

بسم الله الرحمن الرحيم

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هذا العمل الذي اضعه بين ايديكم الان هو حصيله عمل اكثر من عام كامل
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الاطباء العرب علي مستوي العالم والانكتفي بالنقل او الاقتباس



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يوم امتحان الجزء الاول في فندق سفير في صوره تذكاريه للدكتور علي
اقصي اليمين والدكتور فيصل في منتصف الصوره والدكتور هيثم والدكتور
عمر عبدالفتاح 2014/1/14.

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في البدايه وقبل اي حاجه حابب اقول لأي حد بيفكر ياخذ قرار انه يذاكر للزماله ان اهم خطوه هي انك تحلم وتصدق حلمك ومتسمعش لأي حد يحاول انه يثبط من هممك الفكره كلها انك لو عاوز هتقدر الموضوع مش مستحيل الموضوع عاوز انسان صادق مع نفسه في البدايه

هتلاقي ناس هتكتفي بشراء الكتب وبس وناس هتشتري الكتب وتفتحها وناس ثانيه هي اللي هتشتري و تذاكر وتحل وناس غيرها هتحل و هتتقدم للامتحان

مأسهل عليا وانا لسه طالع من امتحاني امبارح اني اقول انه كان اصعب امتحان في العالم بس مش دي الحقيقهالفكره انك تكون داخل الامتحان وانت عامل اللي عليك و الباقي علي ربنا

متكونشي مقصر بسوالمقصر بيبقي عارف نفسه

مشوار الزماله ممتع طريق كله تحصيل علم

لذلك انصح اي حد بيفكر بأنه كفايه كسل وابدأوانت تقدر وان شاء الله تستطيع

انا بدأت اذاكر للزماله من بدايه امتيازي والله الحمد امتحنت وانا لسه ف الامتياز وكنت اول امتياز علي مستوي مصر يدخل امتحان زماله بريطانيه..

So how can you get benefit from this **NOTES** ??

First of all these **NOTES** extremely helpful for those who will work **pastest**which is mandatory for part 1 I can say

you will study the text from whatever source and then you read my notes before answering pastest ...believe me you will answer it spot diagnosis !!!!

these notes cover most of exam hot topics which is not present in the only mrcp notes book !!!!

read textread notesanswer the chapter mcq..!!

for example in cardio I made more than 200 notes from 293 mcq from pastest.....this notes will make you love pastest (the toughest MRCP question bank at all) !!!

I have make the important info with **red font** so not to miss and mostly that **red font** was the **answer of the mcq !!!**

cardiology

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I RECOMMEND TO READ IT BEFORE DOING pastest!!!!

BELIVEME ME IT WILL MAKE A DIFFERENCEread it after studying the text and before answering the mcqeos !!!!!

Notes from 293 pastest mcq

One of my best notes I can say !!!!

1. Which of the following arrhythmias is unusual in digoxin toxicity ===**Type-II second-degree heart block** .

2. Cardiac involvement is the most common cause of death in patients with amyloidosis =====typically as **restrictive cardiomyopathy**.

3. The most characteristic ECG finding of restrictive cardiomyopathy is diffusely diminished voltages. Echocardiography typically shows small thick ventricles and a thick interatrial septum due to amyloid deposits, which have a 'granular sparkling' appearance.

4. A 58-year-old man's ECG shows a combination of a **prolonged QT interval with tall T waves.**

What is this suggestive of ====**Uraemia** .

5. A prolonged QT interval is due to hypocalcaemia and tall T waves to hyperkalaemia and/or acidosis, which can be caused by uraemia

6. The **epsilon potential** is seen on the ECG of patients with which of the following ====**Right ventricular dysplasia** .

7. A 32-year-old man is brought to A&E in a collapsed state having sustained a precordial stab wound.

Which of the following cardiac valves is most likely to have been injured ====Tricuspid valve .

8. The tricuspid valve is the most anterior valve of the human heart and is the commonest to be injured during a stabbing attack.

9. During which phase of her pregnancy and puerperium does she have the greatest risk of venous thrombosis ====First 6 weeks after delivery .

10. A 28-year-old woman who is known to have a cardiac murmur becomes pregnant. It is noted that the **intensity of her murmur diminishes** during her pregnancy.

Which cardiac abnormality is she likely to have ===== **AR** .

11.unstable angina =====Aspirin, clopidogrel, low molecular weight heparin, atenolol

12. What is the strength (in joules) recommended for the monophasic shock used for defibrillation ===== **360J** .

13. The patient has a **hypertensive emergency** with markedly elevated blood pressure and evidence of target organ damage =====**The initial target is to lower the MAP by no more than 25%,**

14. **Eosinophilic states** are associated with **obliterative cardiomyopathy** not dilated .

15. An ECG shows **complete heart block**.

Which of the following physical signs is consistent With the diagnosis ===== **Basal systolic murmur** .

16. Which of the following statements is true regarding **pulsus alternans** =====**It is found in association with a third heart sound**

17. Pulsus alternans is found in patients with acute left ventricular failure so S3 is associated .

18. for the pt with AF who remain asymptomatic despite of medical ttt ==== **Radiofrequency pulmonary vein isolation with ablation**

19. The presence of calcification around the heart favours **constrictive pericarditis.**

20. Which of the following is the commonest cardiovascular abnormality seen in an adult patient with **Marfan's syndrome** === **Aortic root dilatation** .

21. **During intermittent positive-pressure ventilation (IPPV), lung volumes are significantly increased and Venous return and cardiac output fall due to increase lung volume .**

22. **positive delta in V1 ===Wolff–Parkinson–White (WPW)
====Verapamil is contraindicated**

23. **changes in ECG following acute pericarditis within 2 weeks
Is ===== T-wave inversion in all leads**

24. **Which of the following statements is true of raised
cardiac troponin levels in the blood =====Are seen in patients
with NSTEMI**

25. The most sensitive markers of myocardial cell damage are the cardiac troponins T and I. component of thin filaments .

26. Carotid sinus massage is contraindicated in patients with carotid vascular disease

27. The management of patients who nearly drown in cold water is quite different from that for routine cardiopulmonary arrests ===It is important to lift her out of water in the prone position

28. the INR should be optimal in the preceding 3-4 weeks prior to cardioversion.

29. acute

anterior myocardial infarction. The most appropriate approach here is angioplasty.

30. Which of the following is a characteristic feature of

Troponin ===Levels act as a prognostic factor following an acute coronary syndrome

31.DVT in pregnancy ===== Start subcutaneous heparin

Throughout pregnancy and change to warfarin in the postpartum period

32. paradoxical embolism due to a patent foramen ovale =====

Transoesophageal echocardiogram

33. **Right ventricular myocardial infarction** usually occurs in

association with an **inferior-wall left ventricular**

infarction =====ST-segment elevation in leads II, III

and aVF with Q waves and T-wave

inversion in these leads

34. ventricular tachycardia and is haemodynamically unstable

=**DC**.

35. a **systolic murmur** is heard which worsens

with the **Valsalva manoeuvre** and improves on **squatting** =**HOCM**

36. Patients with atrial fibrillation who are stable pose an intermediate risk. **The initial treatment in this case is anticoagulation with warfarin**

37. What is the commonest cause of **restrictive cardiomyopathy in the UK** =====**Amyloidosis** .

38. the following factors is the strongest predictor of his being at a **high risk** of early recurrent **stroke** =====**Presence of moderate carotid stenosis**

39. Which of the following makes **Wolff-Parkinson-White** the most likely underlying diagnosis =====**ECG in sinus rhythm reveals right bundle-branch block**

40. Which of the following is a feature of coarctation of the aorta =====**It is frequently accompanied by a bicuspid aortic valve**

41. **Verapamil is associated with precipitation of digoxin toxicity**

42. Cardiac catheterisation requires the use of an iodine-containing contrast. This may worsen the hyperthyroidism caused by toxic multinodular goitre, so investigation would be useful to differentiate as to whether the use of contrast media may worsen any underlying thyroid condition is =====Thyroid radionucleotide isotope scan

43. WPW S when pt is in acute presentation and is compromised = DC .

44. An echocardiogram reveals a bicuspid aortic valve. What should he be told =====He may require heart surgery at a later date

45. in patient with artificial valve then have infraction ====Use of **oral anticoagulation may result in haemorrhage in the infarcted area.** As the patient has a mechanical valve, anticoagulation must be continued. The best option therefore would be to **stop the warfarin and start intravenous heparin.**

46. Although **adenosine** is the drug of choice for terminating paroxysmal supraventricular tachycardia, it can cause **bronchospasm** and is thus contraindicated in patients with asthma, so give ====**intravenous verapamil.**

47. **celecoxib can lead to fluid retention** and worse ht failure condition

48 . Pulmonary embolism presents with a **raised jugular venous pressure (JVP)** and **right bundle-branch block** due to acute right heart failure and prominent A wave .

49. **prominent A wave** = === **increase RT atrium pr** like in PS and P HTN and TS .

50. Intravenous adenosine $6 \times 2 \times 12$ is useful in cases of **supraventricular tachycardia**, as is carotid sinus massage

51. A patient presents with congestive heart failure.

Which drug may be effective in reducing mortality?

Enalapril

52. If pt with PE then **don't give labetalol** if the pt have history of **athma** and give **Methyldopa** .

53. **Amlodipine**, a dihydropyridine calcium-channel blocker, is the drug of choice for the treatment of isolated **systolic hypertension in the elderly**,

54. pt post MI should receive =====Aspirin, bisoprolol, ramipril and a statin .

55. end-stage heart failure= === **Ramipril, frusemide, bendrofluazide, bisoprolol and spironolactone**

56.pt with HT F and taking BB and diuretic and then developed pul.edema =====**Increase diuretics and maintain the current dose of β -blocker**

57. Which of the following patients would be best served by a permanent pacemaker =====**40-year-old man with type II second-degree AV block and an escape rate of 30 bpm when awake and asymptomatic**

58. following conditions definitely needs a permanent pacemaker:

- symptomatic bradycardia
- documented periods of asystole of 3 s or more
- any escape rate less than 40 bpm in awake, asymptomatic patients

59. **Dihydropyridines (eg nifedipine)** are safe and effective in pregnancy,

60. 'an insertion

of 5 nucleotides in the gene was identified as the cause of hypertrophic cardiomyopathy in this family'.

Which of the following type of mutation is the author referring to =====**Frame-shift mutation** .

61. Which of the following conditions is most likely to produce a wide, relatively fixed split of S2 ===== **Right bundle-branch block and heart failure**

62. A 30-year-old man presents complaining of **wheezing and loose motions**. On examination he has prominent precordial pulsations.

What is the most likely diagnosis ===== **Carcinoid heart disease** .

63. A prominent left precordium suggests that the right ventricle was dilated during childhood, and also that it was working against a high pressure. Ostium secundum atrial septal defect (ASD) in combination with rheumatic mitral stenosis (Lutembacher's syndrome)

64. What does a prominent left precordium in a 16-year-old young man with an ejection murmur in the second left intercostal space indicate? What does a prominent left precordium in a 16-year-old young man with an ejection murmur in the second left intercostal space indicate ===== ASD with pulmonary hypertension.

65. A 25-year-old man's blood pressure is consistently 30 mmHg higher when measured in his right arm compared with in his left arm.

What is the most likely diagnosis ===== Supravalvular aortic stenosis .

66. Which of the following pharmacological agents is most likely to benefit a patient with angina due to cardiac syndrome X ===== **Isosorbide mononitrate** .

67. sotalol ===== **recommended as the first-choice drug to prevent a recurrence of VT.**

68. Tuberoeruptive xanthomas occur **in type III hyperlipoproteinaemia.**

69. Which of the following microanatomical structures within the heart interacts with **conventional calcium-channel blockers** ===== **L type Calcium-channels** .

70. Which of the following antiarrhythmic agents works primarily by its action on SA and AV nodes =====Verapamil.

Direct membrane effect

71. Calcium-channel blockers act mainly on the sinoatrial and atrioventricular nodes (direct membrane effect),

72. Which of the following best describes the mechanism of action of flecainide as an antiarrhythmic agent =====Slows the upstroke of the action potential

73. Which of the following antiarrhythmics have the highest risk of producing torsades de pointes ===== Sotalol

74. **Urinary hesitancy** as a sign of drug-induced toxicity is characteristic of which of the following antiarrhythmics ===== **Disopyramide** .

75. Harsh pansystolic murmur = **VSD** .!! عيب

76. systolic murmur loudest at the apex === **MS** .

77. moderate pulmonary embolisms, probably associated with **pulmonary infarction**. The management in this case would be **heparin and simple analgesics to control her chest pain**.

78. Isolated elevation of direct and indirect bilirubin, indicates **haemolysis on the cardiopulmonary bypass** and can be confirmed by increased plasma free-haemoglobin levels.

79. a permanent pacemaker is indicated in **====Second-degree block at the distal conduction system**

80. In an asymptomatic patient, a permanent pacemaker (PPM) is indicated in second- and third-degree heart block at the **distal conduction system**.

81. An 80-year-old man with a history of intermittent atrial fibrillation presents with syncope. ECG documents a type II, second-degree AV block.

Which of the following types of pacemaker is best indicated for him ==== **VVIR.**

82. Which of the following **non-pharmacological interventions will be most helpful in reducing his risk of a future ischaemic event ==== **Stopping smoking** .**

83. stopping

smoking is the single most effective, non-pharmacological intervention that will help to reduce the risk of a future event.

84. This patient has severe (**aortic valve gradient > 70 mmHg**), symptomatic aortic stenosis and as such valve replacement is indicated,

85. This woman has moderate, mixed mitral valve disease and therefore surgery is not currently indicated but all you need to do for her is rate control by **bb** .

86. There appears to be a clear-cut relationship between the use of **appetite suppressants (fenfluramine)** and the development of **primary pulmonary hypertension**.

87. Restrictive cardiomyopathy results from fibrosis or infiltration of the endo- or myocardium. The result is failure of the ventricles to relax, with a subsequent increase in ventricular end-diastolic pressures leading on to biatrial enlargement.

88. massive pul . embolism is indication for thrombolysis

89. Most clinicians would now recommend the addition of ACE inhibitors for patients with vascular disease, irrespective of left ventricular function.

90. Wolff–Parkinson–White (WPW) =====Radiofrequency
ablation of the accessory pathway

91. Torsades de pointes (polymorphic VT with QRS
complexes of different amplitude twisting around
isoelectric line) occurs in patients with a prolonged QT
interval ===== ttt by IV MG

92. ECG shows complete heart block with rate of 40 bpm. QRS
duration is 150 ms with a right bundle-branch block
configuration.

What is the optimum initial management =====Temporary
transvenous pacing

93.If a driver experience anginal symptoms at rest the next step
is to do Exercise testing and inform DVLA .

94. BEST

describes primary pulmonary hypertension =====The risk for subacute bacterial endocarditis is low and antibiotic prophylaxis is seldom required

95. MOST

accurate regarding coarctation of the aorta === The coarctation is proximal to the left subclavian artery origin if the right arm blood pressure is significantly higher than in the left arm

96. Which one of the following is characteristic of atrial

Myxoma =====Echocardiogram is diagnostic in most Cases

97. In this case, adult respiratory distress syndrome can

be distinguished from cardiogenic pulmonary oedema

by ===== Measurement of pulmonary artery wedge pressure

98. The systolic click-murmur syndrome is associated with **mitral valve prolapse**. So ==== **The click and murmur is likely to occur earlier in systole when the patient stands**

99.. Aortic stenosis in adults is commonly the result of which one of the following? **Bicuspid aortic valve disease** and in elderly is degenerative calcification

100. Left bundle branch block is associated with ==== **Ischaemic heart disease**

101. Normal pregnancy is associated with which one of the following haemodynamic changes === **A 10 mmHg drop in diastolic blood pressure during the second trimester**

102. **cholesterol emboli** lodged in peripheral arteries, commonly as a result of angiographic or other surgical vascular procedures can lead to **Atheroembolic disease**

103. MORE common
in **Konstrictive pericarditis** than in cardiac
tamponade =====**Kussmaul's sign****LOL !!!**

104. A 45-year-old woman is being investigated for heart disease. It is found that the **pressure–volume curve of the left ventricle is shifted to the left.**

What is the most likely diagnosis in this case = ===== **Aortic stenosis** .

105. The **pressure–volume curve in a patient with heart failure is shifted to the right**. What is the most important feature in cardiovascular dynamics responsible for this right shift
====**Increased compliance of the chamber**

106. A 65-year-old man with **angina pectoris** undergoes serum lipid testing.

Which of the following abnormalities is most likely to be found
====**Increased low-density lipoprotein cholesterol levels .**

107. pt with carcinod syndrome ====Cardiac abnormalities are found in 50% of patients, and consist of **pulmonary stenosis or tricuspid incompetence**. **بستر** PS TR

108. potassium level of 7.1 mmol/l (normal 3.5-5.5 mmol/l).

What would be the most characteristic finding on

ECG? **Reduced P waves**

109. A patient with acute **inferior wall myocardial infarction**

develops shock. Auscultation does not reveal any murmurs.

Which of the following complications of his MI is

most likely to be the cause =====**Right ventricular infarction**

110. **Right ventricular infarction occurs in one-third of cases**

of inferior wall myocardial infarction,

111. A 12-year-old boy with known heart disease is being

Advised regarding the risks of infective endocarditis.

Which cardiac lesion is most likely to be prone to

Infection ===== **AR** .

113. This patient falls into the high-risk category of acute coronary syndrome (also called '**unstable angina**' or '**myocardial infarction without ST-segment elevation**').

Acute coronary syndrome is a medical emergency, which, if untreated, will progress to myocardial infarction in over 10% of cases so **urgent angiography** .

114. **Left axis deviation**

occurs in **ostium primum atrial septal defect**,

115. In pt with HT F ===== **Administration of a β -blocker reduces the time spent in hospital**

116.IN PDA ==== Dilated left ventricle on Echocardiogram

117. What is the best treatment for maintaining patency
the PDA prior to surgery ==== Prostaglandin E1 administration .

118. Echocardiography is extremely useful in allowing
vegetations in infective endocarditis to be seen.

119. AV dissociation and the presence of capture beats
=== V.tach

120. IN SVT ==== Temporary alleviation by carotid sinus Massage

121. left ventricular apical thrombus ==== **Transthoracic echocardiography**

122. A prominent x descent in the jugular venous pressure (JVP) may occur in constrictive pericarditis or pericardial effusion.

123. echocardiography shows diffuse ventricular wall thickening and marked dilatation of both atria, with granular sparkling of the left ventricular myocardium==== **Amyloid heart disease.**

124. A 49-year-old man is noted to have **shortening of the QT** interval on the ECG.

Which drug is most likely to be responsible ==== **digoxin** .

125. Which of the following has no proven benefit on

mortality following myocardial infarction (MI)==== **Isosorbide mononitrate or verapamil**

126. The plateau phase of the myocardial action potential is mediated by ==== **Slow calcium inward current** .

127. **Marfan's syndrome** is characteristically associated with progressive aortic root dilatation leading to aortic regurgitation and an **increased risk of dissection**.

128. **chronic heart failure** is reviewed in terms of his drug therapy.

Which of the following treatments has **no** proven mortality benefit =====**Digoxin** .

129. What is the most likely lipid abnormality in a 48-year-old

Asian man with Type 2 diabetes who has good glycaemic control ===== **Low HDL/elevated triglycerides .**

130. A 56-year-old man has known **tricuspid regurgitation.**

Which part of the jugular venous waveform is likely to be most prominent ===== **v wave .**

131. Which of the following clinical signs would most indicate the presence of established pulmonary hypertension in VSD ===== **Raised jugular venous pressure (JVP)**

132.. **J point depression** is a physiological response to an **increase in heart rate** so reassurance .

133. temporary transvenous cardiac pacemaker insertion

====**Mobitz II AV block complicating anterior myocardial**

infarction with blood pressure 110/70 mmHg

134. palmar crease Xanthomas ====**Broad b disease** . الكف الواسع

135. right-sided aortic arch ====**Tetralogy of Fallot .in 25 %**

136. Which one of the following factors best predicts long-term

maintenance of sinus rhythm following this

Procedure ====**AF duration less than 6 months prior to**

cardioversion

137. Which of the following causes an *increase in end-diastolic left ventricular dimension* ==== **Severe mitral regurgitation** due to volume overload

138. **Buerger's disease** (thromboangiitis obliterans) is an **occlusive inflammatory disease of small- to medium-sized arteries of the upper and lower extremities.**

very closely associated with **heavy smoking**;

continued smoking after diagnosis invariably leads to a poor outlook, gangrene and multiple amputations.

139. **Subclavian steal syndrome** results from occlusion or stenosis of the proximal subclavian artery, leading to **decreased antegrade or retrograde flow in the ipsilateral vertebral artery.**

140. Sick-sinus syndrome is characterised by periods of sinus bradycardia, **sinus arrest**, a combination of sinoatrial or atrioventricular conduction defects and supraventricular tachycardias.

141. crackles in the lung bases, her chest

X-ray shows **bilateral fluffy perihilar shadowing**===**pulmonary edema**

142. delta wave ===WPW S

143. This man has **paroxysmal atrial fibrillation** as evidenced by his **irregular fast tachycardia**. Episodes of tachycardia in this condition may occasionally be precipitated by an excess intake of **alcohol**

144. What statement best describes the effect that **class Ic agents** have on electrical activity in the heart ===== **Have minimal effect on the duration of the action potential like flecanide**

145. auscultation of the heart reveals a **mid systolic click, and a late systolic murmur** (these findings being accentuated in the **standing position**) ===== **MVP** .

146. **Acute mitral regurgitation** associated with myocardial infarction may occur due to **ruptured chordate tendineae**.

147. **The short PR interval without delta wave suggests Long–Ganong–Levine (LGL) syndrome** rather than Wolf–Parkinson–White (WPW) syndrome. It is likely that the patient is suffering from short periods of

supraventricular tachycardia, which result in her palpitations and light-headedness. The management of WPW and LGL syndrome is similar, **radiofrequency ablation is recommended for these patients.**

148. post MI ==== v.tach due to scar tissue inv === **EPS** .

149. **An echocardiogram has been ordered to determine the left ventricular ejection fraction.**

Which echocardiography mode is the most

Appropriate ==== **Modern transthoracic**

150. screening of HOCM is by **echo** .

151. The development of **tilt testing** has allowed the study of **the pathophysiology of neurocardiogenic syncope**.

152. A 62-year-old patient presents with atrial fibrillation of unknown duration. Which **drug may slow his ventricular rate over a prolonged period but is unlikely to result in cardioversion** ===== **digoxin** .

153. Which of the following statements are **most indicative of myocardial ischaemia** ===== **Radiation to jaw** .

154. best clinical marker of the severity of

aortic stenosis ===== **Character of S2**. esp low S2 as the backflow in aorta is responsible for closure of the valve so in stenosis it is decreased .

155. Beta-blockers may produce benefit in heart failure esp

Bisoprolol and carvedilol

reduce mortality in any grade of stable heart failure.

156. **The malignant phase of hypertension** is a rare condition

characterised by **very high blood pressures**, with

bilateral retinal haemorrhages and/or exudates or

cotton wool spots, without the added requirement for

papilloedema. The initial aim of treatment is to lower the

diastolic pressure to about 100–105 mmHg over a period of 2–3

days, with oral therapy like ccb or bb . The maximum initial fall

in blood pressure should not exceed 25% of the presenting value.

157. Which of the following conditions when associated with aortic stenosis would indicate a poor prognosis =====

Left ventricular failure

158. If suspecting syncope of cardiac origin do ===== **24-hour electrocardiogram (ECG)**

159. **Beta-blocking** agents are the **cornerstone** of the pharmacological management of **chronic angina pectoris**.

160. Indications for thrombolysis ==== **1 mm ST elevation in 2 limb leads.....or 2 mm in chest leads .**

161. This patient is suffering from **symptomatic aortic stenosis** as evidenced by the history of syncope, hypertension, left ventricular hypertrophy and harsh ejection systolic murmur do **Cardiac catheterization .**
As such cardiac catheterisation is the definitive investigation as it allows for more accurate estimation of valve gradient and characterisation of co-existent coronary artery disease, which may require intervention at the same time.

162. The timing of this man's deterioration coupled with a murmur of mitral regurgitation and acute pulmonary oedema **suggests the onset of papillary muscle**

dysfunction or even rupture. Echocardiogram is the investigation of choice to demonstrate the mitral regurgitation.

163. presence of pan systolic murmur following MI = **MR** =so do **urgent echo**

164. pregnant lady with paroxysmal supraventricular tachycardia (**SVT**) give =====**Metoprolol** .

165. Metabolism of **simvastatin** is inhibited by **grapefruit juice**.

166. **Cranberry juice** === interact with **warfarin** .

167. Which person is the most appropriate person to make the decision to discontinue resuscitation ==== **Resuscitation team leader**

168. This lady has been in atrial fibrillation for an unknown period of time and her pressing need at this point **is rate control**

169. Which of the following ECG features is most characteristic of **moderate to severe hypothermia** === **J waves**

170. Guidelines published in 2006 recommend warfarinisation for **at least 3 weeks pre and for 4 weeks post cardioversion**, if onset of AF more than 24 hours .

171. absolute contra-indication to pregnancy ===== **Primary pulmonary hypertension**

172. Streptococcus viridians ===== **IV benzylpenicillin + Gentamicin**

173. The standard regime for suspected viridans endocarditis would be benzylpenicillin IV together with gentamycin
1mg/kg/day

174. Which part of the ECG is most **closely associated with the first heart sound** ===== **R Wave**

175. What is the time limit after presentation up to which thrombolysis should be administered =====4 1/2 hrs

176.in **patient with stroke** ===== early

anti-coagulation with heparin has been shown to **increase the risk of intra-cerebral haemorrhage**, without having a significant impact on the risk of long-term disability or death. As such, **commencement of aspirin is the most appropriate option**, with anti-coagulation at a later stage.

177. Dobutamine stress echo simulates the effect of exercise on the heart in patients who are unable to undertake a stress test. Dobutamine is given via IV infusion, and ECG monitoring with Echocardiography is undertaken both at rest and at the point of maximal stimulation.

178. If a patient with arrhythmia occurs in an attack ==== a continuous loop recorder can be **activated by the patient during symptoms** and therefore carries the greatest chance of recording the arrhythmia.

179. This man has a right to left shunt, with right ventricular pressure greater than left so ==== **Persistent hypoxia despite maximal oxygen therapy**

180. **Verapamil** leads to **a reduction in the risk of torsade de Pointes** and not a cause of it .!!!

181. Which antihypertensive would be most appropriate for her to start without risk of significant lithium toxicity ===== **Atenolol**

182. Which of the following is most directly correlated with increased risk of sudden death ===== **Degree of left ventricular hypertrophy**

183. **PR prolongation** is the commonest feature seen in association with **congenital myotonic dystrophy**.

184. In the UK the commonest drugs used for cardioversion of atrial fibrillation are **flecainide and amiodarone**.

185. **Beta blocking** agents are the drugs of choice **for rhythm**

control in long QT syndrome eg **Metoprolol** . پسد BCD

BB.....CCBDIGOXIN

186.in **LQT** =====A defect in which **ion channel** =====**Potassium**

187. Both macrolides such as erythromycin, and clarithromycin, and **quinolones** such as **ciprofloxacin** and **ofloxacin** may lead to **QT prolongation**.

188. left bundle branch block ===== **Soft first heart sound,**
Reversed splitting of the 2nd heart sound

189. use of **IIb 3a inhibitors** within your hospital. Looking at available evidence, what is the most appropriate

indication for using these therapies ==== **A patient with chest pain, a positive troponin and awaiting angiography**

190. In which of the following situations is **BNP** most likely to be **normal** ==== **Unstable angina** .

191. in pt post MI then deteriorated and pan sys murmur in apex
= MR= **Papillary muscle rupture**

192. Which of the following features is most suggestive of dissecting aortic aneurysm==== **The pattern of pain described**

193. Risk factors for cholesterol embolism after coronary artery instrumentation include increased age (>60 years), hypertension, cerebral vascular disease and aorto-iliac arterial disease.

194. The team decide to insert an intra-aortic balloon pump timed to coincide with the **dicrotic notch.**

What does the **dicrotic notch refer to ====Aortic valve closure**

195. She receives a DDDR** pacemaker.**

What does the **R stand for ====Rate modulated .**

196. in cases of **severe tricyclic antidepressant (TCA) overdose, IV sodium bicarbonate is the initial therapy** of choice. Increasing the pH to the range of 7.45-7.55 has been shown to decrease the QRS interval, stabilise arrhythmias and increase blood pressure.

197. This man is suffering from an ST elevation anterior myocardial infarction and most likely has an occlusion of his left anterior descending

198. **Two dimensional echocardiography** is diagnostic for **HOCM**, with TOE delivering the best views

199. **CKMB** is the best marker for detection of **reinfraction** .

200. **irregular cannon waves** on examination of the

JVP===Complete heart block

201. Studies have shown that in patients with acute STEMI, percutaneous coronary intervention is superior to thrombolysis.

202. **Persistent ST elevation in the absence of chest pain in a patient** who has a history of previous anterior myocardial infarction raises the possibility of **left ventricular aneurysm**. Cardiac MRI is an effective

203. Which of the following is the strongest indicator of underlying arterial disease for stopping the test ==== **2mm ST depression in the lateral leads**

204. Reversed splitting of the second heart sound occurs when closure of the pulmonary valve occurs before the aortic valve ==== **Left bundle branch block .**

205. Which of the following enzymes is most appropriate to measure **early myocardial necrosis** ==== **Glycogen phosphorylase isoenzyme BB (GPBB)**

206. regular narrow complex tachycardia with

ventricular rate of 150BPM; **saw-tooth pattern** particularly evident in leads II, III and aVF ===== **Atrial flutter** .

207. Senile degenerative aortic stenosis involves progressive calcification of the valve leaflets, in response to long-standing haemodynamic stress. It represents the commonest cause of aortic valve replacement, usually presenting after the age of 75.

208. Increase of the PR interval suggests extension of the endocarditic infection into the myocardium and so urgent indication for surgical intervention

done by dr.faisal gamal hameda

.....20-12-2013.....1.32AM

chest

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text and before answering the mcqeos !!!!!**

NB.i discover that I hate chest very much !!!!

Pastest destroy every beautiful meaning in my lifeLOL

1.indication to insert a chest drain ===Pleural fluid pH < 7.2 .

2. A glucose level in pleural fluid of < 1.6 mmol/l is characteristic of a rheumatoid pleural effusion

3. Chlamydia psittaci (psittacosis) is characterised by malaise, fever, myalgias and pneumonia. Exposure to an ill bird and a rash (Horder's spots) are pathognomonic.

4. Ethambutol is renally excreted and therefore dose adjustment is necessary in renal F .

5. Cryptogenic fibrosing alveolitis cannot be dx by bronchoscopy with transbronchial lung biopsy

6. The normal **anatomical dead space** is approximately **150 ml**.

7. **Carcinoid tumours** ===very

vascular structures that on **bronchoscopy** appear as **cherry-red balls** that tend to bleed easily.

8. upper lobe lung fibrosis === **Langerhans' cell histiocytosis**

9. TB meningitis ttt for one year .

10. Aspergillus precipitins are IgG antibodies typically found in colonising aspergillosis (aspergilloma),

11.in DVT –PE duration of ttt for 3 months with warfarin .

12. D-dimer ==It is not useful for confirming PE when the clinical probability is high

13. Amiodarone is associated with pulmonary fibrosis.

14. Idiopathic pulmonary haemosiderosis tends to occur in younger people and is characterised by pallor, weakness, lethargy, dry cough and occasional haemoptysis

15. a feature in acute exacerbation of **chronic bronchitis**====An **extensor–plantar response is common**

16. Which of the following relates to exacerbation of chronic bronchitis in patients with COPD?

Moraxella catarrhalis commonly isolated on culture

17. Regarding lung development, which of the following

statements is the most appropriate?

Continues until the age of 7 years

18. Regarding the **value of lung function tests**

**The peak expiratory flow rate is
most closely correlated with height**

19. The peak expiratory flow (PEF) is an indicator of large
airways disease and used in dx of asthma .

20. Male infertility in cystic fibrosis ===**Failure of development
of the vas Deferens**

21. decreased DLCO ===== **Pulmonary embolism** .

22. bronchial asthma === **Bronchial hyper-reactivity is strongly associated with atopy**

23. peak expiratory flow rate === **It measures small-airway Obstruction**

24. not a common symptom of lung cancer on presentation ===== **SOB** .

25. commonest cause of a chylothorax is trauma or a

Malignancy e.g lymphoma

26.obesity obstructive lung defect .

27. non-invasive ventilation an established treatment ===Acute

exacerbation of COPD with Type 2 respiratory failure

28. Allergic bronchopulmonary

aspergillosis is a recognised

complication, found in 15% of adult CF patients

29. small cell lung cancer ===Hypertrophic pulmonary osteoarthropathy is a very rare feature

30. clubbing not a feature in Chronic bronchitis .

31. Q fever is due to *Coxiella burnetii* ====The organism is usually inhaled from infected dust and contact with animals

32. Which one of the following statement is true about the FEF25%–75%(forced expiratory flow rate between 25% and 75% of the forced vital capacity)

in pulmonary function tests?

It reflects the status of the small Airways

33. Macrolide antibiotics (e.g. erythromycin) are the treatment of choice for chlamydia and other atypical pneumonias

34. Which pulmonary function test may be altered to a similar degree in both restrictive lung disease and obstructive lung disease =====tidal volume

35. A 60-year-old smoker is being evaluated for a coronary bypass graft. Which is the best preoperative screen of

pulmonary function for this patient ===== Forced expiratory volume in 1 second/forced vital capacity (FEV1/FVC) ratio

36. Eosinophilic pneumonia often responds well to corticosteroid medication, though treatment may need to be prolonged (6 months

37. Multidrug-resistant tuberculosis is defined as resistance to rifampicin and isoniazid with or without resistance to other anti-TB drugs.

38. Which lung disease is associated with the clinical observations 'pink puffer' and 'blue bloater' ===== COPD

39. ttt of malignant mesothelioma ===== Radiotherapy to the thoracoscopy

tract site

40. she could have carbon monoxide poisoning.

Which test will be the most helpful in determining

This ===== Arterial blood gas analysis .

41. Which of the following is the best predictor for obstructive sleep apnoea?

Neck size

42. This man has invasive aspergillosis, due to his immunosuppression. He has fungal hyphae in his sputum and a corresponding clinical and radiological picture

43. **Cough-variant asthma** represents one end of the asthma spectrum, with airway inflammation but minimal bronchoconstriction so ttt by **Trial of high-dose inhaled steroids**

44. **Organising pneumonia** occurs in rheumatoid arthritis, with fever, dyspnoea and **multifocal consolidation**. This responds dramatically to steroids.

45. This woman has stridor due to cricoarytenoid arthritis.

This is seen in studies in up to 75% of patients with rheumatoid arthritis. It can cause sore throat, hoarse voice and stridor ==> to dx Spirometry with flow volume loops

46. A 70-year-old man with chronic obstructive pulmonary disease and bronchiectasis had a sputum sample sent from clinic because he had been more breathless for 6 months and was coughing purulent sputum. The result has shown the presence of Mycobacterium malmoense. What does this mean?

He should have further sputum samples sent for culture

47. She asks you about immunotherapy

for anaphylaxis. What do you tell her =====This is useful if she cannot avoid latex exposure

48. Allergen immunotherapy aims to desensitise a person to the allergen they are allergic to. It is useful in those people who cannot avoid exposure to the allergen. Small amounts of the allergen are injected weekly, with slowly increasing dose strengths until the maximum dose of the allergen is administered. This can take up to 12 months.

49. Dyspnoea, clubbing and inspiratory crepitations are the classic features of **usual interstitial pneumonitis**. Chest X-ray will show reticulation, which is classically subpleural in distribution on CT.

50. This man has a **thymoma**, which is a tumour of epithelial origin arising in the thymus =====**ttt by surgical resection**

51. The fluid level rising and falling in the drain 'swinging' shows it is still in contact with the pleural space and the fluid level is moving with respiration. Air is not bubbling out of the drain when the patient coughs, as the air has stopped draining from the pleural space and the lung

has re-inflated.

52. In a cyanosed patient which one of the following statements is accurate?

The PaO₂ is not normally above 50 mmHg (7 kpasca)

53. MOST suggestive of pulmonary embolism (PE) ===== **Chest pain worse on deep breathing and respiratory rate of 26/min**

54. Which one of the following conditions is MOST likely to be associated with obstructive spirometry and normal TLCO?

Asthma

55. Which one of the following features is rarely encountered in patients with sleep apnoea syndrome?

Female gender

56. MOST accurate regarding Pneumocystis jiroveci pneumonia (PCP)

====Auscultation of the lungs usually reveals no abnormality

57. MOST

characteristic of cystic fibrosis **====Pancreatic insufficiency is almost always present in adult patients**

58. Which one of the following statements with regard to sarcoidosis is true ===== **A positive tuberculin test in a patient with chronic sarcoidosis is suggestive of concomitant tuberculosis**

59. Most cases of community acquired pneumonia are caused by which one of the following?

Streptococcus pneumonia

60. The main limiting feature of spiral computed tomographic scanning for pulmonary embolism is===== **Low sensitivity for detecting pulmonary emboli in subsegmental**

pulmonary arteries

61. in cases of hospital acquired pneumonia give

====Cephalosporin + aminoglycoside

62. patients who suffer

recurrent severe exacerbations of COPD and who have

an FEV1 less than 50% predicted ====Combination therapy with

a high-dose inhaled steroid and a long-acting b2-agonist

63. Asthma occurs due to a combination of

airway hyperresponsiveness, airflow

limitation and airway inflammation

64. There is a suggestion that this man has a bronchial carcinoma in a central location so do ====Urgent contrast CT brain scan

65. There is hilar lymphadenopathy with 'eggshell' calcification
====Silicosis

66. Byssinosis === It is characteristically described as shortness of breath, cough and chest tightness that begins on the first day of the working week and eases during the remainder of the working week.

67. Progressive Massive Fibrosis (PMF) is associated with fibrotic masses in the apices, sometimes up to 10 cm in diameter .

68. Yellow-nail syndrome is an abnormality of lymphatic drainage associated **with recurrent bronchiectasis**, small bilateral pleural effusions, lymphoedema and grossly thickened, yellow nails.

69. Pseudomonas aeruginosa is the commonest colonising organism in patients with cystic fibrosis

70. Mendelson's syndrome is an acute pneumonia caused by regurgitation of stomach contents and aspiration of chemical material, usually gastric juices. It can cause **severe bronchospasm**.

71. Oral leukotriene-receptor antagonists can also be added in step 3 if the asthma is still not controlled.

72. Theophylline is indicated in step 4 in the treatment of chronic asthma when symptoms are still not controlled.

73. A haemothorax is the result of bleeding into the

pleural space so ====Intercostal drain insertion .

74. A young man has been in a car accident and has sustained a trauma to his thorax. He has a tear in his right main bronchus without any obvious fractures.

What is the most likely finding ====Atelectasis

75. Atelectasis is when part of, or all of, one lung collapses, preventing normal oxygen absorption

76. The 'gold standard' for the diagnosis of bronchiectasis is thin-section, high-resolution CT (HRCT) of the chest,

77. Timolol, which is commonly used in eye drops for the treatment of glaucoma, is a potent non-selective β -blocker can exacerbate asthma .

78. Goodpasture's disease consists of diffuse pulmonary haemorrhage and glomerulonephritis with linear deposition of antibody (90% of which are directed against the α -3 chain of type-IV collagen) along the glomerular basement membrane.

79. This patient presents with **radiation pneumonitis**. Symptoms begin within a few weeks of radiotherapy and may persist for weeks or months. They occur in 10–30% of patients following radiotherapy for lung Cancer ttt is **by corticosteroid** .

80. **Asthma** is usually **diagnosed by the demonstration of airflow limitation** that varies spontaneously over short periods of time,

81. Which of the following single tests is the most important predictor of survival in patients with COPD =====**FEV1**

82. People with **coal-workers' pneumoconiosis** are predisposed to developing which disease? **Progressive massive fibrosis**

83. In cases of **burns and inhalation of toxic fumes** it is important to do **bronchoscopy** is then the best tool to establish whether there is significant oedema or mucosal ulceration obstructing the airways.

84. Which one of the following pieces of clinical information in her history would point most strongly to the development of bronchiectasis? **Previous whooping cough in early childhood**

85. A 62-year-old man has cryptogenic fibrosing alveolitis (CFA). Which of the following lung function abnormalities would be typical of CFA? **Increased lung elastic recoil**

86. CFA lungs are stiff i.e. poorly compliant, and therefore if compliance is low then

elastic recoil will be high as the two are inversely related.

87. PAN affects

medium-sized arteries (cf small arteries in Churg–Strauss syndrome) **and the infiltrate is composed of neutrophils** but granulomas are absent.

88. Which of the

following complications of pneumonia is most likely to be a chronic rather than an acute complication of the **infective** process====**Bronchiectasis**

89. Which of the following conditions is most likely to predispose to the development of emphysema====**Childhood bronchiolitis**

90. MacLeod's syndrome is unilateral emphysema following childhood bronchiolitis.

91. Pulmonary asbestosis ====The condition is slowly progressive

92. diagnostic pleural aspiration ====**An eosinophilia makes Malignancy less likely**

93. α 1-antitrypsin (AAT) deficiency ===== AAT is an autosomal co-dominant Condition

94. clinical features is most strongly associated with sarcoidosis ===== Decreased gas transfer factor (TLCO) with decreased gas transfer coefficient (KCO)

95. Which of the following features is suggestive of extrinsic allergic alveolitis ===== Circulating IgG precipitins

96. cystic fibrosis ===Burkholderia cepacia is a significant Pathogen

97. most specific

to allergic bronchopulmonary aspergillosis (ABPA) ====An early positive skinprick test for Aspergillus fumigates

98. Precipitins

(IgG) are more usual with an aspergilloma

99. Pulmonary AV malformations cause right to left shunts so reducing TLCO values and provoking hypoxaemia.

100. acute asthmatic attack. Which of the following lung

function abnormalities is she likely to have?

Increased residual volume]

101. This is type II respiratory failure ====Ankylosing spondylitis

102. recurrent

pulmonary thrombo-embolic disease. Which of the following

**features is she most likely to have ===Widening of the alveolar-
arterial (A-a) gradient on exercise**

**103. Postural drainage is the mainstay of treatment for
bronchiectasis.**

104. The answer is (a). This man has a large pneumothorax with mediastinal shift and significant symptoms. In the presence of midline shift, the most appropriate management would be needle decompression, with placement of an intravenous cannula in the second intercostal space.

105. The answer is (a). This man has severe chronic obstructive pulmonary disease and has deteriorated significantly during the past five years. Currently the only intervention proven to affect mortality is smoking cessation.

106. You review a 56-year-old man with chronic obstructive pulmonary disease, who is suffering an acute exacerbation.

Which of the following features would suggest suitability for non-invasive ventilation with BIPAP

====Hypercapnia without profound hypoxia

107. i socyanates are a recognised risk factor for the development of non-small cell lung cancer.

108. Surgical resection in carcinoma of the lung is absolutely contraindicated in the presence of which one of the following ====Forced expiratory volume in 1 s (FEV1) 25% of predicted

109. What are the NICE indications for home oxygen ===Cor pulmonale

110. azygous lobe ====Right upper zone

111. The diagnosis of unilateral paralysis, suggested by asymmetric elevation of the affected hemidiaphragm on X-ray, can be confirmed by fluoroscopy.

112. Which of the following features would be seen during the sniff test ===Paradoxical hemidiaphragm movement

113. A patient presents with shortness of breath. His transfer coefficient (KCO) is 160% of predicted. What is the most likely cause ===Pulmonary haemorrhage .

114. In which pulmonary disease is the alveolar structure Preserved ===**Asthma** as it is chronic inflammatory disease of the bronchial airways,

115. This man has an **exacerbation of chronic pulmonary disease (COPD)**. The most common causative pathogens are Haemophilus influenzae and Moraxella catarrhalis. The most appropriate antibiotic therefore would be a **macrolide such as clarithromycin**

116. This man almost certainly has oro-pharyngeal and oesophageal candidiasis from inadequate hygiene after using his inhaler so ===Advise him to rinse the mouth each time he uses his inhaler and use a spacer device and review him in a month .

117. pathophysiology of mesothelioma =====Loss of one copy of chromosome 22 is the most common karyotypic change in mesothelioma cell lines

118. This patient has a long history of COPD and is Deteriorating so Non-invasive ventilation

119. You suspect that she may have occupational asthma; which of the following is the most appropriate way to

diagnose it ===**Peak flow diary** .

120. The history of snoring is suggestive of sleep apnoea.

Sleep apnoea is known to result in chronic nocturnal **hypoxia**, which in turn leads to **pulmonary artery vasoconstriction so secondary P++**

121. This man has small reductions in the PEFr and the FEV1/FVC ratio, and the FVC ratio falls when measured in the supine position. The most likely explanation is increased abdominal fat leading to a functional reduction in FVC.

122. PEFr is 540L/min (predicted is 600)

FEV1/FVC is 90% predicted

FVC falls when measured supine versus standing up

Which of the following is the most likely diagnosis?

Obesity related changes in PFTS

123. Streptococcal pneumonia is most commonly associated with re-activation of herpes simplex virus.

124. A normal CO₂ in the face of inadequate respiratory effort may indicate increasing fatigue = impending resp . failure .

125. Whispering pectoriloquy is a sign of consolidation. It is likely that due both to the tumour and locally trapped secretions

126. Recurrent haemoptysis with segmental collapse is a

typical presentation associated with bronchial carcinoid.

127. The clinical picture seen here is very suggestive of Churg-Strauss syndrome, which is commonly associated with **anti-myeloperoxidase antibodies**

128. Which of the following is a relative contraindication to radical radiotherapy ====**Malignant pleural effusion**

129. the most important factor in airflow limitation in severe emphysema ===**Loss of elastic recoil**

130. Klebsiella pneumonia appears to occur with increased frequency in patients with a history of alcoholism and the typical picture is one of cavitating lesions predominantly affecting the upper lobes as is seen here.

131. asbestosis =====High resolution CT

132. Which of the following most closely correlates with mortality in COPD =====FEV1 .

done by dr.faisal....22-12-2013.....1.04PM

derma

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1. Porphyria cutanea tarda presents with bullous eruptions on exposure to sunlight. The eruptions heal with scarring. Alcohol is the aetiological agent. Diagnosis

depends on the presence of increased levels of urinary uroporphyrin. Remission can be induced by venesection. Chloroquine promotes the urinary excretion of uroporphyrin.

2. **Onycholysis** is the separation of the distal edge of the nail from the vascular nailbed causing whiteness of the free edge. **Mycoplasma pneumonia is not a recognised cause.** Other causes are tetracycline and psoralens.

3. **Acne vulgaris** is characterised by **comedones (whiteheads and blackheads)**, papules, pustules, and nodules in a sebaceous gland distribution. This can be divided into progressively severe forms: **comedonal, mild, moderate and nodulocystic acne.** In **the comedonal form there are only comedones but not yet any inflammation.** At the other end of the scale,

nodulocystic acne is characterized by comedones, inflammatory lesions, and large nodules greater than 5 mm in diameter, often with associated scarring.

4. A feature of the **Sturge–Weber syndrome** is the presence of a **port-wine stain** (capillary angioma) – a benign proliferation of vascular and connective tissue that may be associated with a developmental defect of mature dermal capillaries **also associated with epilepsy** .

5. **Pseudoxanthoma elasticum** is a hereditary disorder of elastic tissue with **calcification involving the skin, eyes and vasculature**. The characteristic skin appearance is of **yellow papules arranged in a linear or reticular pattern in plaques over the neck, axilla, groin and periumbilical regions**. The skin resembles that of a **plucked chicken**.

6. Using insect repellents and avoiding skin exposure at dawn and dusk is important in protecting against insect bites and the prevention of infection from leishmaniasis.

7. Stevens-Johnson syndrome is an immunological reaction in the skin and mucous membrane characterised by iris skin lesion (erythema multiforme) in the skin and extensive bullae formation in the mouth and conjunctivae. The commonest disease association is with a preceding herpes simplex or Mycoplasma pneumoniae infection. Other causes include drug sensitivity (e.g. sulfonamides, penicillins, barbiturate,

phenytoin and possibly the contraceptive pill).

8. A 75-year-old ex-soldier presents to his GP complaining of a dome-shaped lesion on his nose. There are prominent telangiectatic vessels on the surface of the lesion. The border of the lesion is translucent, looks pearly-white and is slightly raised.

What diagnosis fits best with this clinical picture=**Nodular basal-cell carcinoma.**

9. **Eczema** is very common, with an incidence of up to 5% in children. Some 85% of patients have a disease onset before the age of 5 years. In children who

develop eczema there is a co-association with asthma or allergic rhinitis in up to 50%. Lesions

characteristically occur on the flexural surfaces.

Chronic inflammation may result in skin

lichenification, constant scratching in

hypopigmentation. **In this case, latex sensitisation**

may have played a role in worsening the clinical

picture. All health-care providers are now well aware

of this problem. like nurse.

10. Treatment centres around the use of emollients to prevent dryness and the use of topical corticosteroids.

Oral antihistamines may be useful in some patients where itching and insomnia are a particular problem.

Oral prednisolone may be considered in severe cases.

Eosinophil count is weakly correlated with the severity of disease.

11. Granuloma inguinale=caused by *Calymmatobacterium granulomatis* is a Gram-negative bacillus that reproduces within neutrophils,

plasma cells and histiocytes, causing the infected

white cells to rupture with the release of 20–30

organisms. **The key features are a primary, painless**

indurated nodule that progresses to a heaped-up

ulcer, and the presence of infected mononuclear cells

containing many Donovan bodies. The infection is

endemic in **Australia**, India, the Caribbean and Africa,

and transmission is associated with unprotected

sexual intercourse.

Treatment is with **tetracycline or ampicillin**, and

patients are advised to refrain from sexual intercourse

until the lesion has healed. Relapse is common and

routine annual or 6-monthly follow-up is advised.

12. Henoch–Schönlein purpura presents with purpura in dependent areas (eg buttocks and lower legs).

Although it mostly occurs in children between 4 and 15 years of age, it may be seen in slightly older individuals. A 2:1 male to female ratio exists.

Postulated aetiology is an exaggerated antigen–antibody reaction with IgA deposition. Antigen triggers may include drugs, foods, immunisation and an upper respiratory tract infection.

There may be no specific abnormalities on blood testing, although **IgA is elevated in 50% of cases**, with a leucocytosis or eosinophilia. Joint pain and renal involvement (leading to microscopic haematuria) are common, as are minor GI bleeds.

Prednisolone is given for severe GI or renal involvement, although properly conducted efficacy

studies of steroids are hard to come by. Usually recovery occurs within 4 weeks, but severe renal disease may occur in 5% of patients.

13. Reactive arthritis is characterised by non-suppurative polyarthritis following a lower urogenital or enteric infection. It usually affects young men carrying the HLA-B27 antigen. **Inflammatory eye disease and mucocutaneous manifestations are common.**

Chlamydia trachomatis, Ureaplasma spp, Shigella spp and other organisms may be responsible.

14. Isotretinoin is indicated for the treatment of severe inflammatory acne. However, it causes marked dryness of the skin and mucous membranes, especially the lips, and can result in minor nosebleeds. Due to its

teratogenicity, pregnancy must be excluded prior to its initiation and during treatment as well as for 1 month after treatment.

15. hereditary angio-oedema, which is inherited in an autosomal-dominant manner. It is due to C1 esterase inhibitor deficiency, which modulates the intravascular activation of complement.

Clinical features may not appear until adult life. A non-hereditary acquired form of the disease occurs in

association with lymphoproliferative disorders. **A**

prodromal rash, evident as mild erythema or erythema

marginatum, may precede attacks. Patients present **with**

airway obstruction and abdominal pain secondary to

visceral oedema. Acute attacks may respond to fresh-frozen plasma. Long-term treatment is with stanazol or

danazol.

16. Cutaneous leishmaniasis (CL) also called ‘oriental sore’ is due to **Leishmania tropica**. It is endemic in the **Mediterranean area** and may also be seen **in North Europeans after Mediterranean holidays**. The incubation period varies between 1 and 12 months and the lesion is usually seen on the face. Nodules that may ulcerate or erythematous lesions are characteristically present.

17. Tuberos sclerosis (Bourneville’s disease) is an **autosomal-dominant** disorder with variable expression. **Epilepsy in infancy or childhood is often the presenting feature**. **Mental deficiency is commonly seen**. **Elongated hypopigmented macules (ash-leaf patches) are**

commonly seen. Adenoma sebaceum is an **acne-like eruption present on the face.** Periungual fibromas arise as pink projections from the nail folds. The ' shagreen patch' is an angiofibromatous raised plaque usually on the lower back. Fundoscopy may reveal white streaks along the fundal vessels.

18. Necrobiosis lipoidica is an unusual complication of diabetes mellitus, but it may also occur in non-diabetic patients. It is thought to be due to small-vessel damage leading to partial necrosis of dermal collagen and connective tissue and a histiocytic cellular response. It is more commonly seen in young or middle-aged females. The skin over the shins is commonly affected and the disease presents as **erythematous plaques that gradually develop a brown waxy discoloration.** Treatment is with **support bandaging. Low-dose aspirin may help the healing of such lesions.**

19. Lyme disease. This is caused by a spirochaete, *Borrelia burgdorferi*, which is transmitted by the bite of an ixodid tick. **Its cutaneous manifestation is called 'erythema chronicum migrans', a slowly spreading annular, indurated erythematous plaque usually on the limbs.** Neurological or cardiac problems such as arrhythmias, heart block, etc may develop. Diagnosis is made by detecting the antibody to *B. burgdorferi* in serum and cerebrospinal fluid so **diagnosis by serology.** Lyme disease responds to high-dose penicillin or tetracycline for 10 days.

20. Secondary syphilis develops 4–12 weeks after the primary infection. This is characterised by a macular or papular rash, which is symmetrical on the trunk, limbs as well as the palms and soles. The rash is pale pink and is non-itching. Confluent plaques (called ‘condylomata lata’) may form in the moist flexures. Small grey or white erosions may be seen on the buccal mucosa. Patients may complain of muscle and joint pains, headaches and fever. Generalised lymphadenopathy is common.

21. squamous-cell carcinoma= It is capable of metastasising via the lymphatics.

22. Kaposi's sarcoma can affect elderly non-immunosuppressed men.

23. This woman has developed **pyoderma gangrenosum** (PG). PG is associated **with rheumatoid arthritis,** multiple myeloma, polycythaemia vera, inflammatory bowel disease and acute leukaemia. It is characterised by the development of papules and pustules on the trunk or the limbs. These rapidly enlarge and produce large necrotic ulcers, having a sloughy base and a prominent purplish rim. **Prednisolone,** azathioprine, colchicine, tetracycline and clofazimine have all been used.

24. **Chancroid is caused by Haemophilus ducreyi** and is thought to be the commonest cause of genital ulceration in parts of Africa, it has an incubation period of 4–7

days. An initial erythematous papule breaks down into a painful ulcer and several ulcers merge to form giant serpiginous lesions. Ulcers are commonly seen on the prepuce and frenulum in men and the vaginal entrance and perineum in women. Inguinal lymphadenopathy develops, usually unilaterally, and this can suppurate. Diagnosis is by isolating the organism from swabs taken from the lesion and culture on chocolate based media, and treatment is with co-trimoxazole or tetracycline. The reason that the candidate should be drawn to Chancroid versus the other potential options is because of the geographical location of the infection and the symptoms seen.

25. Erythroderma is the term applied to any inflammatory skin disorder covering in excess of 90% of the body surface, leading to skin failure. In adults, it is most commonly due to eczema, followed by psoriasis, lymphoma/leukaemia and drugs, and pityriasis rubra

pilaris.

26. **Scabies** can present with an **itchy dermatitic-looking rash** on the body, but the clues are at certain sites (**soles, genitalia, buttocks**)..

27. **blistering**, especially located around the umbilicus, is highly suggestive of **herpes gestationis**.

28. **Thyrotoxicosis** is characterised by clubbing (thyroid acropachy) and distal **onycholysis**.

29. **Sweet's syndrome** has a characteristic **plum**

colour and 50% of patients with this syndrome have haematological disorders and peripheral neutrophilia.

Skin biopsy reveals neutrophils and nuclear debris in the dermis.

30. All the tests are useful to diagnose porphyria cutanea tarda, but in the clinic, examination of urine with a Wood's lamp would clinch the diagnosis as the urine shows a pink fluorescence.

31. Chronic discoid lupus erythematosus

(CDLE)= CDLE is a chronic, relapsing and remitting, cutaneous disease, which affects light-exposed areas and is characterised by well-demarcated plaques of scaling erythema that progress to atrophy. It characteristically affects the face, neck, scalp and hands of sufferers; the female to male ratio is 2:1. The plaques eventually heal with scarring, pigment change (tending to look darker on Caucasian skin and

lighter on black skin), and telangiectasia. Scalp lesions destroy the hair bulbs and lead to areas of alopecia. A small proportion of patients has circulating antinuclear antibodies and this may indicate a risk of progression to systemic lupus.

32. **Chloasma** is a hormonally stimulated increase in **melanogenesis that mainly appears on the face**, it affects both pregnant women and those who are taking the combined oral contraceptive pill. The pigment is **augmented by sunlight**, hence the more pronounced appearance on the face.

33. **The acral lentiginous** melanoma is normally seen on the **sole of the foot**, and occasionally on the palm of the hand. It is characterised by a raised darker area

surrounded by a paler macular (lentiginous) area that may extend for several centimetres around the raised area.

34. Psoriatic-type reactions are most commonly caused by **beta-blockers**.

35. **Darier's disease** is a genetic skin condition that has an autosomal-dominant mode of inheritance. It is characterised **by abnormal keratinisation mainly around hair follicles**, resulting in a **greasy, red–brown papular eruption**. The rash most commonly presents on the **chest and scapular area** and is aggravated by **sunburn or tanning**. Small pits may occur on the skin of the palm of the hand, and nail abnormalities may also be associated. The rash may occur as an abnormal reaction to local skin infection, though the exact pathological trigger is unknown.

Salicylic acid preparations were the mainstay of treatment in the past, but these have now been largely replaced by retinoids. Of course, in this age group, adequate contraception is essential in patients taking retinoic acid preparations.

36. **Morphoea** presents as a very firm, white or violaceous patch of skin on any body site, but **more commonly on the thighs, trunk and upper arms**. The disease occurs most commonly in children or young adults. Developing morphoea lesions have a well-demarcated red or violet peripheral edge. As disease activity burns out, the edge assumes the same colour as the central lesion, and the lesion itself becomes very firm with an atrophic glazed surface appearance. A linear variant of morphoea may be seen on the scalp and face of young children, and is known as 'en coup de sabre'.

37. arterial ulceration in a smoker. Associated ischaemic leg pain may be particularly intense on elevating the legs and cause sleep interference. As well as peripheral vascular disease, as evidenced by the absent foot pulses bilaterally, there is also likely to be arterial pathology elsewhere and it is important to assess for ischaemic heart disease and carotid disease as well. Angioplasty or bypass surgery may only be appropriate for improving peripheral blood supply in a limited number of cases, while peripheral vasodilating drugs are rarely effective. Sympathectomy may, however, be of some value, and a trial nerve block to assess potential effectiveness is advised in cases of severe pain.

38. Pityriasis lichenoides acuta is a purely cutaneous lymphocytic vasculitis characterised by multiple crops of pruritic papules occurring on the trunk and limbs. Purpuric lesions are occasionally seen. Associated systemic upset is rare, and spontaneous remission occurs after a period of months or years. Diagnosis is based on clinical appearance and confirmed on biopsy. Syphilitic lesions are a reasonable differential, but those lesions more commonly affect the palms and the soles, although these areas are rarely affected by pityriasis lichenoides. Treatment is usually with topical preparations such as ichthyol 1% in calamine. UV light therapy may benefit some patients.

39. Granuloma annulare is said to occur in association

with type-1 diabetes in adults. The condition is characterised by well-circumscribed circular erythematous lesions, often multiple, which occur on the hands and feet. They clear spontaneously after 3–6 months, and trauma (eg biopsy) may speed up their clearance.

40. Chronic plaque psoriasis is characterised by pinkish-red **hyperkeratotic plaques**, which occur especially on extensor surfaces such as knees and elbows. **The lower back, ears and scalp are also commonly involved.** New plaques of psoriasis occur particularly at sites of skin trauma – the Kobner phenomenon. Skin biopsy of psoriatic plaques reveals acanthosis and parakeratosis, reflecting increased skin turnover. Capillary dilatation within the dermis also occurs, surrounded by a mixed neutrophilic and lymphohistiocytic perivascular infiltrate.

41. An elderly man presented with a lump on his temple that is shiny and is gradually increasing in size=BCC.

42. patient has moderate acne and is therefore suitable for second-line therapy Oral tetracycline for three months.

First-line therapy for acne involves the use of topical antibiotics such as tetracyclines, keratolytics or topical retinoids. Second-line therapy involves a 3–4 months' course of low-dose antibiotics such as tetracyclines or erythromycin, Dianette® (if there is no contraindication), or UVB phototherapy (although this is rarely used now). Third-line therapy involves the use of oral retinoids, although these are prescribed only by specialists in dermatology and carry high risk of teratogenicity.

43. **Tinea incognito** is the name given to tinea when the clinical appearance has been **altered by inappropriate treatment, usually a topical steroid cream.**

44. This man has **pityriasis versicolor**, caused by the yeast *Malassezia furfur*. Presentation is with patches **of well demarcated scaling skin, which become depigmented compared to surrounding normal skin areas and are particularly noticeable during the summer months for this reason.** Treatment is usually with topical antifungals such as **clotrimazole or terbinafine.**

45. Melanocytes are positioned in the **basal layer of the epidermis**

46. This patient has lentigo maligna, **melanoma in situ**. Whilst cryotherapy, radiation therapy and imiquimod cream may be options in patients unfit for surgery, **surgical excision is in fact the treatment of choice**.

47. This patient has a clinical history which is suggestive of **pyoderma granulosum**, a condition which may be associated with vasculitis, haematological malignancy or inflammatory bowel disease as seen here. **Biopsy** of the ulcerated tissue reveals intense neutrophilic infiltration, haemorrhage and necrosis of the overlying epidermis. **Culture** is important to rule out infection as a cause of the presentation. Treatment includes topical corticosteroids, with oral corticosteroids and ciclosporin being alternative additional agents.

48. This woman's history of previous attendances with paracetamol overdose, and the linear appearance of the

rash suggest that they are self inflicted. As such the mainstay of management is counselling and psychotherapy in this case, rather than any specific medication. If there is evidence of superficial infection, then topical antibiotic ointment may be appropriate.

49. Which of the following is usually associated with neurofibromatosis Type 1?

A gene defect on chromosome 17 Your answer

50. Which of the following chemicals is most likely to have been contained in the **henna tattoo** and caused the reaction?= **P-Phenylenediamine.**

51. The distribution of the rash in this woman suggests

contact dermatitis to nickel, which is often prevalent in belt buckles, and cheaper costume jewellery such as ear-rings or bangles. Patch testing is the investigation of choice, where small amounts of the suspected chemical responsible for the allergy are applied to the skin and left occluded for a period of 2 days. Occupation or planned occupation will dictate testing to a number of other allergens. It is not uncommon for patients allergic to nickel to also show cross reactivity to latex, which may be a consideration if considering work where gloves are required to prevent exposure to hazardous materials.so do patch testing.

THANKS A LOT

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I RECOMMEND TO READ IT BEFORE DOING pastest!!!!

BELIVEME ME IT WILL MAKE A DIFFERENCEread it after studying the text and before answering the mcqeos !!!!!

Notes from 300 mcq from pastest !!

1. The role of HCO_3^- in DKA is controversial. The acidosis usually corrects itself once the fluid and electrolyte

balance is restored. **Some physicians administer HCO₃**
if severe acidosis (pH < 7) is present. However, there is
a view that rapid correction of acidosis may impair
cardiac function.....so don't administrate bicarbonate

2.in DI If fluid

deprivation causes a urine osmolality > 300 mOsm/kg,
it suggests **psychogenic (primary) polydipsia.**

لو العين استجاب

3. **Postural hypotension** is related to

glucocorticoid deficiency regardless of cause **eg in Addison .**

4. . The

diagnostic test to confirm DI is a **water deprivation test**. The inability to concentrate the urine during the test results in the plasma osmolality rising and the urine osmolality remaining dilute. Normal plasma osmolality is 285–305 mOsm/kg. The higher the urine osmolality the more concentrated it is.

5. **Unexplained death in childbirth**

and a family history of thyroid neoplasia raise the possibility of multiple **endocrine neoplasia type-2** (phaeochromocytoma, medullary thyroid tumours and hyperparathyroidism) as the cause of his hypertension.

6. **Klinefelter's syndrome** is a genetic disorder with an

extra X chromosome, **giving a genotype XXY** so to dx it do **chromosome analysis** .

7. Postoperative complications of thyroidectomy include **recurrent laryngeal damage**, haemorrhage and **inadvertent removal of the parathyroid glands** which can lead to **hypocalcemic symptoms** **The treatment of choice to relieve the acute symptoms is 10 ml of 10% calcium gluconate..**

8. Which of the following is the factor most likely to make you ask her to defer pregnancy at this stage=Hb A1C9.4%

تأخر حملها

9. Which of the following is most likely to need immediate referral to the ophthalmologist? == **New vessels on the disc**

10. **hypoglycemic symptoms may** mimics stroke **symptoms esp in elderly**

11. **Toxic thyroid nodules** preferentially take up radioactive iodine. This makes them particularly amenable to **radioactive iodine treatment.**

12. This man has spotty skin pigmentation, probable prolactinoma and a probable left atrial myxoma. Carney complex is diagnosable with two features out of spotty skin pigmentation, myxoma, endocrine tumours (commonest being primary pigmented nodular adrenocortical disease), but it is also associated with Sertoli-cell tumours, growth hormone- or prolactin-producing pituitary adenomas, thyroid adenomas and ovarian cysts) and psammomatous melanotic schwannoma (PMS).

13. MEN-2 (multiple endocrine neoplasia – type 2) is associated with medullary thyroid carcinoma (almost always), parathyroid chief-cell hyperplasia (10–25%) and pheochromocytoma (20–50%). MEN-2b is also

associated with a marfanoid appearance, whereas MEN-2a is not. The cause is an autosomal-dominant inherited genetic mutation on the long arm of chromosome 10.

14. bartter syndrome as you give the patient lasix

و بيكون ف عيل صغير ... كأنك مدي للعيان لازكس

15. A 42-year-old man is referred to the hypertension clinic for advice. He is currently

taking atenolol, bendrofluazide and ramipril and his blood pressure is currently

165/105 mmHg. His potassium is 3.0 mmol/l, with a serum bicarbonate concentration

of 28 mmol/l.

What is the best next management step = **Wash out as many of**

his antihypertensive agents as is possible for a period of 2 weeks, then review

16. **Waterhouse–Friderichsen syndrome** is bilateral adrenal haemorrhage occurring due to **massive septicaemia**, often associated with severe, **life-threatening meningococcal disease**. It may present as in this patient with tiredness, lethargy and postural hypotension a short period after discharge from the precipitating illness.

17. This is the syndrome of inappropriate antidiuretic

hormone (SIADH) secretion = **Renal sodium excretion is likely to be elevated**

??

18. Criteria for diagnosis are

hyponatraemia with an osmolality of less than 270 mOsmol/kg. Inappropriately raised urine osmolality (> 100 mOsmol/l). High urinary sodium of > 20 mmol/l (reflecting relative increased concentration due to reduced water loss), and normal renal, adrenal and thyroid function. **Sodium handling by the kidney is not affected in SIADH.**

19. LITHIUM lead to **nephrogenic DI**

20. She most likely has a **microprolactinoma**, which would appear as a hypodense area on MRI scanning. Serum prolactin is often in the range **1500 mU/l to 3000 mU/l in patients with microadenomas**; levels are usually **above 3000 mU/l in those with macroadenomas**.

21. Although surgery in conjunction with dopamine-agonist therapy is the treatment of choice for patients with macroadenomas, **microadenomas often respond well to cabergoline (83% normalisation of prolactin)**.

22. In acromegaly **growth-hormone levels usually remain above 2 mU/l after an oral glucose tolerance test**.

23. This is polycystic ovarian syndrome (PCOS) ==Sex hormone-binding globulin is low in 50% of sufferers with this condition

24. The blood picture of elevated FSH, low estradiol and prolonged amenorrhoea fits **premature ovarian failure**

25. This is **familial hypocalciuric hypercalcaemia**. It has an **autosomal-dominant pattern of inheritance** with virtually complete penetrance.

The heterozygotic state is commonly asymptomatic, but homozygotes present with severe hypercalcaemia soon after birth and require parathyroidectomy.

26. Which of the following statements best describes the renal disease in patients with type-1 diabetes = **Peak incidence of frank albuminuria is 17 years after the diagnosis of type-1 diabete**

27. Which of the following best describes sulphonylureas? = **In the UKPDS study they demonstrated no effect on macrovascular outcome**

28. Which of the following statements best fits the predisposing factors involved in DKA = **Non-compliance with treatment is the cause in 25% of DKA cases**

29. A glucose tolerance test is required if the patient's
fasting blood glucose level is over 5.5 mmol/l.

30. Which of the following pieces of information best fits
the pathology or management of Charcot's foot = The pathology
of this condition is thought to be due to sympathetic
dysfunction, excessive blood flow to the joint and osteoclast
activity

31. Which of the following best fits the outcome or management of myocardial infarction associated with type-2 diabetes = **Statins should always be started unless they are contra-indicated** .

32. Hypertension in type-2 diabetes is primarily associated with **hyperinsulinaemia and insulin resistance**

33. Which of the following best fits diabetic amyotrophy = **Transference to insulin therapy is the mainstay of treatment**

34. Diabetic amyotrophy is said to occur most commonly in

men in their fifties with type-2 diabetes treated with oral hypoglycaemic agents. It is a mixed motor and sensory proximal neuropathy said to cause severe pain, which is responsible for anorexia and weight loss. Some 50% of patients recover fully from this condition, usually within 3–4 months. The mainstay of treatment is supportive care and transference to insulin therapy.

35. Which of the following statements is most strongly associated with impotence in type-2 diabetes = **b-Blockers and thiazide diuretics may exacerbate the problem**

36. When considering that this woman has a **primary**

pancreatic tumour, which of the following statements best fits the condition = Somatostatin, ACTH and calcitonin may all be raised

37. The history is suggestive of a somatostatinoma, the annual incidence of which is estimated at 1 in 40 million. There is a 95% association with impaired glucose tolerance (IGT) or diabetes mellitus, 68% with gallstones, weight loss 25% and anaemia 14%, there is also an association with diarrhoea. The tumours are often multisecretory and ACTH and calcitonin levels may be raised in addition to that of somatostatin. There is an association with MEN-1 in some (7%). Many tumours may occur undetected, and not causing the somatostatinoma syndrome. Contrast spiral-CT scanning is effective in detecting the primary tumour in only 50% of cases; radiolabelled octreotide or endoscopic ultrasound scanning may often be required.

Although surgical cure is rarely possible due to the presence of metastases, hepatic embolisation may be helpful for symptom control.

38. There is a suggestion that this patient has a **glucagonoma**, 90% of which are associated with the characteristic skin rash – **necrolytic migratory erythema**.

39. **Familial hypercholesterolaemia** is associated with an **autosomal-dominant** mutation on the short arm of chromosome 19, thereby reducing the number of high-affinity, low-density lipoprotein (LDL) receptors by up to 50%.

40. This is familial hypertriglyceridaemia, an autosomal-dominant condition **affecting 1 in 300 people,**

41. The suspicion with the history of dry skin, hair loss, obesity and sleep apnoea is that she has hypothyroidism. **This would be the cause of her secondary hypercholesterolaemia**

42. Erythromycin has known interactions with simvastatin, fluvastatin, atorvastatin and pravastatin

43. Which one of the following proteins is most likely to

be associated with very high levels of plasma chylomicrons = **Apoprotein CII**

44. The combination of hypocalcaemia and hypophosphataemia points to the diagnosis of **osteomalacia and vitamin D deficiency**.also increase alk p .

45. A 56-year-old man with type-2 diabetes presents with background diabetic retinopathy. His HB A1c has been consistently above 9% for the past 5 years.

Which of the following factors would most worsen prognosis for his retinopathy?

Rapid improvement in blood glucose Levels

46. Rapid improvement in blood glucose levels may be associated with **worsening of diabetic eye disease.**

47. Hypokalaemic periodic paralysis autosomal-dominant condition due to **Mutation in a muscle voltage-gated calcium channel**

48. Necrobiosis lipoidica occurs in patients with type-1 diabetes, beginning as a patch of erythema that spreads **across the shin, begins to yellow and then may ulcerate.**

49. Hypercalcaemia is found in **10%** of

established cases of sarcoid, and may eventually lead to nephrocalcinosis. **The cause is increased 1 α -hydroxylation of vitamin D by sarcoid macrophages, in addition to that taking place in the kidney.**

50. Which of the following drug classes is most well known as a cause of impaired glucose tolerance?

Atypical antipsychotics

51. Charcot's joint is said to occur in 1 in every 750 patients with diabetes mellitus, although this is increased to 5 in every 100 in those with proven neuropathy. However, a Charcot's joint does not just occur in those with diabetes but may occur in 20–40%

of patients with syringomyelia and 5–10% of those with long-standing syphilis (although this condition is now very rare). Management in diabetes includes tight control of blood glucose, appropriate orthotic intervention, and there is evidence that **bisphosphonates may slow the pace of joint destruction**

52. A woman needs to maintain a minimum body weight for menstruation, and amenorrhoea may even be seen at weights considered to be at the lower end of the normal range.

53. **in profound hypothyroidism** This woman has a greatly

reduced free T4 concentration, is hypothermic, unconscious and has evidence of associated heart failure. Mortality associated with this condition used to be as high as 50%, but with **modern intensive care management**,

54. Sheehan's syndrome is well known to occur in women due to postpartum haemorrhage and hypovolaemic shock, but the risk of it occurring is increased in women with type-1 diabetes who have microvascular disease, and in patients with sickle-cell anaemia. It is said to occur in 1 in 10,000 deliveries. Initial management includes immediate steroid therapy with later full endocrine assessment and replacement of pituitary-dependent hormones (eg thyroxine) as required. Further conception may be difficult and require pulsed gonadotrophin therapy to restart ovulation. Diabetes

insipidus is not usually associated with the syndrome.

55. This woman has a **marked postural drop, increased pigmentation due to her high ACTH** and a low cortisol, making primary **hypoadrenalism the most likely diagnosis.**

56. Heterozygous **familial hypercholesterolaemia** is an **autosomal-dominant** monogenic disorder present in **1 in 500** of the population; the prevalence is increased in **French-Canadians, Finns and South Africans.**

Homozygous FH occurs in 1 in 10

6 patients and is associated with early cardiovascular death in childhood. Clinical features may include tendon xanthomas and xanthelasma. There is a genetic abnormality of the liver LDL receptor. It is said that 50% of men with this disorder will die by the age of 60 from cardiovascular disease if untreated. High-dose statin therapy is the standard therapy, and specialist lipidologist advice is recommended for these patients.

57. Triglyceride concentrations above 6 mmol/l carry a significant risk of complications, and this unfortunate man has suffered both a retinal vein thrombosis and acute pancreatitis.

58. This is the presentation of type-1 homocystinuria, where a defect in **cystathionine synthetase is responsible.**

59. **carcinoid S** is associated with niacin def and then **pellagra .**

60. Which of the following best describes the mode of action of orlistat= **Orlistat is a pancreatic and gastric lipase inhibitor**

61. **complications of antiretroviral therapy (ARVs) are**

becoming apparent. These include a **lipodystrophy-type syndrome** characterised by the loss of peripheral and facial subcutaneous fat, but increased abdominal and visceral fat deposition.

62. this woman has nephrogenic diabetes insipidus (DI) secondary to **chronic lithium therapy.**

63. The definitive management for **follicular carcinoma** of the thyroid without metastases is **total thyroidectomy,** followed by **radioiodine therapy, with thyroxine replacement** to a TSH-suppressive dose.

64. **Thyroid storm** is an unusual presentation of thyrotoxicosis, precipitated by acute stress in a previously undiagnosed patient.

65. What is the best advice for the patient during the post-radioiodine period = **He should not have close contact with children under the age of 11 years for about 2 weeks after treatment**

66. **Thyroid crisis** is associated with a **significant mortality rate (30–50%)** and is best managed in **an intensive care unit** where close attention can be paid to cardiorespiratory status, fluid

balance and cooling.

67. Postpartum thyroiditis is thyroid dysfunction occurring within the first 6 months' postpartum. Prevalence ranges from 5 to 7%. **It develops in 30–52% of women who have positive TPO antibodies.** Most patients have a complete remission but some may progress to permanent hypothyroidism. It is twice as common in patients with type-1 DM.

68. A 27-year-old woman on bromocriptine for

microprolactinoma becomes pregnant. What is the most appropriate management advice = **Stop bromocriptine as soon as pregnancy is confirmed**

69. In patients with the syndrome of inappropriate ADH (SIADH) secretion, it is important to restrict fluids to 500–1000 ml/24 hours. من نص لتر الي لتر ف اليوم.

70. In primary hyperparathyroidism, a patient with a markedly elevated serum calcium $> 3 \text{ mmol/l}$ should be referred for surgery,

71. What is the commonest cause of death in patients

with von Hippel–Lindau disease = **Renal carcinoma**

72. Which of the following is the most likely long-term consequence of the menopause = **Increased possibility of developing Alzheimer's dementia**

73. Which of the following in a 64-year-old man with diabetes mellitus warrants urgent ophthalmology referral = **Vitreous haemorrhage** .

74. Absolute contraindications for OCP includes a history of heart disease, pulmonary hypertension, history of

arterial or venous thrombosis, history of cerebrovascular disease, liver disease, severe migraine, breast or genital tract cancer and age over 35 years.

Hypothyroidism is not a contraindication to taking the OCP.

75. A pregnant mother with **positive thyroid antibodies**, but who is euthyroid, *has a higher risk of spontaneous abortions.*

76. Which of the following tests would be the most sensitive marker for **carcinoid syndrome** = **Plasma chromogranin A**.

77. The most sensitive marker for **carcinoid syndrome** is **plasma chromogranin A**, which has been found in **100%** of patients.

78. MEN-2b is characterised by a **marfanoid habitus**, visceral and **intestinal ganglioneuromas** (which may occur around the lips and tongue), adrenal tumours, شخص طويل and **medullary thyroid carcinoma, parathyroid hyperplasia** occurs much more rarely than in MEN-2a.

79. Which of the following best describes the mode of action of PPAR- γ agonists = **They act at the PPAR- γ receptor site,**

**promoting binding as a heterodimer with
the retinoid X-receptor to DNA**

80. Hypo-oestrogenisation, as in this case, is usually
characterised by **predominantly trabecular bone loss**.

81. Kelp is a very rich source of **iodine**. In patients with
pre-existing thyroid hyperplasia or adenoma, the
ingestion of large amounts of iodine may precipitate
thyrotoxicosis.

82. Gordon's syndrome presents as almost the **mirror image**

of the metabolic abnormalities seen in Bartter's syndrome, and is caused primarily by renal sodium retention and volume expansion. but associated with HTN

83. Which of the following statements best describes the mode of action of tamoxifen = It is a mixed oestrogen-receptor antagonist and partial agonist

84. By the nature of its presentation, Riedel's thyroiditis is often confused with thyroid carcinoma. It is characterised by marked fibrous infiltration of the thyroid gland,.....FROZEN NECK .

85. The patient has **lactic acidosis** and requires close monitoring and should be admitted to an HDU or ITU ward. The lactate is the cause of the raised anion gap. The mainstay of **treatment is rehydration**. And there is no role for sodium bicarbonate .

86. A 54-year-old type-2 diabetic man presents for review. Which of the following laboratory test results would be **most significantly associated with an increased incidence of cardiovascular disease** in his case?
Raised proinsulin levels

87. **Raised levels of proinsulin were** shown in the Caerphilly Cohort Study to be independently

associated with an increased incidence of cardiovascular disease.

Intervention trials with proinsulin were also discontinued after a possible CV event signal was seen. The reason behind this association has not yet however been clearly elucidated

88. Which of the following HLA subtypes is most strongly associated with **autoimmune thyroid disease** or **type-1 diabetes** = = **HLA-DR3** .

89. Which of the following is the best advice to give her

concerning her fat intake = **Total fat intake should be restricted to less than 30% of total dietary energy**

90. Which of the following best describes the mode of action of nateglinide = **It acts by closure of the β -cell K-ATP channel**

91. Given the diagnosis of **carcinoid syndrome**, which additional clinical feature is the most likely to be present = **Diarrhoea** .

92. hypercalcaemia during a routine health screen.

Which one of the following biochemical findings would be most suggestive of this being caused by primary hyperparathyroidism rather than any other cause of hypercalcaemia = **Serum PTH concentration within the normal range**

93. Prolactinomas are the most frequently occurring **functional pituitary tumours**

94. **Growth hormone replacement** in adults with deficiency of the hormone has numerous effects, including an increase in vitality and overall quality of life. **Lean body**

mass tends to increase but body fat decreases, often to a greater extent.

95. A 37-year-old man with a diagnosis of **hypogonadotropic hypogonadism** is being followed in the endocrine clinic. He does not desire fertility at present. Which would be the most appropriate treatment at this stage - **=Regular testosterone injections**

96. **If fertility is not required**, there is no need to stimulate spermatogenesis with GnRH or gonadotrophins: only **testosterone replacement is required. TO PRESERVE SECONDARY**

SEXUAL CHARCTERS .

97. In healthy individuals, growth hormone secretion is suppressed following the administration of glucose.

Failure of suppression is diagnostic of excessive growth hormone secretion. As an initial screening test however, it may be more practical to measure serum IGF-1 and to follow this with an OGTT if the results are abnormal.

ابقي اعمله الاول ياسيدي عشان اللي حاطط الباس تيست يرتاح !!!

98.in Addisonian crisis the immediate ttt **Resuscitation with**

intravenous physiological saline and hydrocortisone .

99. Which of the following additional features would most suggest that a pheochromocytoma is causing his hypertension = headache .and it occur in attacks =paroxysmal =

100. Approximately 80% of patients with pheochromocytoma complain of headaches, which are often paroxysmal.

101.if a patient under thyroxin replacement therapy and you

make a change in her dose you **will have to wait one month** b4 reviewing the response .

102. Clinically silent pericardial effusion is common in **untreated hypothyroidism,**

103. What is the most reliable investigation for **determining the volume of the thyroid gland = Ultrasound**

104. Ultrasound is useful in determining thyroid size accurately.

105. **Serum ceruloplasmin** can be measured enzymatically (copper oxidase), by radial immunodiffusion or by reverse passive haemagglutination **if you suspect Wilson** .

106. **d-Penicillamine** is effective in removing copper from patients with **Wilson's disease**.

107. Which concomitant condition would be a **contraindication for starting metformin = Respiratory insufficiency** .

108.pt with toxic nodule**Lid retraction and lid lag** .

109. Alcohol consumption is a common cause of
hypertriglyceridaemia.

110.hypo ca + hypo p + increase of alk p =====**osteomalacia**

111. Which ONE of the following findings in an elderly
man with pain in the back and known prostatic

carcinoma **suggests a diagnosis of Paget's disease**
rather than metastatic disease = **Serum alkaline phosphatase**
activity five times the upper limit of normal .

112. A patient with impaired glucose tolerance has an increased risk of developing frank diabetes. What is the five-year progression risk == **20–30% .**

113. Diabetes mellitus: **fasting glucose more than 7.0 mmol/l**

114. Which is the
most appropriate oral hypoglycaemic drug in patients
with impaired renal function == **Tolbutamide .**

115. Tolbutamide is largely eliminated by **hepatic metabolism** and has a short duration of action. **It is useful in renal failure.**

116. The risk of developing retinopathy progressively increases with **increasing duration of diabetes.**

117.diabetes mellitus. Her visual acuity is 6/9 in both eyes. Which of the following fundoscopic findings would be likely to warrant you making an urgent referral to an ophthalmologist=
Neovascularisation near the optic disk

118. . Which of the following hormone levels would be most likely to indicate the occurrence of ovulation = **Luteinising hormone** .

119. Which of the following enzymes is most likely to be inhibited by insulin = **Pyruvate carboxylase** .

120. Insulin inhibits gluconeogenesis by inhibiting **pyruvate carboxylase**.

121. The presence of **proliferative endometrium** indicates that **ovulation has not occurred**.

122. Testosterone is responsible for the development of

internal genitalia and spermatogenesis. **It is converted to dihydrotestosterone (DHT) in the body by the enzyme 5 α -reductase.** DHT is a more active compound than testosterone and is involved in the expression of male secondary sex characteristics.

123. What is the most probable mechanism of action of emergency contraception by **(levonorgestrel 1.5 mg)** in preventing conception in this case = **Decreasing tubal motility and ciliary activity** .

124. **Breakthrough bleeding** is most commonly associated with **low-dose oral contraceptive pills**, especially those containing **20 μ g ethinylestradiol**.

125. An infant with hypoglycaemia is administered glucagon.

Which of the following actions of glucagon would be most likely to be effective in treating this condition

===Activates adenylate cyclase .

126. Glucagon acts mainly on the liver and has no action on muscle. It increases glycogenolysis and gluconeogenesis and also stimulates lipolysis in adipose tissue. Adenylate cyclase is a key enzyme involved in the breakdown of glycogen polymers to increase availability of glucose.

127. for postmenopausal **Dual-energy X-ray absorptiometry (DXA)** is the '**gold standard**' for diagnosing **osteoporosis**.

128. Long-term treatment **with lithium causes nephrogenic diabetes insipidus**. This is due to the development of **resistance to vasopressin in the renal tubules**.

129. Exposure to darkness is found to increase melatonin secretion. What is the most common mechanism by which this is achieved = **Increased serotonin N-acetyltransferase**

130. **diabetes insipidus** Which part of the nephron is

most affected in this condition = **Cortical and medullary collecting tubules** .

131. Up to 5% of patients taking **chlorpropamide** may develop **inappropriate ADH-like syndrome** resulting in **dilutional hyponatraemia**.

132. Of the sulphonylureas, **chlorpropamide is the main one associated with facial flushing following alcohol intake**, although a lesser reaction may be seen with other SUs. This **disulfiram-like reaction is** also seen in those who are on treatment with metronidazole.

133. A 40-year-old man is suffering from type-2 diabetes mellitus

and hypertension.

Which of the following antihypertensive drugs is most likely to cause hyperglycaemia if prescribed for this patient =

Hydrochlorothiazide .

134. Thiazide diuretics are associated with impaired glucose tolerance. They are usually not recommended for the treatment of hypertension in patients with diabetes mellitus.

135. A 39-year-old man with Grave's disease is being considered for subtotal thyroidectomy. What is the most

common postoperative complication following this operation = **Hypothyroidism** .

136. Menarche may be delayed in girls who are involved in strenuous physical activity. Usually no treatment is required, as the majority would menstruate by the age of 16. *Provision of an adequate diet and the relief of stress* would be the most appropriate treatment in this case

137. A fall in which of the following hormones is most commonly associated with shedding of the endometrium during menstruation= **Progesterone** .

138. Prolactinomas cause hyperprolactinaemia. Large tumours (macroprolactinomas)

are over 10 mm in size and may cause headaches, visual field defects and hypopituitarism.

139. While examining the patient which of the following features is most likely to indicate that pubertal change may have commenced === Increase in testicular volume .

140. The first clinical sign of the onset of puberty in boys is an increase in testicular volume (> 5 ml). This is followed by growth of external genitalia, deepening of the voice and pubic and axillary hair growth.

141. A 15-year-old boy who is 155 cm tall is worried that he may have stopped growing. **Which hormone is chiefly responsible for epiphyseal fusion and cessation of growth?=== Oestrogen .**

142. This patient **has isolated follicle-stimulating hormone (FSH) deficiency** and he has **oligospermia** so it is mostly due to **Decreased androgen-binding proteins .**

143. What is the main mechanism of action of glucagon in this case?

Promotes the formation of cyclic AMP

144. This patient most probably has a pheochromocytoma.

The presence of **noradrenaline alone** usually indicates

an **extra-adrenal tumour**. Scanning with

[131I]metaiodobenzylguanidine (MIBG) produces

specific uptake in sites of sympathetic activity with

about 90% success.

145. A 20-year-old woman with a history of migraine is prescribed a progestin-only pill. What is the main contraceptive mechanism of action of this drug == **Thickens cervical mucus**

146. This patient has **severe diabetic ketoacidosis**. Plasma **glucose is often elevated to 30 mmol/l or higher**.

147. MEN-2b syndrome with a **marfanoid phenotype** is associated with **phaeochromocytoma** and medullary carcinoma of the thyroid **so Elevated metanephrines** .

148. Sudden increase in luteinising hormone (LH) – **the LH surge** – is of particular significance as **it indicates that ovulation will occur about 24 hours after the LH peak.**

149. In reviewing her history, which of the following would be most typical of the **first sign of onset of puberty = Breast-bud development .**

150. What is the optimum time for the administration of hydrocortisone to a patient undergoing bilateral adrenalectomy for Cushing's disease===**Following excision of both adrenal glands .**

151. Most surgical texts agree that cortisol should be given

immediately following the removal of both adrenal glands. This makes sense, as it is at this point that glucocorticoid and mineralocorticoid supplementation becomes essential.

152. A woman with history of bipolar affective disorder on lithium presented with infertility.

BMI= 35. Investigation: TSH 13, free T4 4.8, prolactin 800, US pelvis - polycystic ovaries.

What is the best management?

==Stop lithium after consultation with psychiatrist .

Long-term

treatment with lithium may produce frank hypothyroidism, as in this case. The

raised prolactin is likely to be related to a combination of lithium therapy and

hypothyroidism. Subfertility in this case may be related to a combination of

hypothyroidism and polycystic ovarian syndrome. The best management in this

case would be to discontinue lithium therapy and replace it with another agent

(after consulting the patient's psychiatrist).

153. An elderly woman came with weight loss of 6 kg over 6 months. Investigation showed low free T3, low free T4 and low TSH. What is the diagnosis ==**Anterior hypopituitarism** .

The answer is anterior hypopituitarism. There is a strong suspicion that this patient has suffered anterior pituitary failure. Isolated secondary hypothyroidism would not usually be associated with weight loss. The weight loss of 6 kg over 6 months raises the possibility of anterior pituitary failure.

154. The answer is hypocalcaemia. Polyglandular syndrome type 1 is an autosomal recessive condition associated with hypoparathyroidism in around 90%, mucocutaneous candidiasis, adrenal insufficiency in around 60%, primary gonadal failure, primary hypothyroidism, and rarely hypopituitarism or diabetes insipidus.

There may be associated malabsorption, pernicious anaemia, chronic active

hepatitis or vitiligo. Polyglandular syndrome type 2 may be autosomal-recessive,

autosomal-dominant or polygenic.

155. a thyroid lymphoma.

Which of the following is the best choice therapy in this case ==

Chemotherapy and external beam radiotherapy .

156. You review a 54-year-old patient with hyperparathyroidism. Which of the following statements is true regarding parathyroid hormone

(PTH) = **Secretion is stimulated by low 1,25-hydroxyvitamin D and inhibited by high levels of 1,25-hydroxyvitamin D .**

157. Which of the following findings would be most consistent with Grave's disease === **Decreased pa(CO₂) .**

158. What is the mode of action of **lanreotide** == **Stimulation of the somatostatin Receptor** .

159. Which of the following fits best with the action/effects of **excess thyroxine** === **Improved insulin sensitivity**

160. Excess thyroxine leads to improved insulin through an association with reduced fat mass and increased insulin sensitivity.

161. Which type of thyroid carcinoma is linked to the ret-proto-oncogene === **Medullary thyroid carcinoma** .

162. You elect to start a peroxisome proliferator-activated receptor (PPAR)gamma agonist.

What is a main function of peroxisomes ===**Fatty acid metabolism**

163. Which of the following best represents the main advantage of insulin glargine == **Reduced nocturnal hypoglycaemia as it is peakless and long acting .**

164. primary hyperparathyroidism ===**Serum PTH concentration within the normal range**

165. the most effective treatment for his **loss of libido in pt with hereditary haemochromatosis** === **Testosterone replacement**

166. This patient has isolated follicle-stimulating hormone (FSH) deficiency === **Decreased androgen-binding Proteins**

167. Which of the following blood tests is most sensitive in establishing whether there is excess thyroid activity === **T3level** .

168. You elect to start a peroxisome proliferator-activated receptor (PPAR)gamma agonist.

What is a main function of peroxisomes ===== **Fatty acid metabolism**

169. to determine the degree of retrosternal involvement ===== **CT Chest** .

170. This woman's low BMI and amenorrhoea, raises the possibility that she is weight Restricting so ===== **cortisol is likely to be elevated** .

171. Hyperprolactinaemia === low LH .

172. Losartan

was the first ARB to be launched and has a relatively flat dose response curve on increasing the dose from 50 to 100mg; hence irbesartan would be the more appropriate choice here.

173. Metformin should be stopped in patients in those patients who have an unstable circulation post infarct

174. The combination of low thyroglobulin, decreased uptake on scintigraphy and raised T4 can only really be **thyrotoxicosis factitia.**

175. This patient's clinical picture is very typical of porphyria cutanea tarda. Anti-nuclear antibodies are frequently seen in patients with the condition. Use of oestrogens may precipitate development of the condition, hence her presentation shortly after commencing the oral contraceptive pill.

176. **Familial hypercalcaemic hypocalcuria** is an autosomal dominant mutation of the calcium receptor sensing gene. It leads to reduced calcium excretion and consequent mild to moderate hypercalcaemia

177. take care that inhaled steroids can lead to adrenal suppression and give picture of Addison .

Corticosteroid related adrenal suppression

178. The diagnosis to be excluded here is Cushing's syndrome. 24hr urinary free cortisol is an **ideal initial** test as it can be done as an outpatient and is non-invasive.

179. She is diagnosed with Addison's disease.

Change in which hormone is likely to be responsible for her amenorrhoea =====**Prolactin**

180. Modest hyperprolactinaemia is reported in cases of Addison's and is glucocorticoid responsive.

done by dr.faisal gamal hameda

Egypt.....5-12-2013.....8-15pm

اسألكم الدعاءيارب

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text and before answering the mcqeos !!!!!**

Notes from pastest git and hepatology mcq !!!

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1. This patient has Whipple's disease ttt by amoxicillin

2. Carcinoid syndrome ===presents as bluish-red flushing mainly on the neck and

face, abdominal pain and recurrent watery diarrhoea.

Cardiac abnormalities develop in 50% of patients and consist of tricuspid regurgitation or pulmonary stenosis.

3. coeliac disease complains of a recurrence of his symptoms.

What is the most likely diagnosis?

Intestinal lymphoma

4. This woman has signs of chronic liver disease. She is

also on long-term nitrofurantoin, which is known to cause chronic active hepatitis.

**5.aortic stenosis is associated with angiodysplasia so do
Selective mesenteric angiography**

6. Barium swallow no role in acute pancreatitis .

7. Chronic radiation enteritis is diagnosed if diarrhoea and abdominal pain persist for 3 or more months following irradiation.

8. This lady has ulcerative colitis. She should undergo colonoscopy as this will show the extent of disease and will allow biopsies to be taken.

9. The presence of multiple ulcers and hyperparathyroidism suggests Zollinger–Ellison syndrome. This is due to a pancreatic tumour that secretes gastrin.

10. Barrett's esophagus shows poor differentiation. Repeat endoscopy and biopsies immediately. If repeat shows poor differentiation then refer for oesophagectomy,

11. Which of the following is the most appropriate way of determining the successful eradication of H. pylori?

[14 C]urea breath test

12. Diabetes-associated gastroparesis occurs in 10–20% of diabetics after 10 years to dx it =====Gamma scintigraphy, gastric-emptying study

13. The faecal elastase test is the most straightforward and sensitive of the pancreatic function tests and will demonstrate pancreatic insufficiency

14. Which of the following is the most serious consequence of the refeeding syndrome===**hypopphosphatemia**

15. **Abetalipoproteinaemia** is the failure of synthesis of chylomicrons in the villi resulting from the inability to make beta-lipoproteins. This results in malabsorption of the fat-soluble vitamins A, D, E and K. while vitamin K deficiency results in **the failure of K-dependent clotting-factor synthesis, thus prolonging the INR or PT (prothrombin time).**

16. COX-2 selective inhibitors (coxibs) are safer than NSAIDs but still have a risk that is greater than placebo in causing gastric ulcer dis .

17. A 44-year-old woman was referred with a change in bowel habit. Which of the following would most strongly suggest an organic rather than a functional cause === Nocturnal diarrhea .

18. This man has acute severe colitis (bowels open more than six times per day with blood). The key diagnosis to exclude is a toxic megacolon as this is life-threatening if it perforates. Therefore, the plain abdominal X-ray is the most vital test.

**19. Which of the following is true of FAP?
Duodenal malignancy is an important
cause of death**

20. hepatitis C antibody-positive.

Which is the best marker for active infection and a better response to treatment =====Genotype 3a on PCR

21. true of hepatitis E =====Transmission is by the faeco-oral route

22. Which of the following would be most suggestive of encephalopathy as the cause=====Elevated serum ammonia.

23. This is a 'Keep it simple' question. The test that will give you key information on a rapidly reversible and

potentially life-threatening complication is the blood glucose: hepatic gluconeogenesis can be significantly down-regulated both by the cirrhosis and further alcohol consumption

24. Which of the following would suggest pregnancy-related cholestasis as a cause?

Elevated serum bile salts

25. The commonest causes of a pyogenic abscess are: enterococci; Staph. aureus; and E. coli.

26. In the maintenance treatments used for ulcerative colitis, azathioprine is effective but associated with a

number of potentially serious side effects like drug induced acute pancreatitis .

27. Which of the following increases the risk of Gallstones ===== Crohn's disease .due to bile salt malabsorption .

28. Which of the following is true of MALT lymphomas=====Paraproteins are a feature

29. Painless jaundice and weight loss are indicative of pancreatic carcinoma

30. Which of the following is recognised in protein-energy malnutrition ===Steatohepatitis .

31. Gastrin increases gastric motor Activity

32. Intravenous somatostatin analogues reduce the risk of rebleeding in cases of upper GIT bleeding .

33. Which of the following aspects is most often seen in patients with Wilson's disease==== Onset of symptoms usually between 10 and 25 years .

34. Ulcerative colitis is associated with erythema nodosum, pyoderma ganrenosum, uveitis, scleritis, episcleritis and primary sclerosing cholangitis, Primary sclerosing cholangitis itself then confers a high risk for the development of cholangiocarcinoma.

35. Which of the following is not associated with acute painful scrotal swelling ====Idiopathic scrotal oedema

36. Which of the following is a common feature of primary biliary cirrhosis?

Back pain

37. Which of the following is a feature of coeliac disease ===== Splenic atrophy .

38. **Recurrent mouth ulcers**, diarrhoea and failure to thrive are the clinical manifestations of **coeliac disease** .

39. Which one of the following would favour the diagnosis of Crohn's disease on rectal biopsy ===== **Patchy inflammation**

40. Which of the following is true of the gastric K⁺/H⁺-ATPase proton pump ===**Omeprazole binds irreversibly** .

40. Which of the following is true of carcinoid tumours
===**Fibrosis of the heart valves is Recognized**

41. The major hint here is the presence of ANCA positivity, a history of diarrhoea and abnormal LFTs. These factors taken together strongly hint at primary sclerosing cholangitis

42. The diagnosis here is primary sclerosing cholangitis do MRCP and liver biopsy .

43. In a patient with this history, coeliac disease would be a major consideration ====**Anti-tissue transglutaminase antibodies** .

44. The diagnosis here is Wilson's disease Low serum uric acid level and high urinary copper excretion and low serum ceruloplasmin .

45. **Cryptosporidium infection** in HIV-positive patients is associated with moderate to severe diarrhoea, but there **is little or no abdominal pain and no fever**.CMV have both .

46. Which one of the following statements BEST describes a feature of irritable bowel syndrome (IBS) === A diet high in soluble fibre is often prescribed for the treatment of the syndrome

47. Which one of the following is MOST characteristic of pseudomembranous colitis === Nosocomial outbreaks .

48. Which one of the following clinical findings is MOST suggestive of a pyogenic liver abscess rather than an amoebic liver abscess ===Recent bowel surgery

49. In alcoholic hepatitis the aspartate aminotransferase to alanine aminotransferase (AST/ALT) ratio is 2:1

50. In a patient with liver cirrhosis which one of the listed features is characteristic of portal hypertension =====Oesophageal varices .

51. Examination

reveals some epigastric tenderness but only to deep palpation. Which of the following represents the best clinical management ===== Upper gastrointestinal endoscopy .

52. Precipitating factors for encephalopathy in patients with underlying cirrhosis include upper gastrointestinal tract bleeding, hypokalaemia, hypomagnesaemia, analgesic and sedative drugs, sepsis, alkalosis and increased dietary protein.

53. Severe hyperemesis is common in pregnancy, and is associated with mild liver abnormalities in around 0.5–1% of pregnancies. Jaundice is always mild. If hyperemesis continues for a prolonged period it may result in a lower birthweight baby, but this is rare.

54. Which of the following statements best describes **infliximab ===It is an injectable anti-TNF- α monoclonal antibody**

55. best describes the mode of action of

Lansoprazole ===== **It inhibits the hydrogen-potassium-ATP 'proton pump'** ==irreversible .

56. Sulfasalazine therapy can lead to isolated falls in the number of red blood cells, white cells or platelets, or lead to a pancytopenia,

57. A plain abdominal film shows thumb-printing at the site of the splenic flexure===== **Ischaemic colitis** .

58. the most important physiological mechanism that prevents reflux =====Parasympathetic stimulation of the lower, circular, smooth muscle fibres of the oesophagus

59. Wedged hepatic venous pressure is the pressure recorded by a catheter wedged in a hepatic vein. It reflects the portal venous pressure in the hepatic sinusoids.

60. had enteric fever 2 years ago.

Which of the following investigations is most likely to indicate a chronic carrier status ===== Culture of intestinal secretions

61. acute hepatitis B

infection. Which of the following immunological test

results would best confirm this diagnosis ==== **IgM anti-HBc**

62. Which of the

following test results is most sensitive in confirming

continued viral replication?

HBV DNA

63. HCV RNA is the most sensitive test for detecting

hepatitis C infection

64. Over 70% of patients with gastric B-cell lymphomas

(mucosal-associated lymphoid tissue; MALT) have H.

Pyloriinfection

65. The definitive diagnosis of **Hirschsprung's disease** is made by **rectal biopsy**. This would show:

Absence of ganglion cells in Meissner's and myenteric plexuses

Hypertrophy of the nerve trunks

Increased staining for acetylcholinesterase: this enzyme is elevated in Hirschsprung's disease and would be evident in a full-thickness biopsy on frozen section

66. **Levels of CEA** are highly correlated with tumour recurrence and the **presence of metastases**.

67. The risk of hepatocellular carcinoma is increased in patients with

68. This patient has cholangitis presenting as Charcot's triad – fever, pain and jaundice. She is also toxic.

Definitive management is to relieve the pressure in the obstructed biliary system. Endoscopic bile duct clearance is the preferred technique.

69. A 45-year-old man is admitted with acute upper gastrointestinal bleeding. What is the most common cause for this condition =====Chronic peptic ulceration .

70. Chronic peptic ulceration still accounts for approximately half of all cases of upper gastrointestinal (GI) haemorrhage.

71. A major reason for so-called diuretic-resistant ascites is an excess sodium intake ====**Paracentesis is best avoided if the patient has peripheral oedema**

72. A diagnosis of **biliary stones** in a 43-year-old executive with right-sided abdominal pain is supported by?

A past history of a right hemicolectomy for Crohn's disease

73. **Acute (fulminant) liver failure is caused by hepatitis viruses A, B and E,.....** Hepatitis A infection on a background of hepatitis C (but not B) has very poor prognosis

74. After the diagnosis of small bowel Crohn's disease, a patient asks for therapy that is **as effective as a course of corticosteroids, but with a better adverse event profile.**
What would you recommend **====Defined formula diet**

75. This is the **distal proctitis** variant of ulcerative colitis
====Rectal mesalazine

76. This is a classic presentation of severe toxic dilatation of the colon. The most reliable sign is the pulse rate; the most helpful investigation is a plain abdominal X-ray.

77. In a patient with ulcerative colitis the risk of developing colonic cancer is greatest with===**Onset of disease in childhood**

78. The patient has acute pancreatitis. Prognosis depends on CRP,

79. What is the most appropriate first-line investigation if coeliac disease is suspected ===**Anti-endomysial antibodies** .

80. Microsporidia is one of the commonest causes of HIV related diarrhoea, being responsible for 15-34% of cases of HIV related diarrhoea.

81. A patient presents with inflammatory bowel disease. 5-ASA would be most appropriate in treating which Condition =====Maintenance therapy for ulcerative Colitis

82. A cancer patient has been referred for a nutritional assessment. What is the most reliable measurement=====Clinical observation

83. Gastrinomas are malignant tumours, usually sited in the

pancreas. They secrete gastrin, causing hyperchlorhydria and ulceration, as well as diarrhoea.

The gastric acid increases breakdown of vitamin B12 resulting in a deficiency in severe cases, hence the elevated MCV.

84. A patient with **colon cancer presents with weight loss.**

What is the most likely factor responsible for this =====**Anorexia**

.

85. **Enteral nutrition** is preferred rather than parenteral nutrition because =====**Less invasive** .

86. What features of colonic adenomas are most associated with an increased risk of malignant change =====**Polyp is sessile or flat.**

87. metformin =====**Bile acid malabsorption .**

88. describes a feature of the epidemiology of **Crohn's Disease** =====**Ashkenazic Jews have a higher risk than Sephardic Jews**

89. **Menetrier's disease** is a rare condition associated with **giant gastric folds, predominantly in the fundus and body of the stomach.**

90. Overall mortality from bleeding varices is around 30%

91. Which of the following best describes a feature of

PSC =====Cholangiocarcinoma may occur in up
to 20% of patients.

92. 60% of patients of African origin may have some

degree of lactose intolerance and so ==Trial of dairy-free diet .

93. cause of gynaecomastia in cirrhosis?

Altered oestrogen metabolism

94. Increased GGT is found in cases of fatty liver

95. haemochromatosis undergoes venesection. Which of the following features would be most likely to show improvement====Cardiomyopathy

96. Diarrhoea associated with long-standing Crohn's disease may be due to bile salt malabsorption (in the terminal ileum) and colestyramine is the most appropriate therapy in this case.

**97. Which of the following is suggestive of Wilson's disease?
Decreased serum ceruloplasmin**

98. In bleeding esophageal varices the most important to reduce the risk of long term bleeding is **oral propranolol**.

99. **The presence of large numbers of leucocytes in stool suggests** colonic mucosal inflammation and should suggest infection with enteroinvasive organisms such as Shigella, **Entamoeba histolytica**, Salmonella, Campylobacter, invasive Escherichia coli or Yersinia enterocolitica.

100. Which of the following risk factors is **not** associated with the development of ulcer disease =====

Emotional stress

مش واحد فرکش يعني يجيله قرحه !!! القرحه اللي مع الستريس اللي زي واحد محروق او عامل عمليهستريس عضوي وليس معنوي !!!

Stress induce ulcer like cushing and curling .

101. **Vitamin C** is essential for which process in collagen synthesis =====**Hydroxylation of procollagen proline and lysine**

102. Which of the following statements about lactulose is

True =====**It reduces proliferation of ammonia producing bacteria**

103. A patient underwent endoscopy and a **Mallory-Weiss tear** has been diagnosed. What is the most likely cause
====**Persistent vomiting**

104. Which of the following describes the primary mechanism of action of lactulose in the gastrointestinal tract ====**Osmotic laxative** .

105. When thinking about dietary protein, which of the following best describes the site of **polypeptide absorption** ==== **small intestine** .

106. Which of the following foods contains the largest proportion of **folic acid**?

150 g of liver

107. **Vibrio cholerae**

were identified in the stool sample.

Which of the following is the most appropriate antibiotic in this case?

Oral doxycycline

108. which of the following is

the biggest risk factor associated with the

development of crows disease===**Oral contraceptive use** .

109. Indications for fundoplication in this patient would include the fact she is young, has persistent symptoms of reflux despite maximal PPI therapy, and that she has ongoing respiratory symptoms. The use of laparoscopic fundoplication has expanded the range of patients who are now able to undergo surgery. Laparoscopic fundoplication is said to lead to resolution of symptoms in over 9 out of 10 patients who undergo the procedure

110. which is a **good natural source for vitamin D.**

Which of the following foods would you advise her to eat more of?

Herring ===! الرنجه

111. This portion of the duodenum is supplied by the posterior superior pancreaticoduodenal artery.

112. gastrin =====Release is triggered by GI luminal Peptides.

113. The symptoms seen here are highly suspicious of bacterial overgrowth syndrome. Hydrogen breath testing is non-invasive and has a specificity of 80% with a sensitivity of up to 75%.

114. Pyoderma gangrenosum is described in patients suffering from inflammatory bowel disease, where it may occur at the stoma site.

115. Colonoscopy – evidence of **melanosis coli**

Which of the following is the most likely diagnosis =====**Laxative abuse .**

116. The history of severe diarrhoea including abdominal / right iliac fossa pain is suggestive of possible **yersinia infection**. As such the most appropriate therapy is **ciprofloxacin**.

117. This man has worked on a farm and has symptoms that fit with **chronic Q fever**, with arthritis, pleuritic chest pain and endocarditis and so **do Serology testing for coxiella .**

118. Without any history of GI disturbance, the highest index of suspicion would be for a right sided colonic lesion. As such the investigation of choice is colonoscopy.

119. **S. bovis endocarditis** raises alarm bells with respect to the possibility of **underlying colonic carcinoma**.

120. **dysmotility associated with systemic sclerosis**. Given her symptoms are predominantly those of worsening reflux, addition of **metoclopramide, a pro-kinetic agent would seem most appropriate**.

121. **Crohn's-like enterocolitis** has been reported in a number of renal transplant patients who have received **mycophenolate mofetil**.

122. Acute respiratory distress syndrome, (ARDS) is a recognised consequence of acute pancreatitis ===Protein rich oedema fluid

123.no role for Bicarbonate in ttt of DKA .

124. is a feature of MEN-1====Parathyroid hyperplasia

Done by .faisal gamal hamedaegypt

14-12-2013.....3.14pm

Infection

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1. This young female has asymptomatic but significant

bacteruria. This is common (approximately 3% of non-pregnant females) and **does not require treatment** as there is no risk of morbidity or mortality. In fact, treatment of asymptomatic bacteruria in a young person may increase the frequency of symptomatic infections. However, **treatment is required if there are co-morbid factors – e.g. diabetes, renal transplantation, invasive GU investigations or a renal stone.** Pregnancy is an absolute indication to treat asymptomatic bacteruria because of the increased risk of pyelonephritis (30%), pre-eclampsia, prematurity and perinatal death. In pregnant patients, **a single dose of trimethoprim is as effective as the** other antibiotic options mentioned in the question

2. The history is strongly suggestive of infectious mononucleosis, which can be confirmed by a **heterophilic antibody test (Monospot).** Around 80% of

patients at this stage of the illness will have a positive test.

3. Dog bites become infected in 10% of cases. The commonest organisms are anaerobic mouth flora and *Pasteurella multocida*. Other organisms include *Capnocytophaga* spp and *Streptococcus pyogenes*. **Co-amoxiclav, (a mixture of amoxicillin and clavulanic acid) is appropriate as it is effective against all the most likely organisms.**

4. This patient is at an increased risk of contracting pneumocystis pneumonia. Although classically associated with HIV infection (and a CD4 count < 200 cells/mm

3

), **pneumocystis infection also occurs in**

patients who are immunosuppressed for other reasons,
eg post bone-marrow transplant and those on high-dose
steroids, effectively this woman has endogenous
high dose steroids as a result of Cushing's disease.

5. Malaria is the most likely diagnosis. Although she could
also have the other infections, malaria is the most
common in travellers returning from West Africa. like gambia

6. This is Rocky Mountain spotted fever, a rickettsial
infection caused by the organism Rickettsia rickettsii
which is spread by ticks. It occurs in the East, South
and West United States and also in Central and South
America. Treatment is with doxycycline.

Chloramphenicol is also effective

7. The most appropriate test

is with PCR (polymerase chain reaction) as this becomes positive prior to IgG levels.

8. This patient either has cerebral malaria or hypoglycaemia, which may well have been exacerbated by the quinine (it stimulates insulin release) as well as the malaria parasites (they metabolise glucose).

Although intubation may be indicated, she may recover her Glasgow Coma Score (GCS) rapidly with a dextrose infusion.

9. **Eosinophilia** is associated with **tissue-invasive helminths: strongyloidiasis, Wucheria infection, schistosomiasis** could all present in this way and should be screened for here.

10. Hepatitis E has

no chronic form but has a higher mortality (1–2%) than hepatitis A (0.1%) which has a similar clinical presentation and is also acquired by the faeco-oral route. Most deaths in patients with hepatitis E occur in women during the last trimester of pregnancy. Both hepatitis A and E may cause fulminant liver failure in patients with underlying liver disease.

11. It is worthwhile learning some of the side-effects of antiretroviral medications. The nucleoside reverse-transcriptase inhibitors (eg **AZT, stavudine, abacavir, DDI (didanosine)**), but much less commonly lamivudine) are associated with **lactic acidosis**.

The non-nucleoside reverse transcriptase inhibitors (NNRTIs) may cause hepatic disturbance.

Efavirenz commonly causes nightmares and is associated with neuropsychiatric side-effects.

Nevirapine may cause a severe rash (as can abacavir).

The protease inhibitors, and to a lesser extent NRTIs (especially stavudine), may be involved with fat redistribution and cholesterol and triglyceride elevation.

12. Protease inhibitors (PI)

- ☐ examples: indinavir, nelfinavir, ritonavir, saquinavir
- ☐ sideeffects: diabetes, hyperlipidaemia, buffalo hump, central obesity, P450 enzyme inhibition
- ☐ **indinavir: renal stones, asymptomatic hyperbilirubinaemia**
- ☐ ritonavir: a potent inhibitor of the P450 system

13. **Trypanosoma cruzi**, a protozoan parasite, is spread by reduviid bugs; these are known as **'kissing bugs'** as they often bite around the lips during the night. They frequently live in thatched roofs and occur in much of **Central and South America**. After an asymptomatic period, often of many years, patients may develop

cardiomyopathy and cardiac failure with arrhythmias.

e.g foot ball player from prazil with sudden collapse and on examination his found to have cardiomegaly and cardiac failure

13. Peripheral blood eosinophilia is the hallmark of a tissue-invasive helminth infection. The most likely diagnosis is a strongyloides infection, which commonly causes a marked eosinophilia.so ttt by Ivermectin.

14. The BTS guidelines recommend stopping TB medication in the presence of a transaminitis > 5 times normal and/or a rising bilirubin level. The medications can be gradually re-introduced at increasing doses once the LFTs have normalised. Isoniazid, rifampicin and pyrazinamide can all cause hepatotoxicity, which may be fatal.

15. A febrile illness in any traveller from a region where

malaria is endemic must have a thick blood film to look for evidence of malaria parasites. Malaria may present with a variety of signs, with headache and diarrhoea not infrequent features. Platelet clumping with thrombocytopenia is a classical effect of the parasite, and leucocytosis and a raised CRP are commonly seen.

16. Tuberculous meningitis is rare in the UK and the CSF typically shows a markedly raised protein (> 1 g/l), a low glucose (< 50% serum) and a lymphocytosis.

17. in the context of severe immunosuppression with HIV and the presence of multiple ring-enhancing lesions in the brain, make toxoplasmosis the most likely aetiology.

18. Nevirapine is a non-nucleoside

reverse-transcriptase inhibitor, a class of drugs well recognised to cause **maculopapular rashes**.in ttt of HIV.

19. The combination of antiretroviral therapy perinatally, an elective Caesarean section and avoidance of breast-feeding are the key factors in reducing vertical transmission in HIV.

20. For vaginal deliveries, if

Possible(when viral load is undetectable), membranes should be left intact until delivery

and foetal blood sampling and scalp electrodes avoided.

21. Intravenous drug users are prone to right-sided endocarditis, and by far the most likely organism

is Staphylococcus aureus(50–70% of cases) acquired from the skin.

22. All fevers in returning travellers from regions where

malaria is endemic should **have three blood films** to assess for malaria. However, in this case the presence of **bloody diarrhoea** indicates an **enteroinvasive organism**. The commonest are **Salmonella spp**, **Shigella spp**, **enteroinvasive Escherichia coli** and **Entamoeba histolytica**.

23. Clostridium difficile diarrhoea

usually occurs in the context of high-dose intravenous cephalosporins in the elderly. A neutrophilia is typical and diarrhoea can quite quickly lead to dehydration. The absence of a rash or eosinophilia makes a drug reaction less likely. Urinary tract infections are probably overdiagnosed and negative cultures also make this unlikely.

24. Immune reconstitution disease typically occurs a few

weeks after commencing **anti-retroviral therapy in a patient with underlying tuberculosis** .may be in the form of enlarged lymph node post ttt with one month .

25. Fully sensitive pulmonary tuberculosis should be no longer communicable after **2 weeks' therapy. Smear-negative disease is much less infectious** and is an indication that the therapy is working.and the patient can there for travel with plan smear negative not spuyum culture.

26. The clinical diagnosis is tetanus=and the patient should avoid early phsiotherpay.

27. **The Jarisch–Herxheimer reaction** can occur several hours after the administration of the first dose of an antibiotic due to the sudden release of endotoxin. The

systemic reaction that ensues can be fatal. It is a feature of **all spirochaete illnesses including syphilis, leptospirosis and borrelia (relapsing fever and Lyme disease) infections.**

26. Lyme disease is an infection caused by the spirochaete *Borrelia burgdorferi*, which is transmitted by contact with ticks of the **genus Ixodes**. Erythema chronicum migrans is usually the first symptom along with malaise, arthralgia and lymphadenopathy. Up to 60% of patients develop chronic oligoarthritis. Radiculoneuritis is another feature in around 15%, often involving the cranial nerves. A lymphocytic meningitis is a recognised complication. **Carditis is rare (< 10%)** especially with European strains of the disease compared with those found in North America. Heart block and arrhythmias may occur.

27. Wuchereria

bancrofti may present with a febrile illness and acute lymphangitis, and later lymphatic obstruction can occur with elephantiasis and massive scrotal swelling. The microfilariae are best demonstrated **during the night**.

28. **Botulism** is caused by an exotoxin, produced by *Clostridium botulinum*, which leads to **neuromuscular blockade**. The clue here is the presence **of IV drug use**, as **wound botulism is commoner in this group**, especially those using black tar heroin.

29. The list of **notifiable diseases** mostly refers to those which are communicable and hence of public health importance. **like malaria not HIV**.

30. **Immunosuppression** is a common cause **of atypical**

presentations of shingles, which may be **disseminated and multi-dermatomal**. Chickenpox may also present as a severe infection in these patients, but serology to varicella zoster virus (VZV) IgG would be negative since it is due to primary VZV infection.

31. BCG, yellow fever and oral tyoid are all live vaccines, which should be **avoided in HIV-positive** patients, even if the **CD4 count is well preserved**.

32. Amoxicillin is a penicillin-based antibiotic with excellent bioavailability and cover against **Gram-positive** organisms but no activity against anaerobes.

However,

the addition of clavulanic acid in **co-amoxiclav** will provide the additional **anaerobic cover** required.

33. an

eosinophilia and the failure to demonstrate acid-fast bacilli, despite intensive sampling. Paragonimiasis is an infection due to a trematode fluke, *Paragonimus westermani*. This fluke is acquired when metacercariae are ingested from an infected crustacean. The metacercariae penetrate the gut wall, the peritoneum and the lungs. Here worms produce a cellular reaction, **eosinophilia and haemorrhage**. A granulomatous response to the eggs may occur.

34. **Taenia saginata** is the beef tapeworm acquired by eating cysts contained in infected beef. These develop into adult worms in the intestine and may reach several metres in length often with few symptoms. The tapeworm is made up of many repeating segments each termed a '**proglottid**'.

35. Carrier of hepatitis B= HepB surface Ag-positive and anti-HepB core IgG Ab-positive.

36. After initial infection with HIV what is the median time for untreated patients to develop clinical disease=**10 years**.

37. **In immunosuppressed patients**, the commonest pathogens causing bacterial meningitis are the following: **Streptococcus pneumoniae; Neisseria meningitidis; Listeria monocytogenes**; aerobic gram-negative bacilli.

38. Meningitis caused **by Listeria monocytogenes** occurs mainly in adult patients with **malignancies**, in

transplant recipients and in immunosuppressed and elderly people.

39. degenerative disease of the central nervous system is caused by an infectious protein called a prion=Creutzfeldt–Jakob disease.

40. chronic hepatitis C infection=Interferon- α (IFN- α) and ribavirin

41. Herpes simplex virus (HSV) keratitis is characterised by the acute onset of pain, blurred vision, conjunctival injection and dendritic ulceration of the cornea. HSV keratitis can cause corneal blindness and its treatment is urgent. Topical aciclovir is the drug of choice, as topical steroids may make the infection worse.

42. serological marker shows vaccination success

after hepatitis B immunisation=Anti-Hbs antibody. Prophylaxis, the development and level of the

protective antibody (anti-Hbs), is used to monitor the

response to vaccination;

43. the most frequent cause of a nosocomial

wound infection=Insufficient hand disinfection.

44. Insufficient hand disinfection is the most frequent

cause of nosocomial wound infection.

45. pathogen can grow in contaminated food if

stored at a fridge temperature of 4 °C=Listeria monocytogenes

46. The **most common side-effect of ribavirin is haemolytic**

Anaemia so decrease HB level mcg, with the average decrease in haemoglobin

being 20 g/l. This therapy is best avoided in older patients, those with concomitant heart disease or patients with pre-existing haematological disorders.

Side-effects of interferon therapy are a flu-like syndrome, emotional lability, mood changes and sometimes thyroiditis. Ribavirin is teratogenic, therefore pregnancy must be prevented during and for up to 1 year after administration, whichever sex is being treated.

44. Bacterial endocarditis is treated with **penicillin**. What additional step is undertaken to **prevent penicillin resistance**?= **Add aminoglycosides**

47. Influenza vaccination (Influenza A virus)

is recommended for

those groups at the highest risk of morbidity; they

usually include patients in **chronic care facilities**

(especially the elderly), those with chronic

cardiopulmonary, lung like COPD. or renal diseases, diabetes

mellitus, haemoglobinopathies and the

immunocompromised.

48. A 65-year-old patient with COPD who continues to smoke

is housebound due to his disability. Which of the

following vaccinations should he receive on a yearly

basis=influnza A vaccine.

49. Oesophagitis presents with retrosternal pain on

swallowing, and in patients with **HIV** is most

commonly caused by **Candida albicans**. Oesophageal

candidiasis indicates advanced immunosuppression and is an AIDS-defining condition. The diagnosis should be suspected in a patient with oral candida and dysphagia, and may be supported by a barium swallow or **confirmed by endoscopy and biopsy**.like **Oesophagogastroduodenoscopy**.mcq

50.if a patient with **eplipse** or **seizures** develop **pneumonia** mostly it is **aspiration pneumonia** which is caused **by anaerobic infection** .

51. Anaerobic pleuropulmonary infections include aspiration pneumonia, necrotising pneumonitis, lung abscess and empyema, as well as infection secondary to bronchiectasis and bronchial carcinoma. The anaerobes involved in these infections are the oropharyngeal commensals.

52. Although Streptococcus pyogenes(β -haemolytic group A) is an invasive organism, it lives on epithelial surfaces (asymptomatic carriage) usually in the nose and throat; carriage can also be anal, vaginal and on the scalp. Infection causes an acute spreading inflammation of the skin and subcutaneous tissues with local pain, swelling and erythema. The appearance of the skin lesion and associated lymphangitis and tender lymphadenopathy may be preceded, by a few hours, by fever, rigors and malaise. Streptococcal cellulitis differs from erysipelas in that the lesion is not raised and the demarcation between affected and unaffected skin is indistinct. It may result from infection of burns, mild trauma, or surgical wounds. Penicillin is the treatment of choice.

53. What is the most common side-effect of

Pyrazinamide is hepatitis and hyperuricemia is less common.

54.in ttt of TB...Criteria for discontinuation of respiratory isolation are:

Treatment given for at least 14 days

Clinically responsive to therapy including

improvement in fever and cough

Acid-fast smears of sputum negative on three

Occasions

55. The diagnostic test for HIV uses an enzyme-linked immunosorbent antibody (ELISA), confirmed by

Western blotting to see if the patient has a

characteristic pattern of antibodies to important HIV

antigens. The CD4+ count is not used for

diagnostic purposes.

56. Without antiretroviral therapy, up to **30% of patients with AIDS** (and a CD4 lymphocyte count below 50/mm³) develop reactivation of **cytomegalovirus (CMV)** in the form of a **destructive and blinding retinitis**.so they become blind.

56. The most common opportunistic cause of **diarrhoea** in **HIV**-positive patients is infection by the protozoan **Cryptosporidium parvum**, which causes a self-limiting gastroenteritis in those who are non-immunosuppressed.but prolonged diarrhea in imunocomprimised.

57. Dengue fever is transmitted from the bite of infected **Aedes aegypti** mosquitoes. It is commonly seen in the

tropics where epidemics occur. After an incubation period of 3–4 days, patients develop fever, severe myalgias **and headaches (mainly retro-orbital)**. Painful red eyes are commonly seen, along with lymphadenopathy. A faint, blanching, maculopapular rash is characteristic. White cell counts are normal and platelets may be low, along with mildly abnormal liver function tests.

58. Plasmodium falciparum malaria is more dangerous than other types of malaria. It does not have a persistent exoerythrocytic phase, but **recurrence of fever is due to multiplication in the red blood cells of parasites that have not been eliminated by treatment.** Splenectomy **increases the risk of acquiring malaria**, and jaundice is commonly due to hepatitis and haemolysis.

59. The diagnosis is **visceral leishmaniasis**. This is due to *Leishmania donovani*, which is found in the Mediterranean and Red Sea area, Sudan, **India**, China and South America. The organism multiplies in the **monocytes and macrophages in various organs, especially in the liver and spleen (which become enlarged), the bone marrow, lymphoid tissue and the small intestinal mucosa**. The incubation period may be up to 10 years with an insidious onset and low-grade fever. The temperature typically rises twice in 24 hours. The spleen and liver are enlarged and if not treated the patient becomes wasted. **Diagnosis is by bone marrow, spleen, lymph node or liver aspiration.**

60. mycobacterium avium complex=MAC is an opportunist mycobacterium found in soil, water, dust, milk, etc. It usually attacks patients with pre-existing lung disease such as chronic obstructive pulmonary disease (COPD), bronchiectasis, etc, or patients who are immunosuppressed. Treatment is with rifampicin and ethambutol for 24 months.

61. Bacterial infection of a prosthetic joint is a rare, but devastating and costly event. Hip and knee replacements, which account for most of the joint replacement operations performed, have a 1–2% chance of becoming infected over the life of the patient or replacement. The most common source of infection is seeding from an infected skin lesion especially when infection occurs early in the first 12 weeks (postoperative period). Gram-positive staphylococci comprise 75–90% of the Gram-positive bacteria found

in infected prosthetic joints, with *S. epidermidis* being more common than *S. aureus*, in contrast with septic arthritis in natural joints, where *S. aureus* predominates.

62. Malignant external otitis is an infection of the external auditory canal due to *Pseudomonas aeruginosa*, commonly seen in **elderly patients with diabetes.**

63. The incidence of KS in AIDS has been in progressive decline since the early 90s

64. *Staphylococcus aureus* coagulase positive, unlike *S. epidermidis*. *Staphylococcus* species are facultative anaerobes, meaning that they can grow in

both aerobic and anaerobic conditions.

65. Live vaccines, including rubella, measles, mumps, BCG, yellow fever and oral polio vaccine are contra-indicated in patients taking prednisolone. like in ttt of rheumatoid arthritis.

66. A diagnosis of chronic fatigue syndrome (CFS) requires the presence of unexplained chronic fatigue for more than six months. Although several formal definitions exist, cardinal features of CFS (besides fatigue) include impaired memory or concentration, sore throats, myalgia, arthralgia, headaches, unrefreshing sleep and post-exertion malaise. CFS is a diagnosis of exclusion, which requires the absence of any other underlying organic or psychiatric problem. Dysphagia might reflect an underlying oesophageal cancer, and should be investigated urgently. no dysphagia.

67. Cervicitis may be asymptomatic or associated with vaginal discharge, dyspareunia and a friable mucosa, which leads to bleeding on smear examination or after intercourse. Laboratory smear reveals 10 or more polymorphs per microscopic field with a positive Gram stain. Cultures should be taken for chlamydia and Neisseria gonorrhoeae, and a wet mount to look for trichomonas. A cervical smear is also advisable to look for cervical dysplasia, as co-exposure to the human papillomavirus is likely.

68. Clinical features of tropical sprue include anorexia, diarrhoea, weight loss, abdominal pain and steatorrhea. These symptoms can develop in travellers even some months after returning to temperate regions. Blood testing reveals megaloblastic

anaemia in more than 50% of cases, with coexistent vitamin B12 or folate deficiency. Treatment is with oral folic acid supplementation, im vitamin B12, and 4–6 weeks' treatment with a tetracycline (or ampicillin where there is tetracycline intolerance). There is complete recovery with appropriate antibiotic therapy.

69. now HIV is shadow of TB.

70. Outbreaks of paramyxovirus infection (mumps in this case) are occasionally seen amongst students. In fact, there has been a recent increase in the number of cases of mumps cases in the late teenage years, as a result of individuals who may have missed the mumps vaccination before the introduction of MMR. The

number of cases seen in this age group may increase further if MMR (measles, mumps, rubella) vaccination continues to fall out of favour. Mumps is spread via respiratory contact and patients are contagious from 48 h before, to 9 days after parotid swelling. **There is a prodromal period characterised by low-grade fever, malaise, anorexia and headache. This is followed by parotid swelling and tenderness, which is usually the first sign of overt infection. It is unilateral in 25% of cases.**

71. the following percentages is the best estimate of how many untreated syphilis patients go on to develop late-stage CNS or cardiovascular complications=30%.

72. Plasmodium vivax infection

usually occurs in Central America or the Indian subcontinent, **Plasmodium ovale infection usually occurs in Africa.**

73. Hand, foot and mouth disease presents with this typical picture. It occurs with highest frequency in children of kindergarten age or younger, during the summer months especially. Outbreaks may occur in adult care workers who deal with children.

Coxsackievirus group A, type 16 was the first and is the commonest viral agent isolated. Viral subtypes A5, A7, A9, A10, B2 and B5 have also been implicated.

The disease has a 3–5 day incubation period, followed by cold-like symptoms and the appearance of grey-coloured ulcers in the mouth and a vesicular rash on the hands and feet. The disease is usually self-limiting, but in rare cases encephalitis, meningitis or

myocarditis may develop. The rate of spontaneous abortion is increased if the infection is acquired in early pregnancy. One small study without a control group claimed to show some benefit of aciclovir therapy.

74. Rocky Mountain spotted fever is a febrile illness caused by infection with **Rickettsia rickettsii**. It is most prevalent in the Central, South and South-Eastern **United States**.

The **incubation period is 3–12 days**, and the first symptoms are fever, headache, malaise and myalgia. There is history of a tick bite in 65%, fever in 100% and **a rash in 90% of cases**. Mild hepatitis, myocarditis, glomerulonephritis and encephalitis may also be associated.

75. Brucellosis is a zoonotic infection that results from contact with farm animals (commonly sheep, goats, pigs, cattle or dogs). Most cases occur due to occupational exposure, eg in farmers, vets or abattoir workers. The most common infecting agents are *Brucella melitensis* and *Brucella abortus*. It is acquired via inhalation or ingestion of organisms or via a break in the skin.

The incubation period is between **1 week and 3 months**, with symptoms of **fever, sweating, weight loss and mild depression**. **Hepatosplenomegaly is often present**. **Infection may rarely seed to heart valves (causing endocarditis), or to bone, resulting in osteomyelitis**. **The white cell count may be normal or low**, and the diagnosis may be confirmed via antibody testing. Combination treatment with **doxycycline and rifampicin**, or using septrin may be considered, for 6 weeks or more. Courses of less than 6 weeks are associated with a significant relapse rate.

76. Norovirus is the commonest cause of viral gastroenteritis, and is said to account for the vast majority of cases, around 96% according to the CDC.

It accounts for a significant burden on the NHS, particularly during the winter months..... **Diagnosis is established via ELISA (enzyme-linked immunosorbent assay) for the detection of virus antigen, or faeces electron microscopy. Treatment is aimed at adequate rehydration. An earlier vaccine for treatment of rotavirus was withdrawn, but a new vaccine has recently been licensed for use in South America, pending wider licensing.**

77. Yellow fever is caused by a flavivirus, and can vary in severity from a mild illness to the severe classical

form seen here. It is confined to Africa and South America between the latitudes of 15°N and 15°S. It is transmitted in South and Central America by the Haemagogus mosquito species. There is an incubation period of 3–6 days.

In the classical illness the patients then present with **a severe flu-like illness with pyrexia up to 40 °C; there may be associated epigastric pain and vomiting. Relative bradycardia (Faget's sign) is present from the second day of the illness.** There is then a recovery phase and the patient feels well for several days. After this time, severe fever develops once again, the **patients become jaundiced, with hepatomegaly, evidence of severe bruising, bleeding from the gums, haematemesis and melaena.** Liver biopsy at late presentation shows mid-zone necrosis, with eosinophilic degranulation of hepatocytes. Supportive therapy only is possible, and mortality is unfortunately up to 40%.

77. for trichomonas vaginalis the most sensitive diagnostic test is **Vaginal fluid microscopy and culture**. Treatment is with **nitroimidazoles; metronidazole is the most frequently used**. Both 5 day regimes looking at 400 mg PO BD for 5 days, or single dose protocols exist with respect to treatment with metronidazole.

78. Constipation, a mucopurulent anal discharge, anal bleeding, perianal discomfort or pruritus ani, and, in severe cases, pain and tenesmus are symptoms of **gonorrhoea in homosexual men**.

79. active HIV If **treatment failure** occurs then what is the most likely cause= **Viral resistance is a major factor in treatment failure.**

78. Patients with advanced HIV infection and CD4 lymphocyte counts below 50/mm are at **high risk of disseminated Mycobacterium avium complex (MAC) infection, particularly in industrialised countries where it is reported to develop in up to 40% of patients with AIDS. Infection is likely to be through the gastrointestinal tract.** MAC infection becomes widely disseminated in those with advanced HIV and causes fever, night sweats, weight loss, **diarrhoea**, abdominal pain, anaemia, disturbed liver function and reduced overall survival. **the most important investigation to confirm the likely clinical diagnosis= Blood cultures.**

81. Haemorrhagic skin lesions are the hallmark of systemic meningococcal disease, occurring in 70–80% of all cases in industrialised countries. They appear as red or bluish petechiae.

82. Parvovirus B19 infection lead to aplastic crisis in patient with SCA.

83. The pathogenic species of Plasmodium cause acute febrile illnesses. These are characterised by periodic febrile paroxysms occurring every 48 or 72 hours, with afebrile asymptomatic intervals and a tendency to relapse over periods of months or even years.

84. This man **has Q fever**. The causative organism, **Coxiella burnetii**, is usually spread between domestic animals by ticks, which are a reservoir of infection. **Transmission to humans is by inhalation of infected dust and aerosols** and drinking unpasteurised milk from infected cows. **C. burnetii** is an obligate intracellular organism and does not grow on standard culture media.

85. **A painless indurated ulcer with non-tender inguinal lymphadenopathy indicates syphilitic infection**. The best investigation would be **dark-field microscopy of the discharge to show the presence of the spirochaete, Treponema pallidum**.

86. **Nocardia**.

Madurella mycetomiis due to subcutaneous infection with fungi (class Eumycetes). Infection results **in local swelling that may discharge through sinuses**.

87. Nocardia spp use paraffin as a source of carbon for growth. would be the best technique to use for isolating and culturing the organism.

88. The clinical features are suggestive of epidemic typhus. A measles-like eruption appears on the fifth day after the onset of symptoms. The macules increase in size and eventually become purpuric in character. At the end of the first week, signs of meningoencephalitis appear that may progress to stupor or coma, sometimes with extrapyramidal symptoms. The most common initial symptoms in cerebral malaria are fever and malaise, which may be followed by a rapid deterioration in consciousness and convulsions.

89. **Septate hyphae** and the involvement of **sinuses** suggest a diagnosis of **aspergillus infection**. Diabetes is a predisposing factor for this disease.

90. Lymphangiitic sporotrichosis is the most common infection due to **Sporothrix schenckii**. This begins as a reddish, non-tender maculopapular lesion at the site of inoculation. Over the next several weeks, similar nodules form along proximal lymphatic channels. These break down to form a **row of ulcers**.

91. **Melioidosis infection** is caused by *Burkholderia pseudomallei*. Infection follows inhalation or direct inoculation, with the majority of clinical cases occurring in South-East Asia. Trench fever is caused by *Bartonella quintana*. There is an abrupt onset of fever followed by the sudden development of profound anaemia. Multiple

abscesses are not seen in this disease. Plague is caused by *Yersinia pestis*, a Gram-negative bacillus that is non-motile and oxidase-negative. Actinomycetes are Gram-positive branching bacteria.

92. Slime is an amorphous viscid colloidal material that is secreted extracellularly by some bacteria (eg *Staph. epidermidis*). The slime remains around the bacteria and provides a matrix in which biofilm formation can take place. The biofilm enables the bacterial colony to spread very thinly over devices such as catheters and prostheses. This biofilm restricts the access of drugs to the bacterium and thus causing antibiotic resistance.

93. A lesion with central scarring is suggestive of lupus vulgaris. This is the commonest manifestation of cutaneous tuberculosis.

94. What is the most appropriate test in patients with hepatitis C virus infection to determine the need for treatment= Liver biopsy.

Treatment is recommended for patients with moderate to severe hepatitis C (defined as histological evidence of significant fibrosis or significant necro-inflammation).

The duration of therapy depends on both HCV genotype and viral load. A lower baseline HCV viral load is associated with a better response to treatment. Serum alanine aminotransferase (ALT) is usually, but not always, abnormally elevated in patients with significant degrees of hepatitis. The primary aims of treatment of patients with chronic HCV are to achieve acceptable ALT levels and clearance of HCV, with both sustained for at least 6 months after treatment cessation. Serum HCV IgG level is irrelevant.

96. Hypertriglyceridaemia can be severe with use of the **protease inhibitor class of drugs**. This class of drugs can also impair glucose metabolism.

97. Side-effects of antiretroviral agents are now a major concern. As a broad rule the nucleoside reverse transcriptase inhibitors (NRTIs) cause mitochondrial DNA damage and lactic acidosis and peripheral neuropathy, apart from lamivudine, which is relatively free of side-effects. The protease inhibitors interact with part of the cytochrome P450 system and therefore have major drug interactions. They also cause metabolic and lipid changes. Lipodystrophy is a major concern to patients. It is not yet clear what the main cause of this is, but stavudine is implicated.

98. zidovudine. What is

the most severe side-effect to watch out for=Lactic acidosis.

99. Congenital VZV following primary infection in the mother in the first 20 weeks of pregnancy causes about a 2% incidence of fetal abnormality. The fetus develops episodes of shingles that affect development of the involved dermatome.

100. The patient has **acute Epstein–Barr virus (EBV)**. The **tonsillar swelling** responds to **intravenous hydrocortisone** (up to 200 mg qds) and can prevent respiratory obstruction, a recognised cause of death.

101. HPV is considered an aetiological agent in carcinoma of anal canal in homosexual men.

102. An increasing PR interval suggests an aortic root abscess, which has a high mortality even with surgery.

Embolism, particularly if recurrent, is an indication for surgery. Cerebral embolism and coronary artery

embolism are associated with increased mortality.

Failure of fever to resolve after 1 week also suggests the presence of an intracardiac abscess that will usually require surgery.

103. Overwhelming post-splenectomy infection (OPSI) can occur any time after splenectomy, but is more common within the first 5 years. It is less common if the spleen

is removed for trauma. Typically the causative organisms are encapsulated. *Capnocytophaga canimorsus* (DF-2, a dog-bite organism) has also been identified as a causative agent and can give a clinical picture similar to meningococcal septicaemia.

104. Take EDTA blood sample for PCR. The diagnosis of meningococcal septicaemia.

105. It is highly likely he has multidrug-resistant TB, now a huge problem in Russian prisons and increasingly imported to the UK. Treatment be discussed with an expert in the management of MDRTB but should be with multiple agents, at least three of which he has not previously received. CCDC is responsible for contact tracing. The rifampicin resistance gene is present in >

90% of rifampicin-resistant isolates and can provide a guide to Rx, but a negative result does not exclude rifampicin resistance. It is now standard practice to offer all TB patients an HIV test.so **Refer to expert microbiologists.**

106. Anti-tetanus immunoglobulin must be given urgently on clinical suspicion of the disease. The initial entry wound may be trivial and is often not identified. Penicillin and metronidazole should also be started, but the **priority is for the immunoglobulin.**

107. Gastrointestinal anthrax develops following consumption **of contaminated meat**, it can occur as familial clusters. The incubation period **is 2 to 5 days**. Oropharyngeal anthrax follows deposition of the bacteria in the oropharynx. **Patients present with fever, neck swelling, sore throat, and dysphagia.** The neck swelling is caused

by enlargement of the lymph nodes together with subcutaneous oedema as in diphtheria. The lymph node enlargement commonly involves the upper group of the jugular chain. There is an inflammatory lesion in the oral cavity or oropharynx. The lesion starts as an inflamed mucosa, progressing through necrosis and ulceration to the formation of a pseudomembrane covering the ulcer. In severe cases, the subcutaneous oedema extends to the anterior chest wall and axilla, with the overlying skin showing signs of inflammation. Toxaemia and death may follow. Oropharyngeal anthrax should be considered in patients who present with fever, neck swelling, sore throat, and oropharyngeal ulcer and who give a history of eating raw or undercooked meat.

108.norovirus=There have been dramatic outbreaks of this virus (also

known as Norwalk-like virus, small round-structured virus, SRSV) in UK hospitals in 2002/03 necessitating closure of wards. Transmission is by direct contact, but also possibly by droplet spread. The prodromal illness can be minutes! Enteroviruses are so called because they replicate in the gastrointestinal (GI) tract, but they only very rarely give rise to GI symptoms..

109.if a patient with fits and +ve Treponema pallidum haemagglutination assay (TPHA)=you have to do lumbar puncture and test to exclude neurosyphilis.

110.eastern europe = diphtheria.

111. In addition, live vaccination should not be given to individuals who are currently undergoing corticosteroid therapy. like yellow fever.

112. Cephalosporins given intravenously are also likely to be associated with C. difficile. C.difficile is a common bacterium and is found as a part of normal bowel flora in 3–5% of the normal population. When it causes problems with acute infection, two toxins are produced (A is an enterotoxin and B is cytotoxic and results in bloody diarrhoea). Symptoms range from mild diarrhoea to severe colitis, when the bowel mucosa may be covered by a pseudomembrane. Antibiotics treatment of choice is with oral metronidazole or vancomycin.

113. Classic dengue fever is characterised by abrupt onset of fever, malaise, headache, facial flushing, severe muscular backache and conjunctival suffusion. Lymphadenopathy, petechiae on the soft palate and a morbilliform rash which begins on the limbs and later spreads to the trunk may also occur.

114. Interferon given during acute hepatitis B infection has not shown any benefit, but is effective in the treatment of chronic hepatitis B side-effects include an acute flu-like illness occurring some 6–8 h after first injection.

115. For how long after a splenectomy is a patient at increased risk of pneumococcal infection more than 10 years. OPSI has been recorded more than 40 years after splenectomy.

116. Immunocompromised patients with cytomegalovirus infection develop spiking pyrexia which resolves within a few days. And so if you give antibiotic no response.

117. Which antigen is involved in the entry of Plasmodium vivax into red cells= duffy.

118. Which infection is now classified as an AIDS-defining illness in patients with HIV?= Mycobacterium tuberculosis

119. Which of the following is the most appropriate management step in a ward outbreak of MRSA=Improve hand washing hygiene among staff.

120. mumps

(paramyxovirus infection) complicated by mild CNS involvement. Mumps virus can be isolated from nasopharyngeal swabs, urine, blood and buccal fluid for 7-9 days after the onset of parotitis. PCR is available for virus detection, the alternative for confirming the diagnosis being viral serology. Management is conservative with appropriate hydration and pain relief. Cerebellar ataxia may occur post CNS involvement. Mortality for mumps with CNS involvement is put at around 1.4%.

121. This patient has chicken pox pneumonitis, a serious complication of varicella zoster infection. He has not been exposed as a child, the student environment increases exposure to VZV, and it is known that corticosteroids may increase the risk of infection. This patient should be admitted, and managed on the high

dependency unit. Treatment is with IV acyclovir, at a total dose of 1500mg/m

2

/day for a period of 7-10 days.

Thankfully with appropriate management, whilst a serious complication of VZV, the pneumonitis is rarely fatal.

122. Human rabies immunoglobulin provides immediate protection from rabies, with a half life of around 21 days. **As much as possible of the immunoglobulin should be infiltrated in and around the wound itself, with any remaining immunoglobulin given intramuscularly.** Rabies vaccination should also be administered, although this takes between 7 and 10 days to provide adequate immunity.

123. S. epidermidis is a common cause of infection in dialysis patients. Given the fact that his urine sample is negative, and respiratory examination is unremarkable, a line infection is likely. Typical regimens used for S. epidermidis infection include rifampicin and vancomycin, vancomycin and gentamycin, and linezolid. Line removal is necessary, and a prolonged period of antibiotic therapy for around 6 weeks or more is recommended.

124. This man has strongyloides, the history of intermittent diarrhoea, coupled with episodic vague abdominal pain being typical of the condition. The presence of eosinophilia as well as ovae identified on one of the stool samples also supports the diagnosis. Ivermectin is an option in chronic strongyloides, **but the first choice in the UK is mebendazole (albendazole is not widely available in the UK)**. The azoles block ATP production in the worm leading to decreased energy production, stasis and eventual death. These treatments are contraindicated in the first trimester of pregnancy.

124. The greatest risk of infection post-splenectomy exists in the first **2 years** after removal, and existing UK guidelines recommend prophylactic antibiotics during this period. so you give **Penicillin prophylaxis 500mg BD is indicated for at least a 2 year period.**

Nephro

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I RECOMMEND TO READ IT BEFORE DOING pastest!!!!

BELIVEME ME IT WILL MAKE A DIFFERENCEread it after studying the text and before answering the mcqeos !!!!!

Notes taken from over than 300 mcq pastest !!!

You read it as fast as you can and then answer pastest !!!

1. BEST

describes the **hepatorenal syndrome** =====**Almost all patients have ascites and are usually jaundiced**

2. Hepatorenal syndrome describes impairment in renal function that develops in patients with serious liver disease .

3. The presence of which one of the following features is MOST helpful in distinguishing chronic from acute renal failure =====**Bilateral small kidneys** .

4. Which one of the following vasculitides is **more often associated with renal involvement** =====**Microscopic polyangiitis** .

5. Microscopic polyangiitis is the most common cause of the pulmonary-renal syndrome. Approximately 90% of patients have glomerulonephritis.

6. regarding retroperitoneal fibrosis?

Low back pain is the most common presenting symptom

7. 99% of filtered Ca is reabsorbed in the kidneys

8. Bartter's syndrome =====Hyperplasia of the juxtaglomerular Apparatus

9. Which one of the following conditions is most commonly associated **with large kidneys despite advanced renal failure?**

Amyloidosis

10. Active urinary sediment with RBC casts indicates glomerulonephritis

11. Membranous glomerulopathy is associated with====**Adenocarcinoma of the stomach**

12. The ECG is typical of pericarditis. In myocardial infarction, ST segment elevation would be convex shaped. As this patient has chronic renal failure, the diagnosis is uraemic pericarditis. This condition requires urgent dialysis.

13. dysequilibrium

syndrome. This is caused by cerebral oedema, resulting from the rapid shifts of uraemic toxins associated with too-rapid haemodialysis in a severely uraemic patient.

14. Of the following disorders, which one causes acute tubular damage====Myoglobinuria

15. Water excretion in the kidneys is influenced by====**Vasopressin**

16. Which factor is most likely to trigger renin Stimulation===**Hypovolaemia**

17. Increased anion gap occurs in===**Aspirin toxicity**

18. Allopurinol causes acute interstitial nephritis (AIN)=====
Regression following withdrawal of the Drug

19. Decreased cardiac output stimulates **renin release** Like in ht failure .the renin stimulate aldosterone =release and then pedal edema .

20. type I renal tubular acidosis is: =====**It may occur as a result of amphotericin toxicity**

21. The presence of **uraemic peripheral neuropathy** is an **indication for dialysis**. Early dialysis may reverse the sensory deficits.

22. A renal biopsy shows focal **subepithelial deposition of IgG and C3**. A probable diagnosis is:==== **Membranous glomerulonephropathy**

23. Wilms' tumour is most strongly associated with ====**Deletion on short arm of chromosome 11**

24. Cyclophosphamide ====**chemical cystitis** and therefore excellent hydration must be maintained during therapy with cyclophosphamide.

25. The presence of pus cells in the urine during medications suggests interstitial nephritis. A number of drugs (β -lactams, sulphonamides, rifampicin, ethambutol, erythromycin) cause an acute allergic reaction with infiltration of immune cells.

26. L-Dopa is the mainstay of treatment for Parkinson's disease. The urine darkens on standing in these patients and this is the most likely diagnosis.

26. Long-term haemodialysis is associated with carpal tunnel syndrome.

27. A 73-year-old widow is **undergoing haemodialysis** for chronic renal failure.

What is the most common problem that can arise in this case=====**Protein-calorie malnutrition** .

28. Which of the following is most likely to accompany the **nephrotic syndrome** ==== **Intravascular volume depletion** .

29. Sickle cell disease causes a loss in renal concentrating ability due to **medullary damage from sickling**. DI also develop

30. **Berger's disease** (IgA nephropathy) is associated with

chronic renal failure in up to 30% of adult cases.

31. One of the most important functions of the PCT is===Sodium reabsorption

32. the most significant clinical presentation of distal renal tubular acidosis (type I) that differentiates it from proximal renal tubular acidosis (type II) ===Renal stone formation.

33. the most likely to be responsible for renal osteodystrophy?

Diminished activity of renal 1- α -hydroxylase بدايه المشاكل من هنا

34. A characteristic feature of primary focal segmental glomerulosclerosis (FSGS) is that:=== **The histology may appear normal and may be confused with minimal change nephropathy as fusion of podocyte is found in both**

35. This patient most probably has urinary schistosomiasis. The condition starts with frequency, dysuria and haematuria. Painless terminal haematuria is usually the first and most common symptom. **In advanced disease, pyelonephritis, hydronephrosis or pyonephrosis may lead to hypertension or uraemia.**

36. A significant feature of urinary tract infection (UTI) in children is that =====**Diarrhoea is a presenting feature** .

37. The history is typical of **postpartum haemolytic–uraemic syndrome (HUS)**, which usually occurs 4–6 weeks' postpartum and is characterised by **microangiopathic haemolytic anaemia**, severe irreversible renal failure and hypertension.

38.. The presence of mixed Gram-negative and/or anaerobic organisms is highly suggestive of **secondary peritonitis** due to a **perforated large** bowel or appendicitis. **Diverticulitis is**

the most frequent cause of this presentation

39. Fabry's disease, an X-linked lysosomal storage disorder characterised by

myelin deposits in tubular epithelium and vascular endothelium, resulting in ischaemic nephropathy.

40. Acetazolamide therapy frequently results in chronic asymptomatic metabolic acidosis, which is associated with a normal anion gap and partial respiratory compensation.

41. Xanthogranulomatous pyelonephritis ===== It develops as an abnormal macrophage

response to infection, particularly in the presence of urinary tract obstruction, and is pathologically related to malacoplakia. **A flank mass is usually palpable**, thereby distinguishing it from simple acute pyelonephritis or renal abscess, and occasionally mimicking renal cancer.

42. Hantavirus causes a 'haemorrhagic fever with renal syndrome' and is endemic in Korea and other Asian countries, the Balkans (the recent war there was associated with a mini-epidemic of hantavirus),

43. lupus nephritis =====Diffuse proliferative glomerulonephritis

with deposits of IgG, IgM and C3

44. The type of renal disease that develops in systemic lupus erythematosus (SLE) ===== **Subendothelial deposition of immune complexes**

45. Hepatitis C is now considered the principal cause of 'idiopathic' mesangiocapillary glomerulonephritis,

46. Gitelman syndrome ===== **Genetic defect of the Na + Cl – co-transporter in the distal convoluted tubule**

47. **Adynamic bone disease** is increasing in incidence, is especially prevalent **in diabetic patients on peritoneal dialysis** and is associated with an increased incidence of **hip fracture**.

48. **Carnitine palmitoyltransferase (CPT) deficiency** is the commonest cause of inherited metabolic myopathy resulting in **recurrent myoglobinuria**. Although the metabolic myopathies represent a small percentage of those presenting with rhabdomyolysis, they should be **suspected when myoglobinuria is recurrent, associated with exercise or fasting and occurring with muscle cramps or weakness**.

49. The combination of sterile **pyuria, haematuria, dysuria** and **renal tract calcification** is highly suggestive of ***renal***

TB.

50. Tumour lysis syndrome, often inappropriately called 'acute urate nephropathy', typically occurs after chemotherapy for lymphoma with a large tumour burden.

51. The pathological hallmark of **HIV-associated nephropathy (HIVAN)** is focal **segmental glomerulosclerosis (FSGS)** with a collapsed glomerular tuft,

52. The history is suggestive of **scleroderma renal crisis**====**Muroid intimal thickening of vascular endothelium**

53. Nephrotic syndrome without haematuria in a patient with SLE suggests membranous nephropathy (class V).

54. The loin pain–haematuria syndrome is a poorly defined disorder characterised by loin or flank pain that is often severe and unrelenting and haematuria with dysmorphic features suggesting a glomerular origin.

55. Goodpasture’s syndrome is characterised by the triad of glomerulonephritis, pulmonary haemorrhage and anti-GBM antibody.

60. Nephrogenic diabetes insipidus may be a long-term consequence of lithium therapy due to direct toxicity.

61. The two peaks of incidence in adults for pyelonephritis occur in young sexually active women and in men > 50 years of age.

62. tertiary hyperparathyroidism, as exemplified by her hypercalcaemia and hyperphosphataemia.

63. Patients with short bowel syndrome due to surgical resection are particularly prone to the formation of

oxalate stones.

64. Retroperitoneal fibrosis often presents with malaise, **back pain**, normochromic normocytic anaemia, uraemia and a raised erythrocyte sedimentation rate (ESR).

65. Staph. epidermidis responsible for around 40–50% of cases of peritoneal dialysis-associated peritonitis.

66. A 71-year-old diabetic woman is in her 6th year of haemodialysis. She visits her GP with symptoms of pain, numbness and tingling in both hands during the early hours of the morning. She also complains of stiffness in her shoulders, hips and knees.

**What diagnosis fits best with this clinical picture====Dialysis
amyloidosis**

**67.in PKD ===The commonest chromosomal defect is on
chromosome 16 (85%); a second gene defect has
been identified on chromosome 4, which is responsible
for the majority of other cases.**

**68. This man has polyarteritis nodosa. This is a
multisystem necrotising vasculitis of small- and
medium-sized arterioles.**

**69. This is a case of acute nephritic syndrome, in which red
cell casts are a characteristic feature.**

70. This patient most probably **has autosomal-dominant polycystic kidney disease**. There is a risk of **haemorrhage into a cyst during or following renal biopsy**.

71. Penicillamine and gold may cause membranous glomerulonephritis.

72. The features are highly suggestive of type-2 mesangiocapillary (**membranoproliferative**) glomerulonephritis. This type may be idiopathic or may occur after **measles**.

73. Plasmodium malariae is a common cause of membranous glomerulonephritis in the tropics.

74. d-Penicillamine can precipitate the nephrotic syndrome and is used as therapy for severe gouty arthritis.

75. nephrotic syndrome ===**Increased serum cholesterol** .

76. renal cell carcinoma. The classic **triad of haematuria, loin pain and abdominal mass** is present in this case

77. Circulating immune complexes are seen in mesangiocapillary (membranoproliferative) glomerulonephritis.

78. minimal change GN ===== Normal high-density lipoprotein cholesterol levels

79. Thyroxine levels are depressed in nephrotic syndrome due to the enhanced urinary excretion of thyroxine-binding globulin.

80. A 30-year-old businessman who has recently returned from a 3-month business trip to South Africa presents with fever, malaise, lymphadenopathy and acute nephritis. Which infection is the most probable cause for his Condition =====Treponema pallidum** .**

81. The features are suggestive of secondary syphilis, which can cause nephritic syndrome. Plasmodium malariae is usually associated with membranous glomerulonephritis. Hepatitis B and C infections, but not hepatitis A, may be an aetiological factor in mesangiocapillary nephritis type 1. E. coli and mycoplasma are not usually associated with nephritic syndrome.

82. (membranoproliferative) glomerulonephritis ===Thickening and splitting of the capillary basement membrane

83. post-streptococcal glomerulonephritis ===Serum C3 and CH 50 levels are depressed within 2 weeks of the occurrence of the disease.

84. In antiglomerular basement membrane disease, autoantibodies are directed against the non-collagenous domain of the α -3 chain of type-IV collagen.

85. The diagnosis is Goodpasture's disease ===== **Bilateral diffuse infiltrates in the lower zones**

86. lung biopsy of good pastur syndrome ===== **Haemosiderin-laden macrophages**

87. This patient most probably has Goodpasture's syndrome. **Renal biopsy is the 'gold standard' for diagnosis of this condition.**

88. A 65-year-old woman with **longstanding diabetes presents with proteinuria**==== prone to **Glomerulosclerosis** .

89. This patient has type-1 distal renal tubular acidosis (RTA). This may be caused by a number of autoimmune Diseases like primary biliary cirrohsis ==== **Decreased urinary citrate levels** .

90. **wilson can lead to type2 RTA** and then you will find
=====**Hypophosphataemia**

91. Distal renal tubular acidosis (type-1 RTA) may occur in Marfan's syndrome. This acidosis is associated with a normal anion gap (ie 8–16 mmol/l).

92. Which renal disorder is most likely to occur in patients suffering from **gouty arthritis** ===== **Urolithiasis** .

93. What is the most characteristic physiological activity that retains sodium in the face of salt and water overload === **Arterial underfilling** .

94. This biochemical picture is suggestive of high anionic-gap metabolic acidosis. The most likely cause is lactic acidosis in the presence of myocardial infarction and hypotension.

95. The presence of acidosis, hypokalaemia, low serum bicarbonate levels and relatively high urinary pH are characteristic of distal renal tubular acidosis.

96. Gitelman syndrome is pathognomonic for hypomagnesaemia (which is

97. Rapid lysis of tumour cells following chemotherapy may cause hyperuricaemia to avoid **Sodium bicarbonate b4 chemo .** since uric acid is more soluble in an **alkaline medium.**

98. **Low serum erythropoietin levels suggest polycythaemia vera.** If the serum erythropoietin level is raised, it suggests either a hypoxic cause or an increase in the autonomous production of erythropoietin as can happen with renal carcinoma.

99. The presence of a bacterial count of more than 10⁵ /ml indicates the **need for antibiotic treatment.**

100. Primary vesicoureteric reflux is most commonly found in which patient population =====**Newborn girls** .

101. **A micturating cystourethrography** is used primarily in children to check for vesicoureteric **reflux** during voiding.

102. **This postmenopausal woman** has symptoms caused by the **urethral syndrome**. The condition is common in elderly women due to **dryness and atrophy of the urethral tissue**. **Topical oestrogen cream** often has a

dramatic response.

103. Tuberculosis of the urinary tract should be kept in mind in patients presenting with frequency, dysuria, haematuria and fever, particularly in the Asian immigrant population of the UK. **Excretion urography** may show cavitating lesions in the renal papillary areas, commonly with calcification.

104. Sepsis, particularly Gram-negative septicaemia, is the most frequent complication and cause of death in acute renal tubular necrosis while awaiting spontaneous

recovery of renal function.

105. present on urine examination, would be most helpful in confirming ATN?

Urine osmolality 300 mOsmol/kg

106. **Sulphonylureas, especially chlorpropamide**, induce hyponatraemia by potentiating the effects of antidiuretic hormone on the renal collecting ducts. SIADH .

107. **Cytomegalovirus** is the predominant cause of infection in patients within a period of **1–4 months after renal transplantation**. TTT by gancilovir .

108. Nephronophthisis is an autosomal-recessive disorder.

The clinical features and investigations are suggestive of this disorder.

109. A 2-year-old boy presents with recurrent urinary tract infections. What is the most common cause for this problem in a child of this age ===== Vesicoureteric reflux .

110. The most common abnormality seen in a child with urinary tract infection in a micturating cystourethrogram is vesicoureteric reflux. It is identified in approximately 40% of patients.

111. Tissue destruction or breakdown

results in the release of intracellular potassium

112. spironolactone.

What is the primary site of action of this drug ===== Distal

tubules

113. Rifampicin is a safe and effective drug for the treatment

of tuberculosis. It is mildly hepatotoxic and should be

stopped only if the serum bilirubin becomes elevated or

transferases are elevated more than threefold, which is

extremely rare and not related to renal function to change the dose .

114. .Lambda light chains are specific to the AL type of amyloid protein. The AL type of amyloid protein occurs in **multiple myeloma** and monoclonal gammopathy of uncertain significance (MGUS),

115. Idiopathic hypercalciuria is an autosomal-dominant Disorder and ttt by thiazide diuretic .

116. A 6-month-old boy is found to have primary grade-V vesicoureteric reflux involving both kidneys. What would be

the most appropriate management in this case ==== **Antibiotic prophylaxis cuz this child below one year in age .**

117. A 3-year-old boy presents with a history of poor urinary stream. What is the most probable cause ==== **Posterior urethral valve =**

118. Renal dysplasia is usually associated with posterior urethral valves

119. The loss of gastric fluid rich in hydrochloric acid results **in alkalosis ==== Increased serum bicarbonate .**

120. An uncorrected bleeding disorder is an **absolute contraindication to lithotripsy.**

121. A 27-year-old man is suspected of having a **urethral stricture**. Which radiological investigation would be most helpful in this case =====**Retrograde urethrography**

122. Retrograde urethrography is the mainstay of radiographic investigation for stricture disease

123. A 2-year-old boy has a phimosis. What is the most appropriate treatment for this patient?

Wait and watch

124. Phimosis is common in 2 year olds and most will slowly dilate. In those who have persistent problems into teenage years, around 85% will respond to topical steroids, reducing the need for circumcision.

125. Chlamydia trachomatis is a Gram-negative organism that is too small to be visualised on staining. This is an obligate intracellular parasite and hence cannot grow on any cell-free media.

126. c-ANCA == Wegener's granulomatosis

127. This is a case of **MEN (multiple endocrine neoplasia)-type II**
====The most useful investigation would be **a 24-hour urine
collection for metanephrines.**

128. **posterior urethral valves.** The best diagnostic method **is a
micturating cystourethrography**

129. This patient has the classic triad of haematuria, loin
pain and mass in the flank suggestive of renal
carcinoma. **Since both kidneys are involved, a partial
nephrectomy of the less involved kidney is justified.**

130. Diabetes treatment may need to be adjusted once dialysis is commenced

131. Which of the following symptoms is a recognised association of immunosuppression therapy====Increased incidence of new diabetes mellitus

132. multiple myeloma can lead to RTA 2

133. This woman has evidence of possible Hodgkin's disease, given her history of painless

lymphadenopathy, night sweats and pain on drinking alcohol =====minimal change GN .

134. The history of hypertension, painless haematuria, intermittent loin pain and family history of subarachnoid haemorrhage is highly suggestive of ADPKD.

135. **Medullary sponge kidney** ===The condition is characterised by **dilatation of the collecting ducts in the papillae, with accompanying cystic changes.**

136. Which of the following best describes the percentage of men aged 80 who have malignant foci within their prostate gland ===80% .

137. A 57-year-old man with a long history of **gout presents with loin pain. Other past history of note includes ileostomy after bowel surgery. There is no history of weight loss of malabsorption syndrome after his bowel surgery. Excretion**

urography reveals evidence of bilateral renal stones.

What is the most likely composition of his renal

Stones =====**uric acid stone** .

This one I think it trick me cuz I used to choice oxalate stone when he state that bowel resection but the presence of gout make uric acid stone more likely .LOL.....!!

138. In an unselected population the incidence of **contrast nephropathy** is said to be between 2 and 7%. **If renal function is impaired** then the incidence increases to **around 25%**

139. While asymptomatic bacteriuria in the non-pregnant is a frequent occurrence and does not always require treatment but **in pregnant women Treat with amoxicillin**

140. Type-2 MCGN may be idiopathic or may occur after measles infection, as in this case.

141. Retroperitoneal fibrosis has a recognised association with abdominal aortic aneurysm and prolonged exposure to methysergide,

142. Acute tubular necrosis is associated with pancreatitis and a number of other conditions associated with hypotension and shock such as haemorrhage, burns, diarrhoea and vomiting and myocardial infarction.

And you will find that urinary NA more than 30

143. Which of the following stems best fits the abnormalities that are typically seen on protein electrophoresis in patients with nephrotic syndrome

====Increased α 2-globulin fraction, decreased serum albumin

144. A 22-year-old pregnant woman presents with glycosuria. What is the most likely mechanism?

Reduced renal reabsorption

145. A patient presents with metabolic acidosis but has a normal anion gap. What is the most likely diagnosis ====Diarrhoea

146. Which of the following would be LEAST useful in differentiating between renal tubular acidosis Types 1 and 2 === **Osteomalacia** .

147. Which of the following would be most suggestive of acute tubular necrosis rather than prerenal uraemia ===== **Urinary osmolality of less than 350 mOsmol/kg**

148. What is the most important step to **prevent contrast media nephropathy?**
Adequate hydration

149. A patient with end-stage renal failure is found to have a serum phosphate of 2.1 mmol/l. What is the most likely diagnosis?

Renal osteodystrophy

150. A patient has been diagnosed with autosomal dominant polycystic kidney disease (ADPKD) Which organ will most likely have additional cysts?

Liver

151. What is the most important therapeutic step in a normotensive type-2 diabetic patient without albuminuria to prevent diabetic nephropathy ===Optimal

glycaemic control

152. Glomerulonephritis is a common occurrence in chronic Schistosoma mansoni infection in Brazil,

153. A patient presents with acute Wegener's granulomatosis. Which presentation has the poorest prognosis ===Dialysis-requiring acute renal failure

154. Which is the most appropriate first line management in a 17-year-old female presenting with recurrent lower urinary tract infection?
Attention to lifestyle measures (eg

fluid intake, pericoital hygiene)

155. progressive renal failure due to analgesic nephropathy. What is the most significant complication ====Urinary tract malignancy .

156. Renal amyloidosis ====The diagnosis is confirmed by finding green birefringence of deposits stained with Congo red and viewed in polarised light. This remains the gold standard.

157. A patient is diagnosed with membranous nephropathy. With which other condition is this condition associated ===Malignancy .

158. Ciclosporin toxicity can cause chronic renal failure in patients who have received cardiac, liver and lung allografts

159. A 22-year-old pregnant woman presents with dysuria and increased frequency. A urinary tract infection is diagnosed. What is the most appropriate step ==Should always be treated in pregnancy

160. A 33-year-old man presents with rapid progressive glomerulonephritis and nephrotic syndrome. A renal biopsy shows granulomas. What is the most likely diagnosis

===Wegener's disease

161. Patients with **sickle cell disease**, especially those aged 40 or older, have a high risk of developing which complication =====**Chronic renal failure** .

162. Von Hippel–Lindau

disease is an inherited syndrome in which cysts or tumours in the kidney, pancreas, adrenal gland, epididymis, cerebellum, and spinal cord may form.

Between one-third and one-half of patients with this condition develop renal cell tumours that are often bilateral and multifocal. Main cause of death .

163.in patient with **obstructive renal failure** with **parkison** disease you have to consider **Neurogenic bladder** more than BPH.

164. This man has glomerulonephritis, as demonstrated by the presence of proteinuria and haematuria, and the best way to establish the underlying diagnosis is via renal biopsy.

165. the combination of haematuria and proteinuria suggests
Glomerulonephritis

166. Symptoms of **urinary tract infection** may develop in patients with an underlying **urothelial tumour**.

Presentation with a first urinary tract infection at the age of 86 suggests that it is worth re-testing urine for

persistent haematuria and carrying out urinary cytology after a period of antibiotic treatment.

167. The major indication for genetic screening in ADPKD is for subjects who are considering donating a kidney to a relative affected by the disease.

168. Patients with chronic renal failure often have co-existent low iron stores. Adequate total body iron is required for erythropoietin to work as an effective treatment for renal anaemia. Options for **screening include serum ferritin,**

169. Which of the following is the commonest cause of death in renal dialysis patients =====**Cardiovascular disease** .

170. Around one-third of patients with Turner's syndrome have associated renal abnormalities. Examples of associated disorders include renal artery stenosis, increased renal cyst formation and a single horse-shoe kidney which can lead to HTN

171. Which of the following is the most important physiological adaptation to his intake of large volumes of lager ===Reduced expression of renal aquaporin channels

172. Wegener's granulomatosis ====Segmental crescentic Necrotizing Glomerulonephritis

173. Churg-Strauss is associated with less severe renal disease when compared to Wegener's and this is usually manifest as focal segmental glomerulonephritis.

174. in protus inf ==struvite===Magnesium ammonium phosphate stone

175. Ganciclovir is a synthetic guanine derivative with potent activity against CMV.

176. The development of drug induced lupus is associated with sulphasalazine therapy. The presence of blood and proteinuria seen here is suggestive of

glomerulonephritis and as such renal biopsy is the most appropriate investigation.

177. p-ANCA =====PAN.

178. PR examination reveals a firm, enlarged prostate with obliteration of the lateral sulcus. Which of the following is the most appropriate next investigation=====Trans-rectal prostatic biopsy .to obtain tissue biopsy .

179. c-ANCA / anti-serine protease 3 is the antibody associated with Wegener's granulomatosis,

180. Causes of acute deterioration in creatinine would centre here around acute rejection, infection or ciclosporin toxicity.

181. Hypertension is most strongly associated with deteriorating renal function in patients with IgA nephropathy so the most common associated with prognosis is blood pressure .

done by dr.faisal gamal hemedda.....16-12-2013.....1.53AM

Neuro

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I RECOMMEND TO READ IT BEFORE DOING PATEST !!!!

BELIVEME ME IT WILL MAKE A DIFFERENCEread it after studying the text and before answering the mcqeos !!!!!

1. Wallenburg's syndrome), which is usually due to occlusion of the **posterior inferior cerebellar artery** the patient complain of nystgmus and ataxia and brain stem signs like ipsilateral dysphagia and hoarsness of voice

2. This 50-year-old man has lower limb proximal weakness, autonomic symptoms, mild ptosis, and reduced reflexes and feel good at the end of day = **lambert eaton syndrome .**

3. This woman has **hypokalaemic periodic paralysis**. It is an autosomal-dominant disorder with a high number of sporadic cases and an onset usually in adolescence. Symptoms begin with **stiffness and heaviness of the limbs followed by weakness**. The severity of the weakness is variable. The respiratory and bulbar muscles are only occasionally involved. Attacks usually last for a few hours, although they may last for up to three days. **Large carbohydrate loads or sodium-rich meals followed by exertion are common precipitating factors**. Examination during an attack will demonstrate **weakness with hyporeflexia**. The diagnosis rests upon documentation of **hypokalaemia during an attack**.

Treatment of an attack is with **potassium replacement and continuous cardiac monitoring.**

4. A lumbar puncture is therefore vital if the history is suggestive of SAH. Even better than MRI

However this should be ideally performed at least 12 hours after symptom onset, as this is when spectrophotometry testing of CSF is most sensitive in detecting the breakdown products of haemoglobin that give a yellowish appearance to the CSF (“xanthochromia”).

5. The examination findings describe sensorineural deafness and loss of the corneal reflex on the right. These fit very well with the early symptoms of an acoustic neuroma.

6. The right-sided facial swelling is an enlargement of the right parotid gland, which is typical of sarcoid.

Neurological involvement occurs in 5-15% of cases of the idiopathic multisystem disorder sarcoidosis.

So it can lead to that rt facial n palsy .

7. This woman will have an enlarged blind spot. The clinical description is of idiopathic intracranial hypertension (previously called benign intracranial hypertension),

8. A 16-year-old man presents with difficulty in walking and foot drop. There is weakness of dorsiflexion and eversion of the right foot, with a small area of sensory loss over the dorsum of that foot. What is the most likely diagnosis= Common peroneal nerve lesion .

9. This man presents with a combination of akinetic rigid syndrome, cerebellar signs and the suggestion of autonomic features postural hypotension. This is most suggestive of a diagnosis of **multiple system atrophy**.
(parkinsonian like +autonomic disturbance)

10. This woman has a **Millard–Gubler syndrome**; a pontine lesion that produces **an ipsilateral VIth and VIIth nerve palsy and a contralateral hemiparesis**.

11. **Neuralgic amyotrophy is an inflammatory process that affects the brachial plexus**. It usually follows a **minor trauma to the deltoid region like during vaccination** and is usually preceded by

pain over the deltoid region. In most patients there is recovery over a period of months. Electrical studies confirm **denervation in affected muscles**. The CSF is usually normal but may show a slightly elevated protein and small lymphocytosis.

12. **Cysticercosis** is caused by the larvae of the pork tapeworm, these may affect any tissue in the body but are **commonest in subcutaneous tissues and the CNS**. When they die, the larvae produce multiple encysted areas that are **palpable as subcutaneous nodules and if present in the CNS commonly present with epileptic seizures**.

13. This 16-year-old presents with **abdominal pain** and a **motor neuropathy**. Causes of these two symptoms are **lead poisoning**; only lead poisoning causes **basophilic stippling**. This sister has shared the same environmental lead exposure.

14. Anterior spinal artery thrombosis affects the **corticospinal tracts and spinothalamic tracts** (motor neurones and pain/temperature sensation). These are found at the front of the spine. Posterior columns carry vibration and joint-position sense. As a spinal lesion this is purely upper motor neuronal. This is consistent with brisk reflexes and upgoing plantars.

15. Duchenne's– X-linked, presents in early childhood (average age 4.6 years) with proximal weakness of the limbs; usually, severe progression with wheelchair dependence death by age 12 on average and death in the early twenties; affected individuals may have a cardiomyopathy with intellectual involvement

.....

Becker's– similar type of disease, with a later onset (average age at presentation 12 years), milder

phenotype and life expectancy is longer

16. Bilateral paralysis of eye abduction in this context implies **bilateral VIth cranial nerve palsy**, as seen in the setting of Wernicke's encephalopathy due to thiamine deficiency.

17. Excessive exposure to the anaesthetic agent nitrous oxide results in a predominantly **sensory neuropathy and associated myelopathy** (leg weakness, increased reflexes and plantar signs). Prolonged exposure to nitrous oxide is needed to produce neurological symptoms in normal individuals,!! زي طبيب الاسنان مثلا او التخدير

18. The most important aspect in this patient is the postural nature of the headache, pointing strongly to the diagnosis of spontaneous intracranial hypotension

(SIH) as you can see

She spends most of her time lying flat, as in this position she is headache free.

19. **Botulism** is caused by a toxin produced by the anaerobic bacterium *Clostridium botulinum*, which **blocks the release of acetylcholine from the motor nerve terminal.**

Botulism can be spread by the ingestion of foods contaminated by inadequate sterilisation, or, as in this case, through **wound contamination in drug abusers after subcutaneous injection of heroin** Early symptoms are **blurred vision, dysphagia and dysarthria.** Pupillary responses to light are impaired, **tendon reflexes reduced and typically there is progressive symmetrical limb weakness.** Most patients have evidence of **autonomic dysfunction such as dry mouth, constipation or urinary retention.**

The edrophonium test is falsely positive in about one-third of cases and does not distinguish botulism from other causes of neuromuscular blockade.

20. Kennedy's disease

is an abnormal increase in the trinucleotide CAG repeats in the region of the androgen-receptor gene . It is inherited in an **X-linked recessive fashion**, with the mother of an affected male patient being an obligate carrier. Characteristic symptoms include prominent muscle cramps, difficulty walking and limb-girdle muscle weakness. Dysarthria and dysphagia occur in less than half of patients. Reflexes are depressed or absent. Facial and particularly perioral fasciculations are highly characteristic of this condition. Gynaecomastia is present in up to 90% of cases. Endocrine abnormalities, such as infertility, testicular atrophy and diabetes

mellitus, are common.

21. The clinical picture of **ipsilateral weakness of adduction and contralateral gaze-evoked nystagmus is typical of internuclear ophthalmoplegia (INO)**. This is a disorder of horizontal conjugate eye movements resulting from a **lesion in the medial longitudinal fasciculus**, the bundle of connecting fibres between the IIIrd and VIth cranial nerve nuclei

22. The initial symptoms and signs indicate a **raised intracranial pressure**, followed by **sudden deterioration due to a haemorrhagic ischaemic lesion in the left hemisphere**. The differential diagnosis after the initial

normal CT scan is between idiopathic intracranial hypertension (IIH), which is more common in obese female patients, and cerebral venous sinus thrombosis (CVST), for which she has a risk factor (on the oral contraceptive pill). And so you have to do **Cranial magnetic resonance venography** .

23. Topiramate is one of the few antiepileptic drugs (also including gabapentin) with **almost exclusively renal metabolism**. It would be theoretically less likely than the others (which are predominantly metabolised in the liver) to cause worsening of hepatic function. The adverse effects of topiramate include renal stones, weight loss and neuropsychiatric side-effects. so you give for the **patient with epilepsy with hepatic impairment** .

24. The clinical signs are those of the Brown–Séguard syndrome, or hemicord syndrome. This is characterised by ipsilateral pyramidal signs, ipsilateral dorsal column sensory loss and contralateral spinothalamic sensory loss,

25. **Facioscapulohumeral– inherited as autosomal-dominant or autosomal-recessive; onset is in early adulthood; weak musculature of the face and around the shoulders; usually, sufferers have a normal life expectancy.**

.....

Limb-girdle– inherited as an autosomal-recessive; commonly presents in the teenage years with proximal weakness; IQ is normal and life expectancy is unchanged; these patients can have cardiac involvement.

26. Cervical vascular dissection like dissection of carotid artery that occurs spontaneously

or is provoked by **minimal trauma** (a clue in this case

being the fact that she is taking **an exercise class**) is

likely to be commoner than previously recognised, and

is **an important cause of stroke**.so in the case you will find an otherwise healthy individual while in gym have s.s of sudden stroke and he ask you a bout the source of this emboli .

27. The family history of epilepsy and the provocation of a generalised seizure by sleep deprivation (with or without alcohol like in a party) in a young patient are strongly suggestive of a primary generalised epilepsy syndrome.

Juvenile myoclonic epilepsy is the most common

primary generalised epilepsy, but is underdiagnosed

partly due to the lack of awareness of the condition by

doctors. It is characterised by: absence seizures in

childhood .

28. The description is typical of migraine without aura. An appropriate first-line acute treatment is simple analgesia with an antiemetic. **paracetamol + metoclopramide**

29. **Prolonged periods in intensive care**, irrespective of the underlying pathology, are associated with a risk of developing **critical illness polyneuropathy**. This is an axonal neuropathy and thus muscle wasting may occur. It may be predominantly sensory, predominantly motor or mixed. like after motor car accident .

30. In the UK, **β -interferon** is currently a licensed disease-modifying therapy for **relapsing remitting multiple sclerosis (MS)** and secondary progressive MS in adults.

31. The presence of nailfold infarcts and the multifocal nature of the neuropathy indicate that a vasculitic cause is most likely. Hepatitis C infection may be associated with cryoglobulinaemia, which causes a vasculitic syndrome including neuropathy.

32. The common peroneal nerve is a branch of the sciatic nerve and is formed from the L5 and S1 roots. It supplies the ankle and toe extensor muscle groups as well as sensation over the dorsum of the foot (superficial peroneal nerve). **The head of the fibula is a common entrapment site like in sport injuries .**

33. Given the absence of sensory features, the main differential clinical diagnosis is between motor neurone disease (MND) and multifocal motor neuropathy (MMN).

The latter is an autoimmune neuropathy that causes multifocal demyelination with conduction block, in contrast to MND where axonal degeneration is seen.

Neurophysiological studies can distinguish between the two.

Also he said in the case (**He undergoes nerve conduction studies and electromyography, which show evidence of demyelination and conduction block in his upper limbs, and normal sensory conduction.**)

34. in patient with optic neuritis = If a cranial MRI shows more than three white-matter lesions, the 5-year risk of subsequently developing multiple sclerosis is around 50%.

35. This clinical picture is typical of the Miller–Fisher syndrome, which classically consists of **ophthalmoplegia, ataxia and areflexia.**

36. **Strokes** and transient ischaemic attacks (**TIAs**) generally have a driving restriction of **1 month** from the date of the attack.

37. **in Guillain–Barré S = Normal cell count, high protein and normal glucose ratio . a high protein level that probably reflects the widespread inflammation of the spinal nerve roots.**

38. clinical diagnosis of variant **Creutzfeldt–Jakob** disease is suspected. A cranial MRI is performed.

Which of the following MRI findings would be most

supportive = **Increased signal in the pulvinar of the thalamus .**

39. The clinical scenario is that of **Huntington's disease** (also called Huntington's chorea). This is characterised by **slowly progressive subcortical dementia with early personality changes (irritability, disinhibition) followed by the onset of a progressive choreiform movement disorder.** Age of onset is very variable, with both juvenile forms (<25 years) and late onset forms existing, but most patients present at around 35-45 years of age. **It has an autosomal-dominant mode of inheritance and is one of the trinucleotide-repeat disorders (CAG repeat, on the 'huntingtin' gene, chromosome 4p16.3).** Increasing repeat length in offspring gives rise to the **phenomenon of anticipation** (clinical onset at an earlier age in subsequent generations).

40. Sciatic nerve damage is a common complication of total hip replacement. It causes global weakness of the ankle due to the involvement of both its branches (common peroneal and tibial nerve). The ankle jerk is absent due to the involvement of the tibial nerve. Sensory loss is variable but most commonly occurs around the dorsum of the foot and lateral aspect of the leg.

41. Diffuse Lewy body dementia . Typical features include intermittent confusion, visual hallucinations, parkinsonism, recurrent falls, sensitivity to neuroleptics and syncope.

42. The combination of confusion, ataxia and ophthalmoplegia are the typical features of Wernicke's encephalopathy.

43. **Incongruous homonymous hemianopia is a feature of an optic tract lesion.** And if left lesion it will lead to rt HH due to crossed fibers .

44. The radial nerve supplies the triceps, brachioradialis and extensor digitorum profundus.

45. **Juvenile myoclonic epilepsy is a common type of idiopathic generalised epilepsy. It is characterised by generalised tonic-clonic seizures (usually provoked by sleep deprivation and/or excessive alcohol intake) and early morning myoclonic jerks mainly involving the upper limbs and absences.** **Brain imaging is normal. EEG**

shows generalised spike and wave changes. The treatment of choice is sodium valproate and lamotrigine. Between 30 and 40% of family members may also be affected.

46. Lamotrigine has no effect on liver enzymes and is the treatment of choice for the above patient.

47. Nerve conduction studies support the diagnosis of **multifocal motor neuropathy with conduction block**. It is a very important differential diagnosis of motor neurone disease because it is treatable. It is usually slowly progressive, sometimes mimicking mononeuritis multiplex. Sensation is normal. **The treatment of choice is intravenous immunoglobulins**. Steroids should be avoided because they exacerbate the weakness.

48. cluster

headaches. They are more common in men, occur in clusters of weeks, last for 15–60 minutes and most commonly occur in the early morning. They consist of periorbital headache associated with ptosis, lacrimation, redness of the eye, nasal congestion and rhinorrhoea.

Nausea, vomiting and photophobia are usually absent.

The treatment of choice for the acute episodes is high-flow oxygen and/or subcutaneous sumatriptan. The

pharmacological treatment of choice for prophylaxis is verapamil,

49. The **paroxysmal episodes of vertigo, nausea/vomiting and deafness lasting for hours are typical features of Ménière's disease**. An audiogram characteristically shows a unilateral low-frequency sensorineural deafness. The treatment of choice is diuretics and a low-salt diet.

50. Periodic alternating nystagmus is a jerk nystagmus where the direction of the fast and slow component changes about every 2 min. **The typical site of the lesion is the cerebellum .**

51. The combination of optic neuropathy, proptosis, chemosis, Horner's syndrome, ophthalmoplegia (in this case due to VIth nerve palsy) and involvement of the first branch of the trigeminal nerve is typical **of orbital apex syndrome.**

52. Clinical manifestations of temporal lobe epilepsy consist of ascending epigastric aura, olfactory and gustatory hallucinations, ictal fear, oroalimentary automatisms (lip-smacking, chewing and swallowing) and limb automatism (fiddling, picking, tapping). The commonest

cause of temporal lobe epilepsy is hippocampal sclerosis. MRI brain is diagnostic. Surgical treatment has a complete success rate up to 70% of cases.

53. *Listeria meningitis* should always be considered in the elderly population, diabetics, alcohol abusers and in patients on immunosuppressive treatment. It typically causes polymorphonuclear pleocytosis and low CSF glucose and high protein levels. Brainstem involvement is common. It does not respond to cephalosporin treatment. Ampicillin is the treatment of choice.

54. **Transverse myelitis** usually follows an upper respiratory tract infection. It causes a complete spinal cord syndrome. الواد سخن يومين وبعدها صحي من النوم لاقى نفسه مش قادر يحرك رجله ورجليه منمله....!!!صباح الفل !

55. The most likely diagnosis is **Miller, Fisher syndrome**= The treatment of

choice is either **immunoglobulins or plasma exchange**.

The majority of patients improve, but recovery may be slow (weeks to months).

56. Known side-effects of **topiramate** include weight loss, **renal stones** and cognitive and behaviour changes.

Lamotrigine is commonly associated with a skin rash

This drug like we said b4 is exclusively excreted by kidney .

57. take care of rigidity and pyrexia in patient taking antipsychotic for fear of **neuroleptic malignant syndrome**.

Management consists of muscle relaxants, such as

dantrolene, and intravenous fluids.

58. All abnormalities are indicative of a left femoral neuropathy. The patient has weakness of knee extension (quadriceps) and hip flexion (iliopsoas). She has decreased sensation in her anterior thigh (anterior femoral cutaneous nerve) and medial distal leg (saphenous nerve). **A patient on anticoagulation therapy can suffer a retroperitoneal haemorrhage, which can damage the femoral nerve.**

59. **The patient has difficulties relaxing her grip, indicating clinical myotonia.** Myotonia dystrophica is an autosomal-dominant condition that presents with ptosis, facial weakness dysphagia, sleep apnoea, distal weakness, atrophy of the temporalis, frontal balding, cardiac conduction problems, cataracts and impaired mental function.

60. The patient's neurological symptoms and signs indicate **mononeuritis multiplex**. Causes include vasculitis, diabetes, sarcoidosis, paraneoplastic syndrome and amyloidosis. The high ESR and normochromic normocytic anaemia make vasculitis the most likely diagnosis. A nerve biopsy should be performed to confirm the diagnosis.

61. Hemiballism is a complication of **subthalamic nucleus damage**.

62. Botulinum toxin injection is the first-line treatment for cervical dystonia (**torticollis**).

63. The most appropriate non-invasive investigation for new-variant CJD is an **MRI of the brain**.

64. Frontotemporal dementia is a neurodegenerative disorder that commonly presents with personality and behavioural changes, altered eating and sexual habits, speech disturbances and disinhibition. Short-term memory remains intact until the endstage of the disease. The age of onset is 45–65 years. Brain imaging usually shows atrophy of the frontal and temporal lobes. It is associated with motor neurone disease. Some cases are inherited in an autosomal-dominant pattern.

65. Inclusion body myositis (IBM) is the commonest cause of inflammatory myopathy in patients over 50 years of age. It typically presents with slowly progressive weakness and wasting of the finger flexors and quadriceps. The slow, relentless progression of muscle weakness in IBM leads to walking difficulty, frequent falls, and eventual need for mobility aids. Dysphagia is a common manifestation of the disease. CK is either

normal or up to fivefold the upper range of normal.

EMG shows inflammatory myopathic changes: increased insertional and spontaneous activity as well as small-amplitude, short-duration polyphasic units. There is no available treatment.

66. **Friedreich's ataxia** is considered the most common hereditary ataxia. It is an **autosomal-recessive** disorder with variable phenotype. Onset is usually in early life and life expectancy is generally about 35 years.

Associated features include ataxia, dysarthria, optic atrophy, hearing impairment, learning difficulties, sensory neuropathy, extensor plantar responses, diabetes and cardiomyopathy. Pes cavus and kyphoscoliosis are also common features. Friedreich's ataxia is one of the causes of absent reflexes in the lower limbs and extensor plantar responses.

67. The prodrome of nausea/light-headedness and association with postural change are highly suggestive of **syncope, as is the rapid recovery. Jerking is common in syncope, and should not be assumed to suggest epilepsy. The witness description of the patient being pale and 'dead' before moaning and jerking suggests that this is 'convulsive syncope' and not an epileptic seizure.**

77. The symptoms and examination findings are most consistent with an axonal peripheral neuropathy **and statins are associated with PN.**

78. Wound botulism should be considered in any injecting drug user who presents with descending motor and autonomic signs.

79. Acute treatments for Guillain–Barré syndrome = Intravenous immunoglobulin (IVIg) is equal in efficacy to plasmapheresis, and associated with fewer side-effects.

80. Patients with multiple sclerosis commonly complain that their symptoms are worse with exercise and heat.

81. The symptoms are consistent with an acoustic neuroma (vestibular schwannoma), and the patient should be investigated with MRI scanning.

82. The most common symptoms of vestibular schwannomas are unilateral sensorineural hearing loss (96%), unsteadiness (77%), tinnitus

(71%), headache (29%), mastoid pain or otalgia (28%), or less frequently facial numbness, diplopia and vertigo. In most patients the initial symptom is unilateral sensorineural hearing loss, which may have been present for 1–5 years (mean 3.7 years).

83. This is a classic history for juvenile myoclonic epilepsy, one of the most common primary generalised epilepsy syndromes. Juvenile myoclonic epilepsy typically appears in the second decade. It is characterised by myoclonic seizures, associated at times with generalised tonic–clonic seizures (as in this case) or absence seizures. The cardinal seizure type is that of myoclonic jerks characterised by sudden, brief, bilaterally symmetrical and synchronous muscle contractions. Consciousness remains unimpaired during myoclonic seizures, even if they occur in series or in myoclonic status epilepticus.

84. **painful like headache 3rd cranial nerve palsy=PCA aneyrsm .**

85. The history is most consistent with an attack of **transient global amnesia**. Typically, the onset is abrupt, and anterograde memory is profoundly impaired. Patients are disorientated in time, and often in place, but never in person. Retrograde memory is variably disturbed, lasting for hours to years. Patients often do not recognise acquaintances, but they can usually recall their own name and recognise close relatives. Patients recognise their memory deficits and repeatedly ask questions to try and orientate themselves, and also ask 'Why can't I remember?' Both immediate memory, as demonstrated by the patient's ability to immediately repeat several digits or words, and procedural memory, as demonstrated by the patient's ability to do complex tasks (eg, driving), are preserved. Patients appear confused,

tending to get lost once outside familiar surroundings. Alertness is normal. General knowledge and ability to perform complex tasks, such as arithmetic, reading, writing or driving a car, are usually unaffected. During the attack, approximately 10% of patients complain of a headache. Transient bilateral gaze-evoked nystagmus may be present. No other major neurological symptoms occur. Resolution is gradual, with subjective recovery occurring in two-thirds of patients within 2–12 hours and, in almost all, within 24 hours.

86. Like Parkinson's disease, **PSP results in rigidity, bradykinesia, postural instability, dysarthria, dysphagia and, in many cases, dementia.** Unlike Parkinson's disease, however, tremor is rare; postural instability is an early rather than a later symptom; and rigidity is worse at the neck than in the limbs.

87.in **status eplipeticus** if The patient has not responded to standard therapy and should be managed in **an intensive care unit. In the ICU, general anaesthesia should be administered, generally with propofol.**

88. The clinical history is most consistent with a clinical diagnosis of herpes simplex encephalitis (HSE).which commonly affecting temporal lobe and so ttt by **IV aciclovir.**

89. Which of the following are common **early features of Alzheimer's disease?**= **Progressive memory impairment, apraxia and aphasia**

90. Lacunar infarcts are small deep infarcts with a maximum diameter of 1.5cm and a volume of 0.2-3.4 cm³. Lacunar infarcts mainly occur in the basal ganglia, lenticular nucleus, and especially the putamen, thalamus, and white matter of the internal capsule, pons, and centrum semiovale. The 5 classic lacunar syndromes, are: pure motor hemiparesis, pure sensory stroke, sensorimotor stroke, ataxic hemiparesis, and clumsy-hand dysarthria.

91. Hemiplegic migraines are also more commonly seen in patients with a previous history of migraine, which may have subsided years previously, or in those with a positive family history of migraine. However, the history of a slow march of symptoms and signs suggests migraine aura without headache (migraine equivalent), not transient ischaemic attack. Pregnancy is associated with an increased incidence of migraine and stroke, especially from

eclampsia and cerebral venous thrombosis in the puerperium.

The case=A 23-year-old woman is sent to A&E urgently. She is 36 weeks' pregnant. She describes the sudden onset of right-sided numbness and dysphasia. She initially developed tingling in the right side of her face that spread over a matter of minutes to the right hand. Some 10 minutes later she noticed she was having word-finding difficulty and that her right arm felt clumsy. The whole attack resolved completely within 20–30 minutes. By the time she arrived in A&E her neurological examination was normal. There is a previous history of headaches and vomiting as a teenager, which varied according to her menstrual cycle

92. This woman has a left homonymous hemianopia. Her history is typical of a **right-sided occipital lobe lesion**, likely to be cerebral infarction in the **posterior cerebral artery territory**.

93. The triad of **dementia, urinary symptoms and gait disturbance** is classically associated with **normal-pressure hydrocephalus**.

94. Exercise-induced pain and stiffness like characteristic of **lumbar canal stenosis**, usually due to progressive hypertrophy of the facet joints and disc degeneration, leading to narrowing of the lumen of the lumbar canal. The description of being able to exercise his legs on a bike is characteristic. Cycling is performed with the lumbar spine in a flexed position, which increases the diameter of the spinal canal. The clinical trick is to examine the patients after they have exercised (say walking up and down a flight of stairs) and have developed symptoms. The appearance of increased tone, pyramidal weakness or brisk reflexes is then very helpful.

95. This is **meralgia parasthetica**, which is caused by entrapment of the **lateral femoral cutaneous nerve**, and which then results in pain and sensory abnormalities in the **anterolateral thigh**. The lateral cutaneous nerve is a pure sensory nerve.

96. the history of fever in the context of diabetes should always raise the possibility of **infection, eg spinal epidural abscess**. He will require an **MRI of the spine**, blood cultures and probably surgical decompression and intravenous antibiotics

97. Ramsay Hunt, however, is a syndrome in which there is a presumed herpes zoster virus infection of the geniculate ganglion, resulting in facial nerve palsy in association with a vesicular eruption involving the ear, palate, pharynx or neck.

98. Idiopathic

brachial plexopathy is most likely because of the onset. Although usually unilateral, it can be bilateral. It often involves the C5 and C6 segments of the brachial plexus. It can begin suddenly or present over a number of days, with a severe stabbing pain that may last from hours to weeks. There is usually associated weakness and profound wasting of the muscles involved. Attacks may be precipitated by intercurrent illnesses such as an upper respiratory tract infection, immunisation or minor injury. Recovery may take months to years and may be incomplete. Recurrence is unusual.

99. Frontotemporal

dementia, however, is associated with early personality change, although the exact nature of this change varies.

Patients may present with disinhibition, or alternatively with apathy, loss of initiative and drive with impairment of frontal executive tasks. Speech gradually deteriorates and many patients develop aphasia. Motor skills are well preserved.

100. A 60-year-old woman is referred with a single fall. She has been well all her life and has rarely had to see her doctor. She smokes 10 cigarettes a week. Examination is unremarkable other than a right-sided ptosis and some slight thinning of the muscles of her right hand, which she thinks might be long-standing.

What is the most likely cause of her ptosis?

Horner's syndrome Correct answer

In this case

weakness of her hand muscles suggests a T1 root lesion, and therefore a Horner's syndrome is the most likely.

102. Which of the following is suggestive of **an axonal neuropathy**?= **Reduced compound muscle action-potential amplitude.**

103. The presence of **trigeminal nerve involvement** (facial numbness and diminished corneal reflex) is highly suggestive of **acoustic neuroma** .

104. This woman has a **cerebellar gait ataxia**. The history of difficulty coming down stairs and the presence of **downbeat nystagmus** is highly suggestive of a structural **lesion at the foramen magnum**.like **Arnold–Chiari malformation**.

105. The pattern of muscle involvement (**quadriceps and long-finger flexors**) is characteristic of **inclusion body**

myositis, an inflammatory myopathy.

106. In a patient with diplopia which one of the following findings is **MOST suggestive of myasthenia gravis**=Thymoma on computed tomography scan (CT scan) of the chest

107. Which one of the following features is MOST typical of cavernous sinus thrombosis?

Double vision on looking upward

108. Which one of the following statements is MOST accurate about chronic subdural haematoma=**The trauma to the head is usually minor and often forgotten by the patient.**

109. Which one of the following neurological findings is MOST helpful in differentiating subacute combined degeneration of the cord from multiple sclerosis=**Absent ankle jerk.**

110. Which one of the following is MOST suggestive of a lesion of the **sciatic nerve=foot drop**.

111. Which one of the following pathological abnormalities is characteristically found in patients with Parkinson's disease=**Lewy bodies**.

112. Autonomic neuropathy is LEAST likely to occur in which one of the following conditions=**Myasthenia gravis**.

113. **Weber syndrome** lead to **ipsilateral 3rd cranial nerve palsy + contralateral hemiplegia** due to occlusion of Branch of the basilar artery

114. She has light headedness and an electric shock like feeling from the neck down the spine whenever she bends her head forward. this is highly suggestive of MS .and you can then do Visual evoked potentials.

115. **Meralgia paraesthetica** is a symptom complex that includes numbness, paraesthesias and pain in the anterolateral thigh, which may result from either an entrapment neuropathy or a neuroma of the lateral femoral cutaneous nerve (LFCN). Obesity or weight gain is a risk factor for this as it predisposes to nerve compression; individual variation in anatomy around the region of the anterior superior iliac spine may also contribute. *The diagnosis is mainly clinical (including*

the absence of other signs) and electrophysiological studies can help to exclude other more generalised neuroradiculopathy.

116. The syndrome of rapidly progressive dementia (usually over weeks), with associated focal neurological signs (often cerebellar ataxia and visual dysfunction) is typical of this **prion-protein disease**, which has its peak incidence in the seventh decade. **Myoclonic jerks are characteristic.**

117. a pregnant lady under ttt of epilepsy and recived 2 drugs for it is control the best mangement for it =**Start high-dose folic acid now and try to withdraw one of her antiepileptic drugs (AED)** .as monotherapy is perfered.

118. **Acetylcholinesterase-inhibiting drugs** (donepezil,

rivastigmine and galantamine) have been licensed for the treatment of **'mild to moderate' dementia** of Alzheimer's type so if Mini-Mental State Examination (MMSE) score is 8/30, which is severe dementia so you **can't** give this patient acetylcholinesterase inhibitors.

119. A 45-year-old woman has long-standing multiple sclerosis (MS). She comes to the clinic complaining of urinary frequency, urgency and occasional urge incontinence, present for the past 6 months. She has signs of a chronic spastic paraparesis and mild cerebellar ataxia. What would be the most appropriate approach to her initial management?— **Exclude infection and measure postmicturition residual volume**
Her symptoms are related to neurogenic detrusor

overactivity, due to her spinal disease. The result is a small-capacity bladder prone to uncontrollable contractions. Estimation of the postmicturition residual volume (with or without cystometry) is an essential step in management.

120. A 72-year-old man had a diagnosis of motor neurone disease made 4 months ago. He has dysphagia due to bulbar weakness, and is having increasing difficulty in swallowing. His videofluoroscopy showed evidence of aspiration. He has lost 3 kg in weight and has some biochemical evidence of undernutrition. In addition, he tends to get breathless on very minimal exertion (eg standing up) and has a vital capacity (VC) of 46%. Which means of nutritional supplementation would be most appropriate to consider at this stage=Radiologically inserted gastrostomy feeding****

121. There is clinical consensus that gastrostomy feeding for such MND patients enhances their quality of life, and evidence that it prolongs survival, increases BMI and decreases weight loss. It is recommended only for patients who have a life expectancy of at least 3 months, who are able to give informed consent and who have adequate carer support to manage the feeding. Radiologically inserted gastrostomy offers the advantage of not requiring sedation, and is therefore preferred in patients with significant respiratory dysfunction.

122. He has subacute combined degeneration of the cord due to vitamin B12(cobalamin) deficiency=Increased T2-weighted signal in the posterior columns .

123. A 19-year-old man has had a tendency to complex tics since childhood. He repeatedly squats down on the ground and also has another repetitive action of rubbing his nose. He is prone to loud vocalisations, sometimes swear-words. A diagnosis of Gilles de la Tourette syndrome has been Made=the best treatment is Risperidone.

124. Gilles de la Tourette syndrome is the most severe and rare of the tic syndromes, consisting of multiple tics involving both motor actions and vocalisation. Onset is usually in childhood. Utterance of obscenities (coprolalia) is a dramatic manifestation; echolalia and palilalia may also occur. The underlying cause is unknown, with no particular imaging or standard histopathological abnormalities having been identified. The EEG shows non-specific abnormalities in about half of patients. However, more recent immunocytochemical

studies have suggested altered dopamine uptake in the striatal system. Risperidone is an effective therapeutic option without the effects associated with chlorpromazine and haloperidol.

125.in the GBS there is **segmental demyelination** .

126. Cerebral autosomal-dominant arteriopathy with subcortical infarcts and leucoencephalopathy (CADASIL)= is the most common genetic form of vascular dementia. It has a very variable phenotype but is characterised by a high prevalence of migraine with aura (often atypical aura), strokes at a young age and early vascular (subcortical) dementia. Variability in presentation may partly reflect environmental factors,

eg smoking is associated with an earlier age of onset.

The affected locus is on chromosome 19q12 – the

‘NOTCH 3’ gene – and several different possible

mutations have been identified (missense mutations or

deletions). MRI shows leucoaraiosis and infarction.

Neuropathological studies show pathognomonic granular

osmiophilic materials in the media of small arteries. Skin

biopsy appears to be helpful in diagnosis.

127. von Hippel–Lindau disease. What

serious pathology might she have most increased

risk for in other organ systems = **Renal-cell carcinoma**

128. Glioblastoma multiforme (or anaplastic astrocytoma) is

the highest grade (most malignant) form of

astrocytoma, and accounts for **about 20% of all cerebral**

tumours. These often remain clinically silent until they

have reached a large size. About half occupy more than one hemisphere at presentation, and some are **multicentric**.

129. A 34-year-old alcoholic man has been admitted to the intensive care unit after having been found collapsed in the street. Initial CT brain scan excluded any intracranial lesion. On admission he had signs of a left basal pneumonia, confirmed on chest X-ray, and low sodium concentration of 118 mmol/l. You are asked to see him as, although he is now conscious, extubated and able to communicate by blinking, he appears to be unable to move or speak. On examination he has a quadriparesis and bilateral extensor plantar responses. His eye movements appear normal, as is facial sensation, but he has no gag reflex and is unable to swallow or speak. What diagnosis do you consider most likely when planning how best to investigate his problem?= Central pontine myelinolysis.

This condition occurs sporadically, almost invariably in

association with another severe or life-threatening disease (Wernicke's, renal failure, lymphoma, hepatic failure). The underlying pathology is that of a large, symmetrical demyelinating lesion of the central pons, which can give a 'bat wing' appearance on MRI. This patient's history is fairly typical, with onset of an initially flaccid quadriplegia over several days, associated with an inability to speak or swallow. Spasticity and increased tendon reflexes may subsequently develop. The eye movements may or may not be affected (nystagmus and/or ophthalmoplegia may be present). There may also be an association with rapid changes in sodium shift; such as may occur with a too-rapid correction of hyponatraemia (should be corrected by no more than 10 mmol/l in the first 24 hours). However, there is some evidence to suggest that hyperosmolality, rather than changes in the sodium concentration itself, is a more important factor.

130. Fibromuscular hyperplasia is a non-atherosclerotic, non-inflammatory condition that principally affects the carotid and renal arteries; although any part of the arterial bed can potentially be affected =**The classic 'string of beads' appearance** is caused by medial hyperplasia, the most common pathological lesion.

131. Dorsal midbrain

lesions are associated with a failure of vertical gaze.(upward and downward gaze).

This may be called Parinaud's syndrome, and is usually associated with failure of convergence, as well mydriasis and impaired pupillary reflexes. Upgaze is more often affected than downgaze.

132. Absent reflexes imply a LMN lesion, but extensor plantars an UMN lesion. The causes of this combination are therefore those disorders that can cause a mixture of UMN and LMN signs. These include vitamin B12 deficiency (subacute combined degeneration of the cord), taboparesis, motor neurone disease, Friedreich's ataxia, a conus medullaris lesion or diabetes mellitus.

133. A 54-year-old woman has developed difficulty walking over the last two months. Tone and power are normal in the lower limbs. Knee jerks are absent and plantar responses extensor. What is the most likely cause of her problems?= **Conus medullaris lesion .**

134. **The facial nerve emerges from the brainstem with the nervus intermedius, which gains its name from its**

position as it **courses across the cerebellopontine angle (CPA) between the facial nerve and the vestibulocochlear nerves** (ie cranial nerves VII and VIII). **Cranial nerve V (trigeminal) also lies in the cerebellopontine angle.** The close anatomical association between these structures at the level of the cerebellopontine angle may result in disturbances in tearing, taste, salivary gland flow, hearing, balance and facial sensation and facial weakness as the result of lesions at this level

135. A patient complaining of diplopia has nystagmus of the right eye on rightward gaze. **The left eye fails to adduct.**

Where is the most likely location of the lesion=**Left medial longitudinal fasciculus.**

(These are the features of **an internuclear ophthalmoplegia, with a lesion in the medial longitudinal fasciculus** on the side of the eye that fails to adduct).

136. A 45-year-old insulin-dependent diabetic presents with a 72-hour history of horizontal diplopia. The images separate wider on rightward gaze. Covering his right eye on right gaze results in the disappearance of the outer image. Dysfunction of which cranial nerve is most likely to be causing these problems=**Right abducens**.

137. **Downbeat nystagmus** is classically associated with lesions at the **foramen magnum**, though it may have other causes. **Arnold–Chiari malformations** consist of specific abnormalities in the formation of the brainstem, with elongation of the cerebellar tonsils and thickening of the upper cervical spinal cord.

138. A 55-year-old woman with breast cancer presents with symptoms suggestive of brain metastasis. Which neuropsychological finding is most likely to suggest a

right parietal lesion = Visual inattention.

139. Branches of the anterior spinal artery supply the anterior two-thirds of the spinal cord, with the posterior spinal artery supplying the posterior third. Most of the spinal vascular supply comes from two or three major arterial branches, so segments of the cord in the watershed area between the branches (around T2–T4) are vulnerable to ischaemia. Vascular thrombosis is uncommon and compression (eg tumours or acute disk prolapse) or occlusion (eg dissecting aneurysm) more commonly causes infarction. Sudden pain in the back and the distribution of the affected segment is associated with bilateral flaccid weakness and dissociated sensory loss with impaired pinprick and temperature sensation below the level of the infarct. In anterior spinal artery occlusion, touch, proprioception, and vibration sense are typically spared because they are conducted in the posterior columns.

140. A 73-year-old man presents with wasting of both thenar and hypothenar eminences, with weakness of thumb abduction, thumb flexion, and finger abduction and adduction. Sensory loss to pinprick is present over the ulnar border of the hand and forearm. The remainder of the neurological examination is normal. What is the most likely site of the lesion?=lower cord of brachial plexus.

141. A 56-year-old man develops arm weakness after an injury to his elbow. He has weakness of the long flexors of the right thumb and index finger, and is unable to pronate his forearm on that side. Which nerve is most likely to be damaged?= **Anterior interosseous nerve**.branch of median n.

142. Which of the following features would most support a diagnosis of **early Alzheimer's disease? Word-finding difficulties** .

143. Pick's disease is a type of dementia characterised by a slowly progressive deterioration of social skills and changes in personality, along with impairment of intellect, memory, and language. It tends to affect individuals at a younger age than Alzheimer's: peak incidence occurs at 55-65 years. Symptoms may include loss of memory, lack of spontaneity, difficulty in thinking or concentrating, and disturbances of speech, gradual emotional dullness, loss of moral judgement and progressive dementia. Speech and language dysfunction may occur early and progress rapidly.

145. A 20-year-old man with known epilepsy presents in **status epilepticus. He has not responded to 10mg rectal diazepam and has been having a seizure for 10 minutes. Blood**

glucose is normal.

What is the most appropriate next treatment? = **Fosphenytoin**

1500 mg Intravenously

146. Established status epilepticus should be treated with intravenous phenytoin (15–18mg/kg; infused at a rate no greater than 50 mg/minute) or **fosphenytoin (15–20 mg PE/kg at no greater than 150–200 mg PE/minute)**.

147. The combination of cerebellar signs and tremor in a young patient makes Wilson's disease the most likely diagnosis.

148. The combination of bilateral ptosis and respiratory muscle weakness in a woman makes this the likeliest diagnosis from this history. Myasthenia gravis (MG) is the most common primary disorder of neuromuscular

transmission.he state that there is breathlessness on exertion .

149. **Multifocal motor neuropathy (MMN) with conduction block** is closely related to chronic inflammatory demyelinating polyneuropathy (CIDP). It represents a presumed autoimmune neuropathy associated with anti-GM1 antibodies that presents with asymmetrical motor involvement and minimal sensory findings.

150. Which of the following findings best supports a diagnosis of multiple sclerosis====**Intrathecal synthesis of IgG.**

151.in hyperthyroid patient **Optic nerve compression may occur in the absence of proptosis,** and classically causes **reduced vision with colour desaturation, disc oedema, and a visual field**

defect with enlargement of the blind spot.

152. a partially treated bacterial meningitis may more closely resemble the “aseptic” picture of CSF findings also seen with viral meningitis, such as is described here (moderate numbers of lymphocytes, pleocytosis).

153. It should also be remembered that some atypical organisms (e.g. mycoplasma, listeria) also produce an aseptic-type CSF profile.

154. The L5 and S1 nerve roots are commonly subject to compression through lateral prolapse of the L4/L5 or L5/S1 discs. Patients present with low back pain and

sciatica and the problem occurs commonly after lifting a heavy weight. Signs include limited straight-leg raising, loss of ankle reflex on the affected side, weakness of plantar flexion, and sensory loss in the affected dermatome.

155. A 55-year-old man presents with a resting tremor of his right arm and a diagnosis of idiopathic Parkinson's disease is made. Which one of the following drugs is most likely to help his **tremor =Benzhexol.**

156. Which of the following features would suggest Lewy body dementia=**Detailed visual hallucinations.**

157. A 10-year-old boy presented with recurrent convulsions. The convulsions usually occur at night and are confirmed by an eyewitness. Clinically examination revealed 3 café-au-lait spots (5mm diameter) on the lower limbs and 4 on his back. Which of the following would be most helpful in confirming the suspected underlying diagnosis?

This is neurofibromatosis 1 then do Slit lamp examination of the eye

158. What is the most appropriate treatment for long-term stroke prevention?= Clopidogrel.

159. NICE guidance now recommends clopidogrel as the secondary prophylaxis treatment of choice. This has now overtaken use of aspirin and dipyridamole which had found favour as a combination after the ESPS2

study.

160. in cases of macroprolactinoma best ttt is Dopamine agonist and review in 4 weeks with respect to proceeding to surgery .

Case series suggest that

even in cases of macroprolactinoma up to 80% of

tumours see some response to dopamine agonists, such

that a dopamine agonist may even be considered in this

case.

161. This man has blurring of the optic disc and superior arcuate visual field loss. In a patient of this age, chronic open angle glaucoma would be the most likely cause.

The best way to diagnose glaucoma is by measuring intraocular pressures.

162. The paralysis associated with myasthenia gravis is thought to result from the influence of autoimmune antibodies that

bind to the ligand-gated ion channel known as: **An acetylcholine recepto.**

163. Which of these diseases has a polygenic Inheritance =====

Manic depressive psychosis

164. What is the most important intervention at population level to reduce stroke incidence===== **Blood pressure control .**

165. A patient with HIV presents with progressive memory loss.

His Computed tomography (CT) scan shows brain atrophy.

What is the most likely diagnosis=HIV-dementia.

166. A useful clinical approach to diagnose tension headache is when the headache is completely featureless: no nausea, no vomiting, no photophobia, no phonophobia,

no osmophobia, no throbbing, and no aggravation with movement.like A 35-year-old man has been suffering from evening headaches starting from his neck and reaching over the occipital area for the last 4 weeks.

167. Infection is another rare but potentially serious complication of epidural anaesthesia. Pathogenic organisms can be introduced into the epidural space if strict asepsis is not observed during the performance of the block. The commonest pathogens are *Staphylococcus aureus* and streptococci. Meningitis has been recorded, as has epidural abscess. In epidural abscess, back pain and symptoms of local compression may be seen. Here, the bilateral signs, and hemiplegia affecting the arm is more suggestive of meningitis. Where an epidural abscess is suspected, surgical decompression should be considered without delay.

168. This patient has symptoms typical of sciatica due to disc disease. **Gentle mobilisation represents the management of choice in this case.**

169. Therefore the most likely diagnosis is a **mononeuritis** affecting the left common **peroneal nerve**. This would lead to sensory loss over **the dorsum of the foot and anterolateral leg on the left.**

170. What does anticipation mean in this setting=**Symptoms begin at an earlier stage in successive generations .**

171. This woman has a Holmes-Adie pupil, the combination of a **Holmes-Adie pupil, excessive sweating, and loss of deep tendon reflexes** (the other feature which may seen) is known as **Ross's syndrome**.

172. Although nausea and vomiting are the commonest side effects of **valproate therapy**, these are worse during **treatment initiation**. Tremor is also common.

173. Carbamazepine is seen as the drug of choice **to prevent recurrence of trigeminal neuralgia**.

174. **Bitemporal hemianopia** raises the possibility of compression at the level of the **optic chiasm** by a **pituitary tumour**.

175. Enterovirus meningitis can be spread either through the respiratory route or via the faeco-oral route and is a

common pathogen in the environment where she works.

176. Juvenile onset (up to 20 years) Parkinson's is a rare but recognised condition and tends to follow an **autosomal recessive pattern of inheritance**.

177. The **T1 nerve root** supplies the **small muscles of the hands** and sensation on the medial aspect of the upper arm to an area just below the elbow.

Done and editited by dr.faisal hemed

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24-11-2013.....6-44pm

Pharma

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I RECOMMEND TO READ IT BEFORE DOING PASTEST !!!!

BELIVEME ME IT WILL MAKE A DIFFERENCEread it after studying the text and before answering the mcqeos !!!!!

Notes taken from the first 300 mcq of pastest

1. A 32-year-old man presents to A&E following a deliberate overdose of an unknown quantity of ferrous sulphate=Initial hyperglycaemia indicates significant ingestion...****

2. true concerning ecstasy=Hyponatraemia can be due to SIADHS...****

3. carbon monoxide poisoning=**Cerebellar signs are the most reliable sign of neurological toxicity..**

4. true concerning theophylline overdoses=**Multi-dose activated charcoal is useful in management...**

5. Which of the following statements is true following exposure to paraquat pesticide=**Supplemental oxygen may increase paraquat toxicity...**

6. Which of the following statements concerning lead toxicity is true=**Chronic moderate poisoning (450–600 µg/l) is associated with motor neuropathies ..**

7. Which of the following statements is true concerning overdoses of antimalarials=**High-dose diazepam and adrenaline**

infusion may be useful in the management of chloroquine toxicity...

8. Symptoms of chloroquine toxicity include nausea, headaches, visual disturbances, cardiac arrhythmias, convulsions and coma. Activated charcoal should be given to patients who present within one hour. The initial hypokalaemia that occurs appears to be cardioprotective and should not be corrected for at least 8 hours' postingestion. In patients with severe toxicity, high-dose (2 mg/kg) diazepam and adrenaline (0.25 µg/kg per min) have been shown to reduce mortality.

9. Hypoglycaemia, eg insulin, sulphonylureas, salicylates, sodium valproate, **propranolol**

10. Which of the following statements is true concerning the use of multi-dose activated charcoal=It is unsafe in patients with signs of bowel obstruction .

11. Multi-dose activated charcoal means giving 50 g of activated charcoal every 3–4 hours. It is useful in patients who have taken significant amounts of salicylates, and should be continued until plasma salicylate concentrations have peaked. It is also useful in the management of patients who have taken drugs with significant enterohepatic circulation (carbamazepine, phenobarbital, theophylline and quinine) and sustained-/modified-release preparations. It is contraindicated in patients with signs of bowel obstruction, since activated charcoal can cause constipation and may worsen any underlying obstruction.

12. Which of following statements is true concerning the management of body packers=**Abdominal X-rays may not show the total number of packages swallowed..**

13. With which of the following drugs is probenecid used clinically to increase the plasma half-life and therefore the therapeutic duration of the drug=**penicillin.**

14. **probenecid may be combined with oral penicillin to increase the half-life of the penicillin.**

15. Cytochrome P450 interactions with which of the following drugs possessing a narrow therapeutic index leads to toxicity=**Ciclosporin.**

16. Drug interactions with the cytochrome P450 system are only clinically significant for drugs that have a narrow

therapeutic index (ie small changes in plasma concentrations lead to the drug being in either sub-therapeutic or toxic concentrations). Examples of these drugs include ciclosporin, warfarin, theophylline and phenytoin. **Lithium has a narrow therapeutic index due to changes in absorption and excretion rather than enzyme interactions**

17. Which of the following statements is true concerning the management of digoxin poisoning=**Calcium gluconate should not be given when hyperkalaemia is present...as it may paradoxically lead to arrhythmia .**

18. Which of the following statements is true concerning drug-induced lupus disease=**It is more common in Caucasians than Afro-Caribbeans**

19. Concerning halothane hepatitis, which of the

following statements is true=**Fulminant hepatitis results from the reactive metabolite, trifluoroacetylchloride .**

20. Halothane can cause a mild liver dysfunction in approximately 30% of patients, due to the reactive halothane metabolites binding to hepatocytes.

Halothane oxidation by cytochrome P450 enzymes leads to the synthesis of trifluoroacetylchloride, which covalently binds to hepatic molecules and causes an immune reaction. Further exposure to halothane anaesthesia may lead to a fulminant hepatitis, where the mortality is approximately 90%.

21. Diethylstilbestrol : Vaginal carcinoma

22. Drug Teratogenic effect

Androgens Cardiac deformities

Alcohol Fetal alcohol syndrome

Carbamazepine Microcephaly

Diethylstilbestrol Vaginal carcinoma

Lithium Cretinism

Phenobarbital Cleft palate

Sodium valproate Neural tube defects

Thalidomide Phocomelia

Warfarin Chondrodysplasia punctata

23. Aspirin : Kernicterus

24. Many drugs can cause complications during pregnancy in addition to the teratogenic risks of drugs. Some examples of unwanted 'pharmacological actions' of drugs in pregnancy are shown below:

ACE-inhibitors=Oligohydramnios, impaired renal function

Aspirin =Kernicterus

Beta-blockers =Hypoglycaemia, IUGR, fetal bradycardia

Carbimazole= Neonatal goitre

NSAIDs =Close ductus arteriosus

Sulphonamides =Kernicterus

Thiazide diuretics=Neonatal thrombocytopenia

25. Which of the following statements is true concerning the management of maternal thyrotoxicosis in pregnancy with carbimazole or propylthiouracil=Propylthiouracil does cross the placenta..

26. Patients who are slow acetylators are at an increased risk of unwanted effects due to the reduced metabolism and excretion of certain drugs. Slow-acetylator status is inherited as an autosomal-recessive trait. Drug acetylation is a phase-II reaction, leading to the synthesis of water-soluble drugs/drug metabolites. Drugs that commonly cause increased unwanted effects in slow acetylators include dapsone (haemolysis),

isoniazid (neuropathy), hydralazine (drug-induced lupus) and sulfasalazine (haemolysis).

27. Which of the following is true concerning the serotonin syndrome?=**Cyproheptadine may be useful in treatment** ...which posses serotonin antagonist activity .

28. Concerning the management of poisoning with this hydrofluoric acid, which of the following statements is true=**Systemic fluorosis may occur as a Complication...**

29. Which of the following statements is true concerning cyanide toxicity?=**Amyl nitrite is useful in the management...**

30. Which of the following statements is true concerning

NSAID overdoses=Mefenamic acid is the NSAID most likely to cause convulsions .

31. Management of NSAID overdose is with activated charcoal in patients presenting within the first hour, and supportive care. Oral H2-histamine blockers and proton-pump inhibitors may reduce the symptoms of gastrointestinal toxicity. Activated charcoal may be indicated in the treatment of aspirin overdose due to delayed gastric emptying.

32. Bosentan is a competitive antagonist of both endothelin-A (ETA) and endothelin-B (ETB) receptors, leading to falls in both pulmonary and systemic vascular resistances without an increase in heart rate. It has been shown to be efficacious in patients with pulmonary arterial hypertension.

33. you decide to treat him with intravenous magnesium.

Which of the following statements is true=**Magnesium relaxes bronchial smooth muscle** .

34. Which of the following statements is true concerning

the antianginal drug **nicorandil**=**Oral ulceration is an unwanted effect** ..

35. Which of the following statements is true concerning

the cardiovascular effects of **anabolic steroids**=**Fibrinogen concentrations fall during prolonged use**..

36. Which of the following statements is true concerning

the actions and unwanted effects of **moxifloxacin=Tendonitis is an unwanted effect**..it is one of quinolones .

37. Which of the following statements is true concerning

Ezetimibe=Its principal action is to reduce intestinal cholesterol absorption .

38. Acarbose inhibits α -glucosidase

39. Acarbose inhibits intestinal α -glucosidase, which therefore delays the digestion and absorption of starch and sucrose. Its main unwanted effect is gastrointestinal disturbance

40. Hypokalaemia – can be due to intracellular shifts of

potassium with normal total body potassium (eg **theophylline, b-agonists, caffeine, insulin**) or loss of potassium stores (eg chronic diuretic use)

41. The benefits of oestrogen therapy are maintained only so long as treatment is continued for the next 5–10 years at least..

42. The latter causes chemical cystitis and therefore excellent hydration must be maintained during therapy with cyclophosphamide.

43. What is the mechanism of action leading to digoxin Toxicity=Inhibition of the sodium pump.

44. Which of the following gives rise to proto-oncogene stimulation, resulting in protein synthesis and causing hypertrophy of cardiac muscle=Angiotensin II.

45. Beta agonists and angiotensin II augment proto-oncogene expression, stimulate protein synthesis and induce the synthesis of fetal forms of actin and myosin, leading to hypertrophy of smooth muscle.

46. at therapeutic doses, which of the following are side-effects of aminophylline=jitteriness.

47. Aminophylline is a severe irritant of the gastrointestinal tract and causes nausea and vomiting. The central nervous system side-effects include jitteriness, seizures and coma. Ventricular and supraventricular arrhythmias

and hypotension are common in severe overdose (> 25 µg/ml). Profound hypokalaemia is common in overdose with theophylline compounds and may be fatal unless intravenous potassium is given.

48. Side-effects of acetazolamide include=**Acute interstitial nephritis.**

49. Side-effects of ciclosporin therapy include=**Chronic interstitial nephritis..**

50. Monitoring serum levels is important in preventing adverse drug effects of=**Theophylline..** Theophylline has a narrow therapeutic window and needs close monitoring of its serum level to avoid toxicity.

51. Peripheral neuropathy is a neurotoxic feature of vincristine. Foot drop, paraesthesias, loss of ankle jerks and wrist drop may also occur. An SIADH (syndrome of inappropriate ADH)-type picture may develop with dilutional hyponatraemia and seizures. Mucositis of the entire gastrointestinal tract may occur with bleeding.

52. sumatriptan=Causing vasoconstriction of cranial Arteries..

53. Which of the following statements best pertains to gastrointestinal bleeding due to NSAID therapy=It is due to depletion of mucosal prostaglandin E (PGE) levels .

54. The commonest drugs used to control seizures in children are sodium valproate and carbamazepine.

55. **Opioid poisoning** is classically associated with pinpoint pupils, reduced respiratory rate, **bradycardia**, drowsiness and coma. Hypothermia is a feature of barbiturate poisoning, while sweating and lacrimation are seen in cases of opiate withdrawal.

56. One of the mechanisms of action of antimicrobial drugs is to bind to **bacterial ribosomes and disrupt protein synthesis=Azithromycin**.

57. Which one of the following features is MOST characteristic of lead poisoning=**Punctuate basophilic stippling on peripheral blood film examination**..

58. It is also used to reduce the body burden of copper in Wilson's disease. **Penicillamine is also of value as a chelating agent in lead poisoning also copper.**

59. Which one of the following statements BEST describes Warfarin=**Reduces protein C levels in the blood..**

60. Which one of the following diuretics is associated with metabolic acidosis=**Acetazolamide.**

61. Acetazolamide (carbonic anhydrase inhibitor) inhibits proximal tubule bicarbonate reabsorption in a similar fashion to type II renal tubular acidosis (RTA).

62. BEST describes radioactive iodine (^{131}I) in the treatment of thyrotoxicosis=Not associated with increased incidence of late leukaemia..

63. Orlistat therapy=Prevents fat absorption from the intestine.

64. Orlistat (Xenical) therapy effectively promotes weight loss and improves co-morbidities in obese patients.

Orlistat operates by preventing the absorption of fat molecules in the intestinal tract. Approximately 30% of fat that would otherwise have been absorbed passes straight through the bowel and is excreted in the faeces. As a result it can cause 'fatty stools', urgency and increased frequency of defaecation often with anal leakage or oily spotting. These effects encourage people taking the drug to limit fat intake.

65. Propylthiouracil has a modest therapeutic advantage over carbimazole in the treatment of thyrotoxicosis **because it has Inhibits T4 to T3 conversion..**

66. Which one of the following contributes to the **beneficial effect of nitro-glycerine=Dilation of systemic veins..**

67. **Sodium valproate has been associated with the development of PCOS,**

68. Which one of the following pharmacokinetic parameters remains normal in chronic renal failure=**Bioavailability immediately following intravenous injection of a drug .**

69. Renal failure disturbs virtually every kinetic parameter including gastric absorption, hepatic metabolism of some drugs, protein binding and volume of distribution. The bioavailability of an intravenously administered drug is 100% and does not change in renal failure.

70. In renal drug elimination, the extraction ratio can be defined as which one of the following=Decline of drug concentration in the plasma from the arterial to the venous side of the kidney..****

71. Which one of the following represents the recommended daily dietary intake of calcium and vitamin D in the treatment of established osteoporosis=1500 mg/day of calcium, 400-800 units/day of vitamin D..****

72. If osteoporosis is established, the treatment includes 1500 mg/day of calcium and 400–800 U/day of vitamin D. (1000 units is equivalent to 25 micrograms).

73. Household and other close contacts of patients with pyogenic meningitis should be given oral rifampicin. In adults, a single dose of ciprofloxacin may be a good alternative.

74. Although adenosine is the drug of choice for terminating paroxysmal supraventricular tachycardia, it can cause bronchospasm and is thus contraindicated in patients with asthma. Verapamil would therefore be the drug of choice in this case.

75. rofecoxib can cause fluid retention and worsen pre-existing cardiac failure.

76. Salicylate poisoning is a known cause of an increased anion gap.

77. In the prophylaxis of asthma, what is the most probable mechanism of action of **sodium cromoglycate=Inhibition of mast-cell degranulation..**

78. This boy most probably **has Kallmann's syndrome,** which is a combination of anosmia, obesity and hypogonadotropic hypogonadism. It is an X-linked recessive disorder causing an isolated deficiency of gonadotrophin-releasing hormone (GnRH). **Long-term treatment of males with HCG** or testosterone restores pubertal development and secondary sex characteristics.

79. Which of the following measures is documented to be most effective and appropriate in reducing the risk of transmission of HIV to the newborn child=**Postnatal administration of zidovudine to the baby** .

80. Administration of **sodium valproate** during pregnancy may predispose to the development of **neural tube defects in the fetus e.g spina bifida** .

81. Pioglitazone belongs to the thiazolidinedione group which decreases insulin resistance by decreasing leptin expression and increasing p85a-P1-3K gene expression (a gene that allows insulin to work). He is obese and falls into a group that would respond well to introduction of a glitazone as the reduction in glucose often depends on

available fat cells.

82. Diazepam and **chlordiazepoxide** are used to prevent **withdral symptoms in alcoholics**.

83. **Vigabatrin is the drug of choice for infantile spasms**. It is however associated with a number of other adverse effects including **aggression, alopecia, retinal atrophy and reduced peripheral vision** and as such is not generally used outside the situation of infantile spasms.

84. Carbamazepine causes hyponatraemia, which is dose-related.

85. **Desloratadine is a long-acting H1-receptor antagonist and has poor penetration into the central nervous**

system so not to cause drowsiness. It does not interact with antibiotics or other co-administered medications so it is **suitable in ttt of hay fever .**

86. Acamprosate is derived from taurine and increases the gamma-aminobutyric acid (GABA) level, which inhibits CNS activity. It has a lesser number of side-effects and **can treble abstinence rates by decreasing the craving for alcohol.** It is contraindicated in pregnancy and severe liver and kidney failure.

87. An NSAID overdose may be associated with upper abdominal pain and gastrointestinal bleeding.

88. An excess alcohol intake significantly increases the risk of lactic acidosis in diabetic patients on metformin.

89. This is a case of **Wernicke's encephalopathy** due to **thiamine deficiency**. It is most often seen in **alcoholics**, but it can be seen in persons with disorders associated with malnutrition and also in patients on long-term haemodialysis or with AIDS. It presents as the triad of **acute mental confusion, ataxia and ophthalmoplegia**. **Nystagmus is usually present**. **Urgent thiamine should be given to prevent the development of irreversible Korsakoff's syndrome**, characterised by retrograde and anterograde amnesia with varying degrees of other cognitive defects.

90. The symptoms are suggestive of digoxin toxicity. **Administration of a thiazide or loop diuretic, such as furosemide, may enhance the toxicity of digoxin.**

91. **d-Penicillamine is associated with pancytopenia and**

Nephritis and administered orally .

92. Ampicillin and amoxicillin can cause skin rashes that are not allergic in nature. All the other antibiotics produce a diffuse, papular, non-purpuric rash that may be intensely pruritic.

93. Bromocriptine is a dopamine agonist used to inhibit prolactin release from the anterior pituitary. Adverse effects include nausea, headache, light-headedness, orthostatic hypotension and fatigue. Higher doses may cause cold-induced peripheral digital vasospasm.

94. The most common dose-related adverse effects of carbamazepine are diplopia and ataxia.

95. The features are suggestive of an adverse reaction to amiodarone. The drug accumulates in many tissues, but dose-related pulmonary toxicity is the most important adverse effect. **Skin deposits result in photodermatitis and a greyish-blue discoloration on sun-exposed areas.**

96. This patient has the **Stevens–Johnson syndrome consequent to co-trimoxazole treatment.** It is a particularly serious and potentially fatal type of skin and mucous membrane eruption associated with sulphonamide use.

97. A dangerous pharmacodynamic interaction can occur when fluoxetine or one of the newer selective

serotonin-reuptake inhibitors is used in the presence of a monoamine oxidase inhibitor.

98. An 18-year-old man presents with nausea, vomiting and diaphoresis. His pupils are dilated and his blood pressure is elevated.

Misuse of which substance is most likely to have caused this condition?=**cocaine**.

99. A 60-year-old patient has been commenced on antihypertensive therapy. The next morning he has a dizzy spell and complains of fast palpitations.

Which of the following drugs is the most likely cause?=**doxazocin**

α 1-Selective antagonists in particular can cause orthostatic hypotension and patients should be dosed carefully.

100. Bleomycin causes lung toxicity, including pneumonitis, which can progress to interstitial fibrosis.

101. Brains of patients with liver cirrhosis and hepatic encephalopathy (coma or precoma) are more sensitive to the effects of sedating drugs. It is therefore wise to avoid opioid and other narcotic analgesics and barbiturates; chlorpromazine dosage should be reduced.

102. What is the mechanism of chlamydia's **resistance to Cephalosporins=Chlamydia has no peptidoglycan cell Wall..**

103. Although drugs containing 5-aminosalicylic acid (sulfasalazine, olsalazine, balsalazide, mesalazine) are

often used to treat a mild colitis, **prednisolone has been shown to be more effective and to control symptoms more rapidly, which make it the drug of choice.**

104. What kind of medication would have contributed to the iron deficiency anaemia=Aspirin.

105. Tamoxifen as a partial oestrogen agonist can increase the risk of thromboembolism, particularly during and immediately after major surgery or periods of immobility. Patients should be made aware of the symptoms of thromboembolism and advised to report sudden breathlessness and any calf pain.

106. When ingested in overdose, salicylates directly stimulate the respiratory centre to produce both

increased depth and rate of respiration, thereby causing **a respiratory alkalosis.**

107. Multiple doses of activated charcoal aid the elimination of some drugs from the circulation by interrupting their enterohepatic circulation and adsorbing that which diffuses into the intestinal juices.

108. Gastric lavage and activated charcoal should be considered if the patient presents within 1 hour of ingestion of the overdose.

109. Flumazenil, a benzodiazepine antagonist, is used to reverse the central sedative effects of benzodiazepines after anaesthetic and similar procedures. Flumazenil has a shorter half-life than that of diazepam and midazolam and there is a risk that patients may become

re-sedated – in which case a repeat dose of flumazenil should be given.

110. Simvastatin and the fibrate class of lipid-lowering agents certainly potentiate the anticoagulant effects of warfarin therapy.

111. Atorvastatin and pravastatin are least likely to interfere with his warfarin therapy.

112. Glitazones reduce whole-body insulin resistance by increasing glucose uptake into muscle and fat. They are associated with a low incidence of hypoglycaemia.

113. Meglitinides (nateglinide and repaglinide) increase postprandial insulin release specifically.

114. In patients with renal impairment pethidine is metabolised to norpethidine, but at this stage metabolism stops and norpethidine accumulates rather than being excreted through the kidneys.
Norpethidine is toxic and is associated with a risk of seizures.

115. Amiodarone has a number of long-term side-effects, one of which is the development of **corneal microdeposits:**

116. Enalapril (and all other angiotensin-converting enzyme (ACE) inhibitors and angiotensin II-receptor blockers)

may be associated with paroxysms of angio-oedema.

117. Paracetamol given in repeated doses may lead to an enhanced response to warfarin and therefore an increased INR

118. The penicillins are relatively safe in breast-feeding. In contrast, ciprofloxacin and ofloxacin are quite lipophilic and are therefore secreted in significant quantities in breast milk.

119. Conjugation reactions are affected to a lesser extent by advanced liver

disease and only occur in very late
stage disease

120. best definition of **bioequivalence**=The two drugs compared
have the same biological effect.

121. Which of the **following β -blockers** has the largest volume of
Distribution=Metoprolol.

122. Metoprolol is the most lipid-soluble of the β -blockers listed
above and therefore
has the largest volume of distribution.

123. **Quinolones** such as ciprofloxacin primarily act by
inhibiting bacterial DNA gyrase.

124. Tirofiban, eptifibatid and abciximab are all glycoprotein IIb/IIIa inhibitors, but **only abciximab is licensed as adjunctive therapy in acute coronary intervention.**

125. **The fibrate class of drugs are PPAR- α agonists**, their predominant action is in reducing serum triglyceride levels and increasing HDL-cholesterol.

126. most likely to account for differences in drug metabolism between the elderly and younger age groups =**Reduced cardiac output..**

127. Which of the following drugs is most likely to produce large clinical effects for a relatively small dose change across a large range of licensed doses=**Furosemide**

128. Which of the following enzymes is most likely to be inhibited by insulin = Pyruvate carboxylase.

129. Insulin inhibits gluconeogenesis by inhibiting the enzymes involved in the process. Pyruvate carboxylase is an enzyme involved in gluconeogenesis, hence its action is inhibited by insulin.

130. Which of the following substances in vitamin A is most likely to be maximally involved in correcting the visual disturbance=Retinaldehyde.

131. What is the main type of damage caused by

excessive ultraviolet radiation on cells=**Formation of pyrimidine dimers.**

132. **Diazepam** is the only one in the list that does not have to be metabolised prior to its initiation of activity in the body. **SO the mode of its action is direct .**

133. Which of the following antimalarials is most likely to be a slow-acting schizonticide=**Pyrimethamine.**

134. Cefuroxime is a second-generation cephalosporin=It is useful in mixed aerobic–
anaerobic infections

135. This patient most probably has an **aspergilloma.**

Aggressive antifungal therapy is required with amphotericin B and flucytosine.

136. amphotericin B best describes a significant pharmacological characteristic of this drug= **Lipid-bound preparations are less toxic**

137. Nephrotoxicity due to amphotericin B is associated with hypokalaemia and hypomagnesaemia.

138. This patient was most probably on dactinomycin, which is a radiosensitiser so the patient will have radiotoxicity .

139. azathioprine=It suppresses lymphocyte numbers and function .

140. Methaemoglobinaemia results from the oxidation of ferrous iron in the haemoglobin to the ferric form. This causes precipitation as Heinz bodies, and eventually leads to haemolytic anaemia. Nitrates may cause this reaction.

141. aminophylline inhibit phosphodiesterase .

142. theophylline preparation as a bronchodilator.

Which of the following best describes the main feature of this drug's activity?

It blocks the adenosine receptor.

143. Tamoxifen is a selective oestrogen-receptor modulator. It acts both as a potent oestrogen

antagonist in some areas and as a weak oestrogen in other places.

144. Specifically, the risk of rhabdomyolysis may be increased with the use of high-dose statin therapy.

145. best fits with **isoniazid-associated peripheral Neuropathy=Those with an N-acetyltransferase type-1 gene defect are predisposed to neuropathy..**

146. N-acetyltransferase type 2, resulting in abnormal isoniazid metabolism. Pyridoxine 10 mg is given as prophylaxis against peripheral neuropathy occurring.

147. Phenothiazines such as chlorpromazine can produce hepatocanalicular cholestasis due to a hypersensitivity

reaction.

148. Fenofibrate is a rare cause of drug-induced hepatitis, characterised by raised transaminase levels with a smaller rise in bilirubin and alkaline phosphatase.

But in only mrcp notes he state that it cause cholestatic pic.

149. Adenosine is an ultra short-acting antiarrhythmic drug with a half-life of 8–10 seconds, although this is prolonged when administered in patients taking dipyridamole. Unlike verapamil it may be used following beta-blockade. its effect is reduced by theophylline which adenosine antagonist activity .

150. Which metabolic pathway is mainly responsible for the metabolism of pioglitazone=CYP3A4.

151. Long-term use of combination antiretroviral therapy including protease inhibitor regimens is **associated with a redistribution of body fat in some patients**. This follows an insulin-resistant pattern, with a **loss of fat on the face, increasing abdominal fat and deposition of subcutaneous fat on the back**.so the dx is not cushing but it will be *Antiretroviral insulin-resistance syndrom*.

152. **Side-effects of co-trimoxazole therapy** include nausea, vomiting, rash (including Stevens–Johnson syndrome), toxic epidermal necrolysis and photosensitivity. Blood disorders occurring in conjunction with co-trimoxazole therapy include **neutropenia**, thrombocytopenia and, rarely, **agranulocytosis**.

153. Amiodarone has by far the longest half-life of these agents, at around 25 days.

154. the most water-soluble=Digoxin.

155. tiotropium=It is a long-acting anticholinergic agent.

156. eplerenone adverse effects include Hyperkalaemia as Eplerenone is a spironolactone-like agent indicated as an add-on to standard post MI therapy, including beta-blockade, in stable patients with an ejection fraction of less than 40% and clinical evidence of heart failure. Studies indicate that adding eplerenone may result in an additional all-cause mortality benefit of up to 15%.

157. Which of the following substances is most likely to reduce the effect of warfarin therapy.

158. Colestyramine is known to reduce the absorption of warfarin. Antiepileptic agents may reduce or enhance warfarin effects.

159. care unit admission. You elect to begin **doxapram** therapy. Which of the following characteristics fits best with doxapram= **It is contraindicated in hyperthyroidism .**

160. **Doxapram is a centrally acting respiratory stimulant, generally used in patients with severe respiratory disease who are deemed unsuitable for admission to ICU.** The main purpose in using doxapram is to allow time for recovery from an acute respiratory event. The usual dosing regimen is 1–4 mg/minute given as an intravenous infusion.

It is contraindicated in patients with heart disease, epilepsy, cerebral oedema, stroke, asthma, hypertension, hyperthyroidism and phaeochromocytoma. Side-effects of therapy include hypertension, exacerbation of apparent dyspnoea, agitation, confusion, sweating, cough, headache, dizziness, nausea, vomiting and urinary retention.

161. Of the following drugs, which is most likely to cause **significant tachycardia=Adrenaline.**

162. Lamotrigine

is a suitable first-line treatment for partial epilepsy, and does not alter oestrogen metabolism.

163. **Therapeutic drug monitoring is only useful for drugs which have a narrow therapeutic index, and where**

there is a good correlation between serum concentration and therapeutic effect e.g **Vancomycin**.

164. **Droperidol** is a butyrophenone. Butyrophenones and phenothiazines **are the most common cause of drug-induced Parkinsonism**.

165. High doses of intravenous penicillin can provoke seizures.

166. **Pulmonary fibrosis** is a recognised adverse effect of treatment with a variety of drugs; important ones to remember are **busulphan, methotrexate, amiodarone and bleomycin**.

167. Carbamazepine = is a cause of SIADH.

168. Drugs associated with nephrogenic diabetes insipidus (due to acquired resistance of the renal tubules to vasopressin (antidiuretic hormone, ADH) include **lithium, demeclocycline, amphotericin and glibenclamide.**

169. In patients with a genetic predisposition, therapy with a thiazide diuretic and low-dose aspirin can precipitate an acute attack OF GOUT .

170. Excretion is the most important kinetic parameter to vary with renal impairment, and changes in drug clearance can be estimated from glomerular filtration rate.

171. Nifedipine causes jaundice due to cholestasis more commonly than hepatitis.

172. Drugs causing cholestasis

include; chlorpromazine, chlorpromamide, erythromycin, nitrofurantoin, co-amoxiclav, nifedipine and statins, (statins also cause a hepatic picture).

173. Drug-induced haemolysis can be congenital, as in glucose-6-phosphate dehydrogenase (G6PD) deficiency (precipitated by drugs such as dapsone, primaquine, aspirin and quinolones), acquired, which may be allergic (e.g. methyldopa, **penicillin**, quinine and quinidine) or toxic (e.g. lead) in nature.

174. Both heparin and warfarin cross into breast milk in amounts too small to produce significant

anticoagulation in the neonate. Aspirin, on the other hand, when ingested by the mother, can cause neonatal bleeding problems, and there is also the risk of inducing Reye's syndrome.

175. In a normally healthy 80-year-old lady, which of these drugs should be used with particular caution?

Triamterene as diltiazem should be used with caution in elderly .

**176. Which of the following stems best describes the main site of action for haloperidol with regards nausea =
Chemoreceptor trigger zone.**

**177. The main site of action of haloperidol with regards to anti-emetic effects is the chemoreceptor trigger zone.
Haloperidol is an anti-dopaminergic agent licensed for and used mainly as an anti-psychotic agent. It does**

result in more extrapyramidal side-effects than phenothiazine-type agents, but is associated with less hypotension. Phenothiazines and domperidone are also used as anti-emetic agents and act at the chemoreceptor trigger zone. Metoclopramide has additional prokinetic action and may be more useful in nausea and vomiting related to a primary gastrointestinal cause. Newer agents, such as the 5-hydroxytryptamine (5-HT₃) inhibitors, are associated with fewer side effects, and act directly on 5-HT receptors in the gut and central nervous system.

178. Henoch–Schönlein purpura (HSP) is the most common vasculitis seen in children and younger age groups,= Complete renal recovery.

179. Indometacin is an inhibitor of both prostaglandin

synthase and lipoxygenase enzymes.

180. A heroin addict who is on a methadone program was involved in a motor vehicle accident and sustained multiple pelvic fractures.

What should be done about his analgesics?

Continue on methadone and titrate

additional analgesics with parenteral diclofenac

181. HCO₃

–

levels are very low, with severe acidosis and

base deficit. In this situation the next immediate

treatment is with sodium bicarbonate, the 8.4%

concentration should be given via central line over 30–

40 min.

182. Amphetamine overdose is associated with mydriasis,

hypertension, tachycardia, skin pallor, hyperexcitability

and, in the initial stages, agitation and increased talkativeness. Poor prognostic features associated with amphetamine overdose include hyperpyrexia, rhabdomyolysis, acute renal failure and acute liver failure. And so hypoK.

183. If she is planning on pregnancy then registry studies suggest that lamotrigine would also be the best choice in a woman with epilepsy .

184. What is the most common cause of paranoid psychosis with visual hallucination?

Alcohol withdrawal

185. **N-acetylcysteine is most effective when administered within 10 h of ingestion .**

186. Cutaneous pigmentation due to minocycline causes discolouration of the skin which can be slate grey in appearance and is reversible.

189. Which of the following is the main reaction involved in the normal metabolism of paracetamol = Conjugation to glucuronic acid.

190. What is the primary mode of action of N-acetylcysteine=Reduction of the circulation of toxic Metabolites .

191. All patients require plasma vancomycin measurement (after three or four doses if the renal function is normal,

192. Which drug is most likely responsible for **postural hypotension** in a 76-year-old man who is taking simvastatin 20mg, ramipril 5mg, nifedipine 40mg SR, bendroflumethiazide 5mg, aspirin 75mg=**bendroflumethiazide**.

قال رسول الله صلى الله عليه وسلم " اذا مات ابن ادم انقطع عمله الا من ثلاث صدقه
جاريه او علم ينتفع به او ولد صالح يدعو له " صدق رسول الله صلى الله عليه و سلم

THANKS A LOT

AIN SHAMS UNI-EGYPT – 2013

BY.FAISAL HEMEDA16-11-2013

Psychiatry

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<https://www.facebook.com/groups/mrcpuk/>

I RECOMMEND TO READ IT BEFORE DOING PASTEST !!!!

BELIVEME ME IT WILL MAKE A DIFFERENCEread it after studying the text and before answering the mcqes !!!!!

1. Previous episodes of self-harm predict future ones, even if the actual 'medical' harm done was minimal.

2. Factors associated with an increased risk of suicide include: sex (woman more likely to attempt, men more likely to complete), age (teenagers and middle-aged and older, with the highest prevalence being in the >65 year age group), depression (15% of depressives), previous attempts, ethanol abuse (15% of alcoholics), rational thinking loss (15% of chronic schizophrenics), social supports lacking, organised plan, no spouse, sickness – this can be remembered by the mnemonic "sad persons".

3. Patients on a methadone programme if experience withdrawal symptoms you describe Loperamide.

4. Delirium tremens carries a significant mortality of 10% and must be urgently diagnosed and treated. Its core

features are delirium, **hallucinations (generally visual, but occasionally in other senses)** and tremor. Other recognised features include **paranoid delusions and autonomic disturbance** (sweating, hypertension, tachycardia and fever).and evidence of chronic alcohol intake .

5. A **delusion of reference** describes the belief that a special meaning for that individual lies behind something 'innocent' in the public domain, such as a book/TV programme/newspaper or from the way objects are arranged in a room or how cars are parked in a street. اشياء عادية ولكنه يفسرها تفسيرات غير عاديه وتكون عنده ذات دلالة. معينه مثل الاشاره ف الشارع خضراء اذن انا الملك !!

6. Delusions of control consist of beliefs that patients themselves are being controlled by an external force, typically citing electricity or radio waves as the mediator.

7. Paranoid delusions usually consist of people or organisations (such as MI5) plotting to kill, spy on, or harass the patient; while delusions of replacement occur when people in a patient's life (eg their partner or close relative) have been replaced by an impostor who looks and talks exactly like that person.

8. in schizophrenia The following are recognised features that predict a poor outcome – young age, insidious onset, poor premorbid social function, negative symptomatology, neurological signs, no recognised precipitating factor, family history of schizophrenia.

A good outcome is associated with older age, acute onset, recognisable precipitant, good premorbid social function, being

married, prominent mood disorder, family history of mood disorder like depression, positive symptomatology.

9. The distinction between cortical and subcortical dementia is not absolute but is clinically useful.

Subcortical dementia is due to disruption in the frontostriatal connections and so results in early frontal lobe problems such as planning difficulties, poor verbal fluency and task switching. Typically, the 'cortical' functions of correct word use and complex motor tasks (praxis) are preserved.

10. Common causes of subcortical dementia include parkinsonism, vascular dementia and multiple sclerosis; rarer causes include normal-pressure hydrocephalus, Huntingdon's disease and Wilson's disease.

11. Postpartum depression occurs within the first year of pregnancy and is similar to major depression.

12. Indications for **ECT** in depression include **depressive stupor, refusal of food and drink**, if the patient is dangerously suicidal or if a delay in the effects of antidepressant medication will result in a serious health risk.

13. A **social phobic** feels **anxiety in public**, particularly if they feel they are being scrutinised eg when eating in front of others in a restaurant.

14. A diagnosis of panic disorder can only be given if the panic attack occurs 'out of the blue' and if for at least one month following the attack there is a fear of recurrence or behavioural change to avoid a further attack.

15. The odd personality disorders (PDs) are

paranoid (no trust in others, suspect infidelity, lack of confidants),

schizotypal (can't keep friends, odd beliefs, ideas of reference, eccentric behaviour and appearance, paranoid ideation)

schizoid (prefers to be alone, no response to positive or negative comments, works alone).

16. The syndrome of **alcohol dependence** is characterised by

the **withdrawal syndrome, tolerance (needing increasing amounts to achieve the same effect)** and loss of control of alcohol use, **eg inability to cut down, drinking more than intended, replacing social activities with drinking.**

If it gets to the stage that the patient can no longer work or live with others or there are legal problems due to persistent alcohol-related behaviour then this is termed 'alcohol abuse'.

17. Binge episodes and

fasting episodes can be seen in both anorexia and bulimia, but purging behaviours, eg laxatives and diuretics are more characteristic of bulimia.

18. for a diagnosis of

anorexia the weight must be > 15% below the expected weight,

19. Dementia affects approximately 5% of people over 65

and 20% of individuals over 80. Alzheimer's disease accounts for around 60% of all causes of dementia, and usually has an insidious onset with gradual progression, without vascular risk factors.

20. This patient has developed a delirium (acute confusional state) probably secondary to pneumonia. Other common causes in older people include urinary tract infections, medication (especially analgesics), constipation, pain, hypoxia and alcohol withdrawal! Delirium is commonly missed on medical wards. The management includes identifying and treating the cause. Disturbed patients may require small doses of antipsychotic medication, although benzodiazepines should be used as a last resort. In a florid presentation such as described above, moving the patient to a well-lit single room with 1:1 observation with a familiar and experienced nurse may help to reduce disorientation and paranoid beliefs.

21. Prodromal schizophrenia often includes social withdrawal and behaviour change. The initial presentation, before the onset of delusions and hallucinations, may be

subtle.

The presence of odd ideas, as in this case the belief that his mother is trying to poison him, needs to be explored to confirm whether they are delusional. Delusions are beliefs that are held with absolute certainty. They are usually false and not understandable in the context of a person's cultural and social background.

22. Which of

the following statements by the patient most strongly

suggests the presence of schizophrenia= **They control me; they made me take my clothes off'.**

23. This patient lives alone, is prescribed amitriptyline and

has a previous episode of DSH, suggesting she has a

recent history of depression. **Delusions of poverty**

indicate current psychotic depression – a significant risk factor for completed suicide.

24. Approximately 10% of people with severe depression will go on to commit suicide. Previous DSH is also a significant risk factor (1% completion risk in one year), as is advancing age and poor social network.

25. Obsessional phenomena are recurrent intrusive thoughts, impulses or images that the patient accepts are their own (ie arising internally) but are perceived as senseless and therefore unwanted and resisted. so to reassure you that the patient is not psychotic she said The patient says the thoughts are stupid and tries not to think them.

26. citalopram is antidepressant with few drug interaction so it is used **in elderly** and in people with **chronic physical disease.**

27. Sociopathic personality disorders may be classified into paranoid (suspicious and self-referential), dissocial (lacking empathy and contempt for social norms) and emotionally unstable – impulsive or borderline types (lability of emotion, repeated self-harm, relationship problems). Individuals with personality disorders are at greater risk of co-morbid organic and functional illnesses.

28. The clinical history describes a patient who lives alone, has an alcohol dependency and has made a previous suicide attempt. A small overdose does not necessarily mean the attempt was not serious: she may have taken this amount of paracetamol believing it would kill her. so hold she in the psychiatry ward.

29. **Polypharmacy**= Multiple medications are one of the most common causes of **delirium in the elderly**.

30. This man has a very short history of **depressive symptoms** and has recently begun taking a new **medication that may cause depressed mood**. This may be linked to **decreased sexual function** because of the **beta blockade and the possibility of erectile dysfunction should be discussed**. Switching of the beta-blocker for an alternative anti-hypertensive medication would be the treatment of choice here.

31. Postpartum blues usually occurs in the first postpartum week and consists of short-lived episodes of irritability, crying, depression and emotional lability. This condition resolves spontaneously and reassurance and

explanation are all that is necessary. and post partum depression occur in month and peak in 3 months.

32. Dependent personality

disorder involves dependent behaviour and a failure to make decisions unaided. There is often anxiety associated with being left alone.

33. Dysthymia is a chronic depression of mood that does not fulfil the criteria for recurrent depressive disorder. It usually begins in late adolescence or early adulthood. Patients tend to brood, sleep badly and feel inadequate

but are **able to cope with the demands of daily life.**

Treatment with antidepressants or cognitive behavioural therapy may be helpful in severe cases. **Cyclothymia is a persistent instability of mood with periods of mild depression and elation.**

34. Derealisation is the subjective sense that the external world is unreal. Depersonalisation describes a situation where the patient feels unreal. A hallucination is a false sensory perception in the absence of a real external stimulus. An illusion is a false perception of a real external stimulus.

35. A history of rapidly progressive dementia and myoclonic jerks is characteristic of **Creutzfeldt–Jakob disease. CJD is caused by an abnormal protein (**prion protein**).**

36. **Cyclothymia** is a persistent instability of mood, involving numerous periods of mild depression and mild elation, usually developing early in adult life and pursuing a chronic course.

37. Toxicity with which psychotropic medication could cause drowsiness, ataxia, coarse tremor, nausea and diarrhoea=**lithium**.

38. Dystonic reactions (eg **oculogyric crisis**) most commonly occur soon after treatment begins, especially in young men. Acute dystonia can occur within hours **of starting antipsychotics** (minutes if the im or iv route is used). **Anticholinergics (eg procyclidine)** are given orally, im or iv depending on the severity of the symptoms.

39. Akathisia is an unpleasant feeling of motor restlessness and a need to move, leading to an inability to keep still.

It can be manifest by foot stamping when seated, the constant crossing and uncrossing of legs, as well as pacing up and down.

40. Neuroleptic malignant syndrome occurring as a result of dopaminergic

antagonism. Signs and symptoms include: fever,

diaphoresis, rigidity, confusion, fluctuating

consciousness, fluctuating blood pressure, tachycardia,

elevated creatinine kinase, leucocytosis and altered liver

function tests. Treatment includes withdrawing

antipsychotics and instituting rehydration therapy and

dantrolene.

41. After initiating lithium therapy when should the

plasma level be checked after 5-7 days.

42. A single episode of depression should be treated for 6 months after recovery to prevent relapse.

43. Donepezil (Aricept) belongs to which class of drugs=
Acetylcholinesterase inhibitor.

44. Donepezil, which is licensed for the treatment of mild to moderate dementia, is a selective inhibitor of acetylcholinesterase.

45. The above symptoms and impairments should have been present for at least 6 months for a confident clinical diagnosis of dementia to be made.

46. Body mass index = [weight (kg)]/[height (m)

2]

الوزن علي مربع الطول

47. The stop–start technique (Semán’s technique) is used for the treatment of premature ejaculation.

48. Education in ejaculatory control using the stop–start technique is the treatment of choice.

During Sensate Focus exercises the man, when he predicts that he will ejaculate shortly, asks his partner to stop, allows his arousal level to subside slightly and then returns to being caressed, repeating the process again when arousal increases. In the treatment of vaginismus, the emphasis is on helping the woman to gain comfort in exploring her own genitalia, in

association with Sensate Focus techniques.

49. Section of the Mental Health Act allows an informal in-patient who is thought to be a danger to themselves or to others to be held in hospital for 72 hours for further assessment=**Section 5(2)**..

50. **Hypnagogic** hallucinations are hallucinations that occur as the patient is **going** to sleep. Hypnopompic hallucinations are experienced on awakening.

51. **This sensation of crawling insects is also known as the 'cocaine bug'** and is associated with the ingestion of high doses of cocaine and called **Haptic hallucination**.

52. The general definition of a hallucination is of a perception in the absence of a stimulus.

53. An illusion is a misperception of a stimulus (eg seeing animals in the wallpaper, or seeing a face in the clouds). Illusions are perceived as having the same qualities as normal perceptions but are often more fleeting than hallucinations.

54. Thought broadcast is the experience that others can read or hear the individuals' thoughts as they are 'broadcast' from them.

55. Nihilistic delusions are beliefs about the non-existence of some person or thing. They are associated with extremes of low mood. احساس بالعدم

56. What feature is characteristically seen on a multiple sleep-latency test (MSLT) EEG in narcolepsy=**Rapid onset of REM sleep.**

57. Narcoleptic tetrad=**Hypersomnia, cataplexy, sleep paralysis and hypnagogic or hypnopompic hallucinations..**

58. During which sleep stage do **nightmares occur=REM.**

59. Most dreams, including nightmares, occur **in REM sleep.**

60. During which sleep stage do night terrors and sleepwalking Occur=**IV.**

61. What is the 'gold standard' for **distinguishing epileptic seizures from non-epileptic attack disorder (NEAD)= Video telemetry.**

62. what is the frequency of **alpha** waves on **EEG=8–13 Hz.**

63. Alpha waves have a frequency of 8–13 hertz. Delta waves have a frequency of < 4 Hz. Theta waves have a frequency of 4–7 Hz. Beta waves have a frequency of > 14 Hz.

64. **Lewy body dementia** has symptoms of cognitive impairment and a motor disorder suggestive of Parkinson's disease.

65. In what type of dementia are both **neurofibrillary tangles** (NFTs) and **senile plaques** seen pathologically=**Alzheimer's dementia.**

66. Which antidepressants have the 'cheese effect' (a hypertensive reaction) as a side-effect=**Monoamine oxidase inhibitors (MAOIs)**.

67. **The CAGE questionnaire** is a screening questionnaire for which disorder=**Alcohol dependence**.

77. **Wernicke's encephalopathy** is directly caused by **thiamine deficiency**,

78. **Grandiose delusions** are beliefs of exaggerated importance, and are associated with **mania**.

79. The Mini-Mental State Examination (MMSE) is a screening questionnaire for which condition=**Cognitive impairment**.

80. Undoing refers to **the performance of an activity that symbolically reverses some previous behaviour or**

thought. This defence mechanism is commonly present

in individuals who feel either conscious or unconscious

guilt.e.g A previously convicted criminal now spends time

working in

a local nursing home and has recently joined the fire-fighting

service.

81. schizophrenia=A premorbid history of social withdrawal is predictive of more severe and long-lasting psychopathology..

82. Rationalisation refers to the distortion of reality so that

the actual act or event seems to be desirable. This

defence mechanism is often used when an individual

cannot accept the implications of a particular outcome

of events.e.gFor the first month after losing his job, a sales manager spent his time moping around the house. Since then he has gradually been forced to do most of the housework, especially as his wife has had to take on a full-time job. He tells his family and friends that he is happy that he now has more time with his family. However, he spends most of his spare time actively searching for employment.

83. Conversion disorder is suggested by a loss of motor control or sensory function that is not fully explained by physiological mechanisms, and which is associated with psychological conflict. Affected individuals often demonstrate la belle indifference or a lack of emotion.

84. Displacement occurs when the emotions associated with a psychologically unacceptable object, idea or activity

stupid and cunning. At the same time, she praises another relative whom she describes as kind, wise and helpful.

شايفه كل حاجه وحشه ف شخص معين زي امها...وكل حاجه حلوه ف شخص تاني ..

87. Tardive dyskinesia occurs in a number of patients who have **had long-term treatment with antipsychotic agents**. This consists of **choreoathetoid movements that are often first evident in the fingers and tongue, but later become more generalised.**

88. the adult

personality is mostly the product of early childhood experiences. Specific kinds of childhood trauma result in specific kinds of personality disorders. Interpersonal problems often develop during the period a child is raised within the family and not after leaving the family home.

89. characteristic finding in the pathophysiology of bipolar disorder=Increased neurotransmitter levels during manic episodes.

90. Generalised anxiety disorder is characterised by excessive anxiety, which is difficult to control, along with restlessness, irritability and sleep disturbances. The anxiety does not appear to be related to a specific stressor or exclusively to social situations, and there is no evidence of specific obsessions or compulsions. The symptoms are better accounted for by generalised anxiety disorder than major depressive disorder.

91. NICE guidelines suggest that first line pharmacological treatment for anxiety disorder is an SSRI, of which citalopram is an appropriate example.

92. 20-year-old man presents with a history of delayed developmental milestones, problems with impulse control and an IQ of 65. He was in special education classes during his schooling. What could be the probable cause=**Mild mental retardation.**

93. **Learned helplessness** is a behavioural theory of depression in which depression is viewed as a **reaction** to a **perception of one's inability to improve a situation**.e.gA 40 year-old woman has become apathetic after a series of setbacks in her life. She now spends 12–14 hours in bed each day. There is moderate psychomotor retardation and difficulty in concentration

94. This patient's symptoms are most suggestive of a single

episode of manic phase of a bipolar disorder. **The lifetime chance of another episode is greater than 90%.**

The disorder is usually first evident in the third decade of life.

95. For **most alcoholics, active participation in Alcoholics Anonymous**, in which total abstinence is mandatory, offers the best chance of **preventing relapses.**

96. Comorbidity for other severe mental disorders is greater than 50% in individuals with severe drug dependence like cocaine.

Mood disorders, anxiety disorders and psychotic disorders are commonly present.

97. The symptoms are most suggestive of autistic disorder. **There is a strong association between autistic disorder and intrauterine infections, most commonly rubella.**

98. A much higher incidence of **childhood sexual abuse** is found in patients with **dissociative identity disorder**.

99. Family dynamics are strongly implicated in the development of anorexia nervosa. A teenage girl complains that her mother interferes in every aspect of her life and tries to control her. The girl no longer speaks to her parents or eats meals with them. The mother has increased her efforts to maintain control. What condition could arise from this situation=**AN**.

100. Symptoms of benzodiazepine withdrawal include **anxiety, insomnia, psychosis and seizures**.

101. A history of violence is the strongest predictor of future violence in this man who is most likely to be suffering

هذا شخص يؤخذ تهديده بالعنف ع محمل الجد ! from a personality disorder.

102. Memory impairment suggests the presence of a **cognitive disorder such as delirium or dementia.**

103. Early treatment for schizophrenia is associated with a better outcome.so **The early use of antipsychotic medication will alter the course of the illness.**

104. An elderly woman presents with an episode of dysphoria, sleep difficulty, psychomotor agitation and worry about mistakes she has made in her life. She has delusions of guilt about indirectly causing the deaths of many people. She has a history of two previous episodes with similar symptoms but no history of manic episodes. She is asymptomatic between episodes. What is the most likely diagnosis=**Recurrent major depressive disorder..**

105. Regression is characterised by a return to less mature levels of functioning. This defence mechanism only appears when the levels of anxiety are high and are not alleviated by more mature defences such as intellectualisation and humour.e.gA political figure is engaged in a television debate with an opponent. As his anxiety mounts he loses his calm, interrupts his opponent and attacks his character. He finally throws down his papers and walks away angrily.

106. Projection is a defence mechanism that involves attributing one's uncomfortable internal feelings of anger and guilt to other people. As a result, the person transforms their anger at self into anger towards others.

107. gender identity disorder, which involves the wearing of clothes of the opposite sex and feeling more comfortable with the opposite gender identity, but

it is not done for sexual pleasure.

108. Maintenance therapy after a response to antidepressants should generally be continued at an effective **dose for 6 months**.

109. **Hypochondriasis** is characterised by **misinterpretation of the meaning of symptoms** that does not respond to physician reassurance even after medical assessment.

110. **Oppositional defiant disorder** involves problems in relating to authority figures. Such children get along well with their peers and have no other problems of conduct or development. بس مشكلتهم مع اباؤهم و مدرسيتهم

111. In **major depressive disorder**, the **greatest risk for suicide** occurs **after a partial response to antidepressants**. Usually, energy and motivation return

before a subjective improvement in mood occurs. **so When he begins to respond to antidepressant medication this is the risky phase.**

112. Passive–aggressiveness is described as covert aggression expressed through passivity, masochism and self-defeating behaviour. Such an individual is often angry and often angers others. The usual result is further deterioration of the interaction, with even greater anger and passive–aggressiveness.e.g A 35-year-old man complains of chest pain. When the doctor asks questions he replies, ‘You are the doctor, you tell me’. He is also unhappy with the doctor’s attitude and states that if he is not treated properly he will sue the hospital.

112. A neglect of the basic right of others is most characteristic of **antisocial personality disorder.**

113. Adults with a **specific phobia** *believe their fear is Irrational.*

114. **Lithium-induced hypothyroidism** occurs in approximately 5% of individuals on lithium maintenance therapy.

115. A 7-year-old boy is referred from school because of his poor speaking and reading ability, failure to follow directions and classroom disruptiveness. He appears to be alert and affectionate with others. He also appears to be preoccupied with internal stimuli. IQ testing results are in the normal range. What could be a probable cause of his symptoms=Hearing impairment.

116. Isolation describes the separation of a thought from its attached emotional tone, thereby making it tolerable.

This defence mechanism is often used during highly stressful events. E.g After an automobile accident that kills her child but leaves

her with only minor injuries, a mother appears very calm and says that she has no emotion..

118. The condition is suggestive of a bipolar disorder, which is not responsive to lithium treatment in approximately 25% of cases. It would be unwise to increase the dose of lithium as the level is already at the top of the therapeutic range. The medication of choice here would be valproate, as some patients who do not respond to lithium may respond to valproate.

119. Hallucinations are common in both delirium and schizophrenia. Visual hallucinations are more common in

delirium, while auditory hallucinations are more often described in schizophrenia.

120. **Buspirone** is an azapirone, a chemically and pharmacologically distinct class of drugs. It is an effective treatment for **generalised anxiety disorder**, especially for people who are sensitive to cognitive impairment. Adverse effects include headache, excitement, palpitations, nervousness, dizziness, confusion, sweating, fatigue and nausea. **Prolactin levels may rise due to stimulation of the pituitary gland.**

121. features is MOST helpful in distinguishing dementia from severe depression=**Grasp reflex**. Grasp reflex and other primitive reflexes indicate neuronal loss

in the frontal lobe, which does not occur in depression.

122. obsessive-compulsive disorders (OCD)= The disorder may be a sequel of

group **A b-haemolytic streptococcal pharyngitis**

123. This 18-year-old has **fragile X syndrome** and the most appropriate investigation is **chromosomal** analysis for a fragile X study.

124. Fragile X is the second most common known cause of mental retardation in males. The phenotype in males is large jaw (prognathism), large low set floppy ears and large testes (macro-orchidism). They also have short stature, hyperflexible joints, ADHD and autistic spectrum disorder.

125. tardive dyskinesia=Abnormal involuntary movements, typically choreoathetoid and usually complex, rapid and stereotyped

126. Murray–Parkes (1998) describes abnormal grief as:

1.Unexpected grief where the death occurs in a horrifying way & suddenly.

2.Ambivalent grief where the relationship with the deceased is disharmonious

3.Where the grief is chronic though normal in nature.

This kind of reaction occurs following a dependant relationship

4.Delayed or absent grief.

127. Erectile dysfunction is the persistent or recurrent

inability to attain or maintain an erection. It is often a temporary response to stress or loss of confidence and **it responds well to psychosexual treatment**, especially if morning erections occur. Erectile dysfunction is frequently associated with sexual anxiety, fear of failure and concerns about sexual performance. It may also be caused by physical factors or by medications (including the SSRIs). The presence of morning erections in this patient makes a physical cause much less likely than a psychological cause.

128. Lorazepam im is preferable to diazepam as it is faster acting. Also, diazepam is not well absorbed via the intramuscular route in Acutely disturbed behaviour.

129. The average IQ is 100, but the normal range is from 70 to 130.

IQ Degree of mental retardation

50–69 Mild

35–49 Moderate

20–34 Severe

< 20 Profound

A person with mild mental retardation is likely to have delayed use and understanding of language, and possible difficulties in gaining independence.

130. When suffering from a depressive disorder people with learning disabilities are less likely than those of normal intelligence to complain of mood changes or to express depressive ideas. Diagnosis mainly relies on an appearance of sadness, changes in appetite and sleep and behavioural changes. The principles of treatment of depression in those with a learning disability are essentially unchanged from that of the normal population. منظرهم العام اللي هيحكم عليهم وليس افكارهم ان عندهم اكتئاب.

131. A diagnosis of Tourette's syndrome can be made in the presence of multiple motor and one or more vocal tics.

Onset is almost always in childhood or adolescence.

132. With made actions there is a delusional belief that one's actions are being controlled by an external source e.g A woman with a long history of schizophrenia tells you 'I am a puppet. I see my arms and legs moving but it is not me moving them. I am just a plaything for them to use. I have no control'

133. A woman has an intense fear of snakes. What treatment would you suggest=Graded exposure.

134. SSRIs are the preferred choice when there is a significant risk of overdosing, as they are less toxic in overdose. لذلك اكتبها للعيان اللي انت خايف انه ممكن ينتحر

135. The obvious benefit of **depot medication** is that it is administered at **regular intervals (generally 2–4 weekly)** by medical staff. Therefore, the patient does not have to remember to take it on a daily basis. Also, staff know that the patient has definitely been receiving their medication. The drawbacks of depot medication are the discomfort of the injection and problems with the injection site, eg abscess.e.g A 30-year-old man with schizophrenia has had many admissions to hospital under the Mental Health Act when he stops taking his medication. حلوه ف العيان اللي انت خايف انه ميخدش دواه !!

136. A 3-year-old girl shows an unusual withdrawal reaction at the sight of a cereal bowl =====**Garcia effect**

137. After watching a violent film, a 5-year-old boy has exhibited extremely violent behaviour involving punching, kicking and throwing things. He showed no such aggression before watching the film. No physical or psychiatric problems have been diagnosed. He repeats his behaviour and becomes uncontrollable =====Social learning

138. A 25-year-old woman shows signs of extreme distress, sweating and palpitations as soon as she enters her former workplace. After consulting her past records, you find that she was seriously abused there. What would be the best description of a person's reaction to a particular situation, in this case her former workplace =====Conditioned response

139. A mildly depressed patient refuses to eat if there is no provision for a stroll in the garden afterwards. Which learning principle would you apply to explain this patient's behavior ===== **Premack principle**

140. Failure to acquire and consolidate new information after trauma, eg severe disease, injury, surgery or malnutrition, is called 'anterograde amnesia'.

141. Unexpected reading and writing problems at an early age amongst otherwise intelligent children is called '**developmental dyslexia**'.

142. He plays around in class, is restless, acts impulsively and

disrupts others =====ADHD

143. **Agoraphobia** is an irrational fear of open spaces, **crowds** and unfamiliar settings.

144. **Sleepwalking** is characterised by complex, automatic behaviours, such as aimlessly wandering about
===**Somnambulism**

145. A newborn baby boy has facial deformities and a small-misproportioned head. He is irritable, hypotonic and has severe tremors =====**Fetal alcohol syndrome** .

146. anorexia nervosa =====**Increased, excessive physical**

Activity

147. **somatisation disorder**===== Establish regular and infrequent follow-up visits, keeping investigations to a minimum and aim for referral to a psychiatrist

العيانه معندهاش حاجه ومش هترتاح الا بالتحاليل

148. which of the following features most strongly suggests a diagnosis of alcohol dependence syndrome =====**Continued drinking despite persistent abdominal pain in pt with acute pancreatitis**

149. Wernicke–Korsakoff syndrome ====**Neuronal loss in the mammillary bodies**

150. Which of the following psychiatric disorders is most likely to occur secondary to alcohol abuse ===== **Pathological jealousy**

151. Which of the following is more characteristic of major depression in a 70-year-old woman than in a 50-year-old ===== **Presents with physical symptoms**

152. Which of the following is a feature of Ganser's syndrome
=== **Pseudohallucination**

153. Which of the following symptoms in a 63-year-old man with progressive cognitive impairment would favour a diagnosis of vascular dementia over Alzheimer's disease ===== **Frequent seizures**

154. Which of the following clinical features would favour an acute organic reaction (delirium) over a chronic brain syndrome (dementia) ===== **Fluctuating level of consciousness**

155. In a 68-year-old woman presenting with forgetfulness and lack of motivation, which of the following would lead you to strongly consider a

diagnosis of depressive pseudodementia ===== **Distress during cognitive testing**

156. This patient describes a probable case of acute glaucoma arising from **the anticholinergic side-effects of the tricyclic drug imipramin**

157. Regarding obsessive compulsive disorder, which of the following stems fits best with the condition –
===== **Psychosurgery is a useful treatment option**

158. Which of the following clinical features in the

psychiatric history is most strongly associated with schizophrenia?

Lack of insight

159. Which of the following would suggest a poor prognosis in a woman of 24 years suffering her first episode of schizophrenia ===**Borderline learning disability**

160. An 85-year-old female with advanced Alzheimer's disease (Mini Mental state examination 16/30) has inhaled a foreign body. She doesn't recognise her husband or

understand what is proposed.

Who should consent for the bronchoscopy =====**Doctor takes responsibility**

161. For a mentally impaired adult, the clinician takes responsibility to do his best for the patient.

162. A 22-year-old patient with schizophrenia was started on risperidone. She had been previously treated with haloperidol.

Which symptom is **unlikely** to improve =====**Hyperkinesis** .

163. A 34-year-old patient known with motor neurone disease was admitted with type 2 respiratory failure. He has chosen

to die from respiratory insufficiency and does not want any intervention, having stated this in writing on two previous admissions and completed a living will. His breathing deteriorates and he becomes confused.

What is the most appropriate next step =====**Relieve any respiratory distress with opiates or other respiratory suppressants**

164. A lady loses her husband in a traumatic RTA. Three months afterwards she says she regularly hears his voice when alone at home. She is not eating very well and has lost 5 kilos of weight in this time. She says she often feels his presence around her and sometimes sees him when she goes outside; she is reassured by these feelings.

What diagnosis should be suspected =====**Psychotic depression**

165. You see a girl who tells you she has felt empty and low in

mood for a long time. She tells you that she has no friends, prefers to stay at home but hates being alone, uses cannabis, has a history of alcohol use and history of self-harm with threatening suicide. On examination of her casualty records it transpires she has self harmed on around 6 occasions over the past year. She denies early morning wakening or lack of appetite.

What is the most likely diagnosis ===== **Borderline personality disorder**

167. Borderline personality disorder is characterised by **instability of mood, self-image and interpersonal relationships**. Frequently patients complain about and worry about being left alone, but are unstable with respect to interpersonal relationships. They have a problem with self harming and feelings of emptiness.

168. **Pick's disease** is a syndrome of dementia which typically

affects the **frontal or anterior temporal lobes**. For this reason **symptoms of disinhibition and emotional lability** are early features of the condition. **MRI scanning often shows increased T2 signal in frontal lobe white matter,**

169. Which of the following features would be most suggestive of a diagnosis of acute alcohol withdrawal =====**Seeing a large vicious dog next to her bed**

170. Which of the following features is most likely to be associated with Lewy Body dementia =====**Fluctuating mental state**

**171. Risperidone is associated with significant
Hyperprolactinaemia**

**172. Which term best describes her tendency to change
rapidly between topics of conversation ===Flight of ideas**

done by dr .faisal25-12-2013.....6.49PM

Egyptain shams universityhouse officier

Rhematology

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لامراض الباطنة

<https://www.facebook.com/groups/mrcpuk/>

I RECOMMEND TO READ IT BEFORE DOING pastest!!!!

BELIVEME ME IT WILL MAKE A DIFFERENCEread it after studying the text and before answering the mcqeos !!!!!

Notes taken from over than 350 pastest mcq !!!!

Read it as fast as you can then answer the pastest !

1.characteristic of a rheumatoid pleural effusion ====It has a low glucose level

2. Septic arthritis results from infection of the joints with pyogenic organisms, of which Staphylococcus aureus is the commonest.

3. Bronchiolitis obliterans presents with a non-productive cough and dyspnoea. Physical examination might reveal a diffuse wheeze. In long case of RA .

4. reactive arthritis =====Rheumatoid factor is likely to be Negative

5. carcinoma of the lung. The

association of weakness and wasting of the proximal muscles of the shoulder and pelvic girdles makes dermatomyositis a strong possibility. This is characterised by a photosensitive facial skin and inflammation of the eyelids.

6. osteomalacia. X-rays will typically show defective mineralisation especially in the pelvis, long bones and ribs. Areas of low density (Looser's zone) are characteristic of the condition. low CA and low P and increase of ALK P .===== Linear areas of low density .

7. This young man presents with the peri-arthritis-dermatitis syndrome, a feature of gonococcal arthritis. Most patients exhibit migratory polyarthralgias followed by fever, tenosynovitis and dermatitis.

8. most suggestive of **ankylosing spondylitis** =====**Bilateral erosion of sacroiliac joints on X-ray**

9. **A swollen and warm joint** is more likely to be affected by an **inflammatory arthritis** than by osteoarthritis.

10. Which of the following findings is most useful for making a diagnosis of gout in this patient =====**Good response to colchicines**

11. **Antibodies to centromere** are a subset of antinuclear antibodies, which most commonly occur in the **CREST** variant of scleroderma

12. oral ulcers are well described in reactive
Arthritis

13. Antiphospholipid syndrome can associated with Addison .

14. This woman has **osteomalacia**, which is characterised by **translucent bands (Looser's zones** or pseudofractures) at points of stress. Osteomalacia is characterised by

back pain, muscle weakness and bone tenderness.

15. PAN is

associated with hepatitis B antigenaemia and is a vasculitis secondary to the deposition of immune complexes. Renal impairment, hypertension, myocardial infarction, arrhythmias, heart failure and polyneuropathy are all known to occur.

16. This man has ankylosing spondylitis. The tramline appearance is due to syndesmophyte growth between the margins of the vertebrae !!! خط الترام

17. Polymyalgia rheumatic is associated with wt loss .

18. class II disease (mesangial lupus nephritis) ====excellent prognosis and require no ttt .

19. Wegener's granulomatosis ====Lung biopsy has a high diagnostic yield .

20. temporal arteritis ====Immediate temporal artery biopsy and concurrent initiation of treatment

21. potentially fatal

complication of microscopic PAN, but not of classic
PAN =====**Pulmonary haemorrhage** .

22.in gout =====**Presence of long needle-shaped
Crystals**

23. Kawasaki's disease is an acute systemic disorder of
childhood that predominantly occurs in Japan

ربنا يجزي الدكتور اسامه محمود خير الجزاء هو اللي علمنا الباطنه

24. The bony lumps are Heberden's nodes and are seen in osteoarthritis.

25. Joint replacement would be an effective treatment for this woman. Analgesia with NSAIDs will provide only temporary relief, while arthrodesis would restrict her mobility even further

26. Aspiration of the joint reveals negatively birefringent Crystals ===== gout =====MSUM arthropathy .

27. NSAIDs are often effective in relieving the symptoms of ankylosing spondylitis.

28. IN MM there is hypercalcemia lead to thirst

29. Symptoms of spinal stenosis occur due to a limitation of space in the vertebral canal. This is a disorder of old age and commonly presents with pseudoclaudication, ie discomfort or pain in the legs on walking that is relieved by rest and bending forwards. CT scan or MRI confirms diagnosis.

30. needle-shaped crystals ===== gout

31. This woman has developed acute septic arthritis following her intra-articular injection. Joint aspiration and culture would reveal the causative organisms

32. Psoriatic arthropathy may mimic rheumatoid arthritis clinically and may be distinguished only by the presence of scaly lesions on the skin or nail changes

33. Behçet's disease associated with erythema nodosum .

34.. The presence of **multifocal concurrent peripheral nerve** lesions and the **absence of symptoms such as pain** and paraesthesiae in this case suggest **mononeuritis multiplex**

35. Hydroxychloroquine may decrease visual acuity and, albeit rarely, cause retinopathy.

36. This patient has developed a lupus-like syndrome consequent **to d-penicillamine therapy**. **Myelosuppression** and nephritic syndrome are other major side-effects of this drug.

37. Obesity is one of the commonest causes for the early appearance of osteoarthritis, which is confirmed by the X-ray.

38. Absence of the right femoral head on X-ray is consistent with avascular necrosis . This is a known complication of sickle-cell disease.

39. This patient has psoriatic arthropathy. Arthritis mutilans affects 5% of such patients, ==== telescoping deformity

40. enteropathic arthritis. It is an acute

inflammatory oligoarthritis that occurs in **20% of patients with Crohn's disease and 12% of those with ulcerative colitis**. The arthritis coincides with exacerbations of the underlying bowel disease, sometimes in association with aphthous mouth ulcers, iritis and erythema nodosum.

41. Churg-Strauss syndrome is a variant of polyarteritis nodosa (PAN). It occurs in patients, usually male, who have a triad of rhinitis and asthma, eosinophilia and systemic vasculitis.

42. Anti-Jo-1 ===== dermatomyositis .

43. Limited cutaneous systemic sclerosis ==This was formerly

called the **CREST** syndrome===**Anticentromere antibodies are positive.**

44. Hereditary angioedema (HAE) is an autosomal dominant disease due to mutations at C1 inhibitor gene.

45. primary Raynaud's Phenomena ===Fingers are symmetrically Involved during an attack

46. Peripheral asymmetric oligoarthropathy is thought to be a more common initial presentation of psoriatic arthritis.

47. Which one of the following features is MOST suggestive of **gonococcal arthritis** ===== **Tenosynovitis** .

48. Raloxifene is a selective oestrogen receptor modulator
===== Increase the risk of clotting

49. **Fibromyalgia syndrome** ===== **multiple tender spots over the spine and limbs**

50. Cortical Lewy bodies (alpha-synuclein inclusions) in Lewy body Dementia is pathognomonic for it .

51. In cases of possible **polymyositis or dermatomyositis **confirmation** of the diagnosis by **muscle biopsy** is essential**

52. Sjögren's syndrome is characterised by inflammation and the destruction of exocrine glands. The salivary and lachrymal glands are principally involved, giving rise to dry eyes and mouth.

53. the most definitive test for Sjögren's syndrome ===== **Labial gland biopsy**

54. Combination therapy with **intravenous immunoglobulin (IVIG) and aspirin** during the acute phase of **Kawasaki disease** produces **a more marked anti-inflammatory effect** and reduction in coronary artery abnormalities than does aspirin alone.

55. Anti-dsDNA antibody levels are particularly useful. This test is virtually specific for systemic lupus erythematosus,

56. This woman most probably has carpal tunnel syndrome, which is due to compression of the median nerve=====Positive Tinel's sign.

57. Tapping the median nerve in the carpal tunnel reproduces tingling and pain – known as **Tinel's sign**.

58. carpal tunnel syndrome =====**Weakness of the muscles of the thenar Eminence**

59. **tarsal tunnel syndrome** caused by

entrapment of the posterior tibial nerve. Burning pain is not a feature of **intermittent claudication where the pain is caused mainly by walking.**

60. Excruciating pain, redness and swelling in the affected joint – often the metatarsophalangeal joint of the big toe – characterises acute gouty arthritis.

61. cervical spondylolisthesis, where there is usually forward displacement of one vertebra upon another. The most common cause in this age group is **osteoarthritis of the posterior intervertebral joints,**

62. A prolapsed cervical disc most commonly affects the C5–C6 and C6–C7 vertebrae.

63. This patient has spinal stenosis. Reduction in spinal canal diameter usually due to osteoarthritis may cause spinal claudication while walking.

64. You suspect early osteoarthritis.

Which clinical finding would be most important in confirming this clinical impression =====Limitation of range of movement

65. A clinical diagnosis of rheumatoid arthritis is suspected.

Which of the following findings on blood testing is most often associated with this diagnosis?

Normochromic normocytic anaemia

66. **Popliteal cysts** ('Baker's cysts') may occur in **rheumatoid arthritis** following **persistent effusion into the knee joint**.

67. There is **marked vascular**

proliferation with increased permeability of blood vessels on the synovial membrane that is *typical of* rheumatoid arthritis.

48. Swelling and dorsal subluxation of the ulnar styloid leads to wrist pain and may cause rupture of the finger extensor tendons. This causes finger drop of the little and ring fingers predominantly, which needs urgent surgical repair.

49. Morning stiffness is a classic feature of rheumatoid arthritis, which may be prolonged for up to an hour or more.

50. Which radiological feature would be **most suggestive of rheumatoid arthritis** ===== **Periarticular osteoporosis** .

51. In Felty's syndrome===== **normocytic normochromic anemia** .

52. Treatment with **gold** causes **pancytopenia and pulmonary fibrosis**.

53. **Giant-cell arteritis** ===== **Treatment is monitored by measuring ESR levels**

54. **polyarteritis nodosa** and arrange to perform some blood

tests.

Which abnormality might you most expect to find?

Elevated creatinine

**55. (SLE) ===It is associated with HLA-B8 and -DR3
in Caucasians**

56. Drug-induced lupus occurs with agents such as isoniazid, hydralazine (only if > 50 mg/24 h in slow acetylators), procainamide, **chlorpromazine and other anticonvulsants.**

57. This patient has **psoriasis** with nail and joint involvement ===== **ttt by Methotrexate** .

58. Keratoderma blenorrhagica (brown aseptic abscesses on the soles and palms) may occur.

59. A provisional diagnosis of **ankylosing spondylitis** is made.

What would be the most characteristic finding on an X-ray of the lower spine ===== **Subchondral bony sclerosis on the iliac sides of the sacro iliac joints**

60. ankylosing spondylitis ttt is by **Spinal extension exercises** .

61. This patient has Whipple's disease. Peripheral arthritis occurs in 15% of patients=====**The presence of bacilli within macrophages on electron microscopy**

62. DIPJ involvement occurs in 5-10% of patients with psoriatic arthritis, but in men is said to be a "classical" feature of the disease.

63. An X-ray of the femur shows

patchy sclerosis, thickening of the trabeculae and dedifferentiation ===== paget disease ===== ttt by biphosphonate eg Tiludronate

64. **Brucellosis** is commonly seen in people handling farm Animals ===== **Doxycycline/rifampicin/gentamicin combination**

65. This patient has **ankylosing spondylitis**. The key to the effective management of this condition is **early diagnosis**, so that a **regimen of preventive exercises may be started before syndesmophytes** have formed.

66. This woman has **septic arthritis**. Involvement of **a single joint occurs in 90% of cases**. **The knee is most commonly affected**. Gout is more likely to affect the first metatarsophalangeal joint and is also not associated with fever, chills and rigors.

67. **Osteochondritis dissecans** is local necrosis of the articular cartilage and its underlying bone resulting in **a loose body leaving the surrounding bone**. The cause is unknown. The medial femoral condyle is most commonly affected, with the condition being seen in adolescents and young adults. Either three or four loose bodies may be present in the knee

68. This patient has features **of cauda equina syndrome**, presumably due to acute lumbar disc prolapse. This is an acute neurosurgical emergency. Alternating or bilateral sciatica with accompanying sensory symptoms and weakness in the lower limbs and feet along with urinary retention suggest the diagnosis. Unless urgent neurosurgical assessment and treatment is initiated, chronic neurological damage may result and ttt by **Laminectomy and fusion** .

69. Scheuermann's disease. It usually affects those between 13 and 16 years of age. The normal ossification of ring epiphyses of several thoracic vertebrae is affected =====**Deep notches on the anterior corners of the vertebrae**

70. This woman has nodal generalised osteoarthritis (NGOA). It predominantly affects women. The other joints affected are the knees, first metatarsophalangeal joint and hip joints. There is a female preponderance and a strong familial tendency. NGOA may be associated with immune-complex deposition and may have an autoimmune cause. Its onset is often sudden and severe. Immunofluorescence studies would show the presence of immune complexes in the joint capsule. So do Synovial membrane biopsy

71. This patient most probably has avascular necrosis of the femoral head. The femoral head is the commonest site of avascular necrosis because of its peculiar blood supply that renders it vulnerable to ischaemia. Ischaemia is common in sickle-cell disease.

72. A 7-year-old boy complains of having intermittent hip pain for several months. Haematological investigations are normal. X-rays show flattening of the femoral head. What is the most probable diagnosis ==Perthe's disease .

72. Perthe's disease is osteochondritis of the femoral head, affecting children between 3 and 11 years of age. It presents with pain in the hip or knee and causes a limp. On examination all movements at the hip are limited. Early X-rays show widening of the joint space. Later there is decrease in the size of the nuclear femoral head with patchy density. Later still there may be collapse and deformity of the femoral head with new bone formation. The white cell count, erythrocyte sedimentation rate (ESR) and C-reactive protein (CRP) levels are unaffected.

73. A 4-year-old girl with a 1-day history of increasing hip pain is unable to stand. Her WCC is $20 \times 10^9/l$, ESR 90 mm/1st h and CRP 275 mg/l. A radiograph of the hip shows a widened joint space. What is the most likely diagnosis === **Septic arthritis .**

74. Slipped upper femoral epiphysis affects children aged 10–16 years. Some 20% of cases are bilateral. About half the patients are obese and hypogonadal. On examination flexion, adduction and medial rotation are limited

75. Tuberculous arthritis usually affects children **aged 2–5 years**. The hip is one of the most frequently affected joints. **Early X-ray signs are rarefaction of bone.**

76. This girl has osteomyelitis of the femur. X-ray changes are not apparent for a few days but then show haziness and loss of density of the affected bone followed by subperiosteal reaction and, later, sequestrum and involucrum. A hot, painful, swollen joint usually accompanies septic arthritis.

77. This patient most probably has acute gouty arthritis

that may be precipitated by her high alcohol intake.

Joint aspiration and microscopy may show the

characteristic long needle-shaped crystals

78. Hyperkalaemic, hyperchloraemic metabolic acidosis

occurs in diabetic patients treated with indometacin.

This is a form of distal renal tubular acidosis (Type

IV) that is seen with non-steroidal anti-inflammatory

drug (NSAID) administration.

79. Subcutaneous low molecular weight heparin is

preferable to ordinary heparin in major orthopaedic

surgery as it causes less bleeding, a lower incidence of

deep vein thrombosis and pulmonary embolism and has

the convenience of a once-daily subcutaneous

administration.

80. Barium studies in

Crohn's disease may show strictures, **rose-thorn ulcers and cobblestone mucosal surfaces. Colonoscopy may **show discrete ulcers.****

81. rose-thorn ulcers ===crohns disease = discrete ulcer

82. A 75-year-old woman with rheumatoid arthritis is being treated with methotrexate. She presents with malaise, fever and swelling and pain of her right wrist.

What is the most likely diagnosis that should be

Considered ===== **Joint sepsis due to methotrexate .**

83. This patient has reactive arthritis. Diagnosis of this condition is usually made from the history and examination.

84. This boy has haemophilic arthritis. The pain and swelling is due to bleeding within the joint. The erythrocyte sedimentation rate (ESR) and C-reactive protein (CRP) levels would be raised in pyogenic arthritis.

85. This patient is suffering from meralgia paraesthetica. It is caused by entrapment of the lateral cutaneous nerve of the thigh beneath the inguinal ligament. Most patients are obese; weight reduction helps to relieve symptoms.

86. This man **has Lyme disease**. The causative organism is **Borrelia burgdorferi**, which is tick-borne. It usually begins with **erythema chronicum migrans**. This starts as a small papule, developing into a slowly enlarging red ring with a raised border.

87. Which one of the following features would most reliably distinguish gout from a septic arthritis as the cause==== The presence of negatively birefringent crystals in synovial fluid

88. Pott's disease is the most likely diagnosis due to the

marked acute phase response with a lymphocytosis in an ethnic group at increased risk of tuberculosis (TB).

89.if patient with SLE with flare up or infection ====**It should be treated with both steroids and antibiotics.**

90.**SLE** = In the absence of serious internal organ involvement eg renal, neurological, eye or lung, there is no indication for cyclophosphamide or prednisolone. Simple arthralgia and fatigue **appear to respond well to hydroxychloroquine.**

91. A Z-score of 0

means that the individual has normal BMD for their age.

The WHO definition of osteoporosis is a T-score of -2.5 or less standard deviations below the norm.

Osteopenia is

defined as a T-score of between -1 and -2.5 SD.

92. Three types of nephropathy are classically associated with **ankylosing spondylitis, AA amyloidosis, NSAID-induced and **IgA nephropathy**.**

93. A 49-year-old man has pain on resisted abduction of the arm from $0-90^\circ$.

Which tendon is affected to give this particular restriction of movement=====**Supraspinatus tendonitis** .

94. Diffuse infiltrative lymphocytic syndrome (DILS) can present like Sjögren's syndrome but extra glandular manifestations are common and it is rare for the patient to have positive autoantibodies. The weakness is due to a peripheral motor neuropathy. Aseptic meningitis and cranial nerve palsies can also occur. Lymphocytic interstitial pneumonitis is the most serious complication of DILS.

95. The above scenario is classical for erosive inflammatory OA. **The gull's wing or inverted T pattern of erosions are typical for erosive inflammatory OA.**

96. case of polymyositis and the pt have myoglobinuria think about ATN .

97. This patient most probably has suffered avascular necrosis of the femoral head. Best INV to be done MRI .

98. **Brodie's abscess is a form of chronic osteomyelitis that arises insidiously.** A localised abscess is present within the bone, often near the site of the metaphysis. Deep 'boring' pain is often the predominant symptom. The X-ray is usually characteristic.

99. **Persistent oligoarthritis** is the most common form of

juvenile idiopathic arthritis (JIA), occurring in around

50–60% of cases of JIA. **Four or fewer joints are affected, especially the knees, ankles and wrists.**

Girls, with a peak age incidence of 3 years, are mostly affected. Uveitis is common in those with positive antinuclear antibodies

100. This patient has Felty's syndrome. **HLA-DRW4 is found in 95% of patients with Felty's compared to 70% with rheumatoid arthritis alone.**

101. The most typical form of rheumatoid arthritis is the chronic persistent type.

102. Genetic factors are the single most significant influence on peak bone mass.

103. A 27-year-old woman has psoriatic arthritis.

Which of the following hand conditions is most commonly associated with this disease ===Nail dystrophy.

104. Nail dystrophy (pitting, subungual hyperkeratosis and/or onycholysis) is most commonly seen in patients with psoriatic arthritis

105. A 30-year-old man has erythrodermic psoriasis and arthritis mutilans involving several digits in both hands.

What would be the most logical treatment for him,
leaving out consideration of current NICE guidance

===**Antitumour necrosis factor-alpha (TNF-a) agents (eg etanercept) have been found to be highly effective in the treatment of severe skin and joint disease due to psoriasis.**

106. Retention of lumbar lordosis during spinal flexion is an early sign of ankylosing spondylitis.

107. Mouth ulcers are the commonest GI involvement in systemic lupus erythematosus (SLE) and may be a presenting feature.

108. Double-stranded DNA (dsDNA) binding is specific for systemic lupus erythematosus (SLE) and is present in 30% of cases. However, its presence most often indicates severe systemic involvement

109. Recurrent pleurisy and pleural effusions are the most common manifestations and are often bilateral in SLE .

110. The heart is involved in 25% of patients with SLE. Pericarditis with small pericardial effusions detected by echocardiography is common.

111.in SLE =====There is a higher concordance rate in monozygotic twins (up to 25%) compared to dizygotic twins (up to 3%).

112. Joint involvement in SLE is the most common clinical feature (> 90%).

113. Wegener's granulomatosis characteristically affects the upper respiratory tract and lungs in 90% of cases.

114. The presence of ANCA–PR3 and -MPO is characteristic of microscopic polyangiitis

115. The clinical triad of rhinitis, **asthma and eosinophilia** along with antibodies to ANCA–PR3 and -MPO is highly suggestive of **Churg–Strauss syndrome**

116. **Paget's disease** ====The most common sites in order of frequency are the **pelvis**, lumbar spine, femur, thoracic spine, sacrum, skull and tibia.

117. test would be most useful in
Diagnosing osteomalacia =====**Serum alkaline phosphatase** .

118. Rheumatic fever =====The arthritis is classically a fleeting migratory

polyarthritis affecting the **large joints**. Isolated arthritis is the presenting symptom in 15–40% of cases of rheumatic fever.

119. Bradycardia, weight gain, malaise, arthralgia, mildly elevated CK and depression are features of hypothyroidism =====do TSH

120. Rheumatoid arthritis is the most common cause of secondary amyloidosis.

121. What is the earliest manifestation of rheumatoid arthritis in the feet====Swelling of the metatarsophalangeal joints

122. Painful swelling of the metatarsophalangeal joints is an early manifestation of rheumatoid arthritis.

123. What is the earliest radiological evidence of rheumatoid arthritis of the knee ====Effusion into the joint space

124. A torn rotator cuff may occur spontaneously in elderly patients with rheumatoid arthritis.

125. This patient most probably has carpal tunnel syndrome, which is a common condition of median nerve compression at the wrist. However, **the majority of the cases are idiopathic.**

126. Which of the following deformities on **clinical examination is most typical of RH =====Ulnar deviation of the metacarpophalangeal joints**

127. Long-term treatment with corticosteroids is a risk factor for avascular necrosis of the femoral head do MRI .

128. Osgood–Schlatter’s disease causes pain and swelling over the tibial tubercle. A traction apophysitis of the patellar tendon, **it is seen in sports players undergoing rigorous training.**

129. Supraspinatus tendonitis is one of the commonest causes of painful restriction of shoulder movement across all ages; 30% of cases follow a definite history of trauma, and fewer than 5% of cases are bilateral.

130. typical of

methotrexate therapy ===== **Birth control measures must be in use before methotrexate is started**

131. **calcific tendonitis**, an extremely

common rheumatic syndrome characterized by **deposits of hydroxyapatite crystals** within injured rotator cuff muscles near the humeral attachment region.

132. osteoarthritis ===== **A low level of glucose** in the

synovial fluid would **not** be found in this patient but is often **found in septic arthritis of bacterial origin.**

133. **Ischaemic optic atrophy** is most likely to be

associated with which of the following diseases ==== **Wegener's
granulomatosis**

**134. Defects in collagen Type II genes in
familial osteoarthritis (OA)**

**135. common features of
rheumatoid arthritis ==== **Proximal interphalangeal joint
involvement in the hands****

136. Wegener's granulomatosis ==== **Corticosteroids iv and**

cyclophosphamide iv 4 mg/kg

137. Which of the following features would suggest a diagnosis of **polymyalgia rheumatic** ===== **Pain and muscle stiffness worst in the mornings**

138. Which of the following features are associated with cholesterol embolisation ===== DM .

139. Methotrexate ===== macrocytic anaemia ===== reduce folic acid

140. Which of the following signs or investigations may be

most useful in **initial diagnosis of prepatellar bursitis** ===== **Crepitation of the knee** .

141. Pain due to carpal tunnel

syndrome is especially common at night and after repetitive actions.

142. Which of the following features would be most suggestive of a diagnosis of tennis elbow === **Pain on attempting the chair raise test**

143. to assess the risk of **azathioprine toxicity** ==== **Thiopurine S-methyltransferase activity (TPMT)**

144. Psoriatic arthritis ==== On examination he has **bilateral sausage shaped fingers and pain over the distal interphalangeal joints**

145. Which of the following investigations would be most appropriate in determining if this patient was suffering from adult onset **Still's disease** ==== **Raised ferritin**

146. You suspect that she may have **avascular necrosis of the hip**. Which of the following is the most sensitive examination to support the diagnosis **====Bone scan** .

147. Which of the following is closely involved in the pathology of rheumatoid arthritis **=====TNF-alpha** .

148. ankylosing spondylitis 2 years ago.

Which of the following findings would you expect to see on X-ray of the spine **=== Subchondral bony sclerosis on the iliac side of the sacroiliac joints**

149. Unfortunately renal disease is responsible for around 50% of deaths in patients with scleroderma.

150. Given the proximity of his symptoms to the pacemaker insertion, the most likely diagnosis is haematogenous spread of staph aureus, introduced at the time of the procedure. ====Staphylococcal discitis .

151. When reviewing the profile of **TNF alpha, which of the following is true?**

Raised levels lead to increased insulin resistance

152. What level of anti-nuclear antibody titre would most

prompt consideration of SLE as the underlying
diagnosis =====1:1600

153. Which of the following interactions or previous
illnesses would prompt caution or avoidance of
etanercept =====Use in conjunction with sulphasalazine .

154. Studies of etanercept in combination with sulphasalazine
demonstrated a statistically significant reduction in white
blood cell count.

155. The suspicion is that this patient has **systemic sclerosis** with symptoms of Raynaud's, oesophageal dysmotility and calcinosis on examination of the fingers. Her **shortness of breath is therefore suggestive of the possibility of pulmonary fibrosis.** The most accurate way to evaluate this is ultimately with **high resolution CT,** and this would be the investigation of choice.

156. Which of the following factors is associated with the **poorest prognosis** =====**Anti-CCP positivity** .

done by dr.faisal gamal hameda

Egypt.....17-12-2013.....1.12PM

Hematology

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<https://www.facebook.com/groups/mrcpuk/>

I RECOMMEND TO READ IT BEFORE DOING pastest!!!!

BELIVEME ME IT WILL MAKE A DIFFERENCEread it after studying the text and before answering the mcqeos !!!!!

1. Immunophenotyping will

demonstrate the absence of expression of the CD 59

antigen (GPI protein) due to the abnormal red cell

clone. A significant proportion of patients with PNH goes

on to develop aplastic anaemia or acute leukaemia.

2. **Acute PML** (or AML-M3) is associated with the **translocation t(15:17) and** can present with **DIC** caused by the breakdown of promyelocytes.

3. Differentiating acute lymphoblastic leukaemias is most simply achieved with **immunophenotyping**.

4. **Marrow failure with a large number of circulating myeloid series' cells is either due to chronic myelogenous leukaemia (CML) or myelofibrosis** – the clinical presentation and routine investigations are often the same in both conditions. The demonstration of marrow fibrosis requires a **trephine biopsy** as the aspirate is often 'dry'.

5. This man has symptoms **of hyperviscosity** (headaches

and visual disturbance) with a high ESR and lymph node enlargement. **Lymphoplasmacytoid lymphoma** (or Waldenstrom's macroglobulinaemia) is due to infiltration of the marrow and reticular system with lymphoplasmacytoid cells that **secrete IgM**, which accumulates in the serum

6. A 78-year-old woman attends the haematology clinic for further investigation. She receives vitamin B12 injections every six months, having been diagnosed with pernicious anaemia four years ago. She is currently asymptomatic. Her FBC shows Hb 10.3 g/dl, MCV 101 fl, platelets $136 \times 10^3/\text{mm}^3$, WCC $5.9 \times 10^3/\text{mm}^3$. Other investigations show TSH 1.5 mU/l, AST 39 U/l, GGT 67 U/l, INR 1.1. what is the likely diagnosis?
Myelodysplastic syndrome (MDS) .

7. **Paraneoplastic neutrophilia** is being increasingly recognised and may **be a reaction to tumour neoantigen** or cytokines rather than direct marrow infiltration.

8. Although there are less invasive tests to distinguish the cause of microcytic anaemia, the presence of iron in erythroblasts effectively rules out iron deficiency. Her racial origin combined with iron in the erythroblasts makes **thalassaemia** the likely diagnosis e.g Haemoglobinopathy

9. Which malignancy is currently the number one cause

of death in women in the United Kingdom **lung carcinoma** .

10. Small-cell carcinoma of the lung is diagnosed in a 66-year-old patient.

What is the best therapeutic action to improve her

Survival = **Chemotherapy and radiotherapy in combination** .

11. Serological tests such as carcinoembryonic antigen

(CEA) levels are of some value in postoperative

management and in the **detection of tumour recurrence**,

but are secondary to accurate histological staging.

12. Most patients with heparin-induced thrombocytopenia

(HIT) develop venous or arterial thrombosis, **most**

commonly a deep vein thrombosis (DVT).

13. Where does glioblastoma multiforme localise most frequently in the brain **Cerebrum**

14. What is **mycosis fungoides = Cutaneous T-cell lymphoma**

15. A variety of haematological changes are due to drug therapy for rheumatoid arthritis and related disorders. The administration **of gold** occasionally causes marked **thrombocytopenia or pancytopenia.**

So if a patient on ttt of rheumatoid and after change of his medication hematological abnormalities appeared you have to consider that new medication as a probable cause .

16. A patient diagnosed with carcinoma of the colon underwent a hemicolectomy. Staging is T3, N1, M0.

Based on large clinical trials which treatment increases the survival? = **Chemotherapy with 5-fluorouracil and folinic acid** .

17. The acute management of hypercalcaemia involves general measures to **enhance hydration** and **diuresis**, and specific measures using drugs to lower serum calcium.

18. What does **the R2classification** stand for in cancer
Therapy = **The tumour was macroscopically**

visible but could not be removed completely .

19. RX Presence of residual tumour cannot be assessed

R0 No residual tumour

R1 Microscopic residual tumour

R2 Macroscopic residual tumour

20. Which kind of tumour typically secretes serotonin?

Carcinoid of the ileum

21. A 16-year-old patient noticed a swelling on her neck 4 weeks ago. On examination there are several supraclavicular increased lymph nodes as well as a

parasternal swelling. The haematological exam shows a neutrophil granulocytosis, neutrophil count $12 \times 10^9/l$.

When would you perform a lymph node biopsy = immediately .

22. Waldenström's macroglobulinaemia is a malignant plasma-cell proliferative disorder that produces **a high concentration of IgM paraprotein**. Anaemia is found in most symptomatic patients. **Hyperviscosity syndrome** is the most common complication associated with the IgM paraprotein and affects the eyes, CNS, hemostasis, and the heart. Clinical manifestations include papilledema, ie, **sausage-shaped retinal veins (distended and tortuous)**, and hemorrhages may be evident on funduscopy findings, as a result of vascular engorgement.

23. Where is the most likely location of a primary extranodal malignant lymphoma in non-immunocompromised patients = **Upper gastrointestinal tract** .

24. The most probable cause for painless unilateral lymphadenopathy is a **lymphoma** the investigation most likely to be diagnostic is **Excision biopsy** .

25. This patient presents with **neutropenic sepsis** secondary to chemotherapy. She also has **herpes zoster infection**.

These patients must be immediately treated with **broad-spectrum antibiotics** until their neutrophil count

Recovers + **Parenteral aciclovir** .

26. Hodgkin's lymphoma stage IA = **Combination chemotherapy**

followed by radiotherapy

27. What is the most frequent complication causing death in patients with chronic lymphocytic leukaemia = **infection .**

28. What are the tumour cells called that are found in patients with Hodgkin's disease = **Reed–Sternberg cells .**

29. If the malignant obstruction is below the level of the cystic duct, the gallbladder is distended and may be palpable (Courvoisier's law) like **Carcinoma of the ampulla of Vater .**

30. Which one of the following findings is individually MOST accurate in differentiating chronic myeloid leukaemia (CML) from a leukaemoid reaction?

Philadelphia chromosome

31. Which one of the following features is MOST suggestive of megaloblastic anaemia?

Hypersegmented neutrophil in peripheral blood film

32. Which one of the following statements regarding iron deficiency anaemia is MOST accurate = **Koilonychia is characteristic and rarely seen in other forms of anaemia**

33. Which one of the following features is MOST helpful in distinguishing β thalassaemia trait from iron deficiency anaemia (IDA) = **Haemoglobin A2 levels**

34. Elevated haemoglobin A2 is encountered in **thalassaemia trait**, it is typically **low in IDA**

35. **Therapeutic plasmapheresis** is considered MOST effective in which one of the following types of haemolytic anaemia = **Haemolytic anaemia associated with Mycoplasma pneumoniae**

36. Mycoplasma pneumoniae, and can induce cold agglutinins mediated autoimmune haemolytic anaemia. Plasmapheresis is very efficient in removing big circulating molecules such as the pentameric IgM rather than the relatively small dimeric IgG molecules. IgG type antibodies are responsible for SLE associated haemolytic anaemia.

37. Which one of the following features is characteristic of immune thrombocytopenic purpura (ITP) = Autoimmune haemolytic anaemia is a recognised association .EVAN S

38. Hyposplenism is seen least often in which one of the following conditions = **Thalassaemia major** .

39. Which one of the following statements BEST describes haemophilia A = **Factor 8 inhibitors occur in 10% of patients receiving multiple factor transfusion**

40. Which one of the following bone sites is the MOST common site involved in **bone metastases** from carcinomata = **Spine** .

41. Which one of the following statements is true about folic acid deficiency = **Responsible for neural tube defect in the fetus.**

42. Which one of the following malignant tumours has

the highest predilection for dissemination to bone = **prostate** .

43. **Congenital aplastic anaemias** include Fanconi's anaemia and dyskeratosis congenita. ***Dyskeratosis congenita*** is characterised by skin pigmentation, nail dystrophy, leucoplakia and a predisposition to bone marrow failure and malignancy. The age of presentation with pancytopenia is variable, with a median age of 8 years.

44. This woman's profound sudden-onset thrombocytopenia is most likely due to her **quinine sulphate therapy**, probably given for leg cramps.

45. This woman, at booking, had a **macrocytosis**. She is now anaemic with profound macrocytosis. This is most likely to be due to **folic acid deficiency**: humans are just in folic acid balance and pregnancy causes an increased demand.

46. Plasmodium falciparum is the most common form of malaria in Africa and South-East Asia = Disseminated intravascular coagulation is often present in severe cases.

47. This patient has had a life-threatening bleed and must have his prolonged INR reversed immediately = Transfusion of 4 units fresh-frozen plasma and 5 mg iv vitamin K . in case that you did not find available Prothrombin complex concentrate

48. Haemorrhagic disease of the newborn, or vitamin K deficiency bleeding in infancy, occurs because the newborn has a moderate vitamin K deficiency. The vitamin K level falls further after birth but will return to normal by 3 months of age, hence most neonates are given vitamin K supplementation.

The disorder is classified as early onset (< 24 hours), classic onset (between 3 and 5 days) and late onset (after 8 days). Bleeding is severe with melaena, bleeding from the umbilical stump, cephalohaematomas, ecchymoses without petechiae and intracranial bleeding. The prothrombin time (PT) is prolonged with a normal fibrinogen and platelet count.

49. **Veno-occlusive disease of the liver results when there is occlusion of the central veins and small venules of the liver. Risk factors for the development of veno-occlusive**

disease are pretransplant conditioning with busulfan and cyclophosphamide, a poor pretransplant performance score, prior liver disease and older age. **The triad of jaundice, ascites and weight gain usually in the first 3 weeks' post-transplant suggests the diagnosis.**

50. Alloimmune thrombocytopenia due to **fetomaternal incompatibility** for platelet antigens is a serious neonatal disorder but with no consequences for the mother.

51. The classical **early features of transfusion-associated graft-versus-host** disease are **fever, maculopapular rash, diarrhoea and hepatitis, with or without jaundice.**

Involvement of the bone marrow failure follows, leading to profound pancytopenia, if not already present as in this case. The disease results in death from infection in over 90% of cases.

52. **Peripheral neuropathy** is a well-known complication of many chemotherapeutic agents, in particular vinca alkaloids (vincristine and vinblastine), platinum analogues (carboplatin and cisplatin) and taxanes (**docetaxel**, paclitaxel).

53. The sudden onset of bilateral leg weakness and loss of sensation is highly suggestive of **spinal cord compression**, which is an oncological emergency.

54. **5-Fluorouracil** can sometimes **precipitate angina attacks in individuals with ischaemic heart disease** and it can also cause **tachyarrhythmias**.

55. he is participating in a **phase-II trial for a new chemotherapeutic agent**. What is the purpose of such a trial = **To establish the antitumour activity of a drug .**

65. **Phase I studies** are used to establish **the human toxicity of a new drug** by delivering carefully selected increased doses to fit **patients with incurable disease**.
No measurable responses are expected

.....

Phase II studies are used to **establish the antitumour activity of a drug** against a particular tumour in fit patients with **incurable disease**. At the same time further information on drug toxicity may be gained

.....

Phase III studies are used to compare a new drug (that has shown anti tumour effect in a Phase II study) with the best conventional therapy, usually by a prospective randomised controlled trial. This usually requires large numbers of consenting patients

.....

Phase IV studies establish the drug efficiency in the adjuvant setting and are used to determine the long term side effects.

66. In cancer therapy, what is the rationale behind using combinations of chemotherapeutic agents rather than single agents=**Combination therapy decreases the chances of drug resistance developing**

67. **Radiation enteritis** is a radiation-induced inflammation of the bowel and is a function of the volume of bowel

irradiated and the radiation dose.

77. Secondary acute myeloid leukaemia (AML) is a late complication of the chemotherapy and radiotherapy given in Hodgkin's disease.

78. A relative of a patient of yours who has metastatic cancer asks your opinion about a new experimental cancer treatment that works by cutting off the tumour blood supply. He is referring to which group of drugs?
Angiogenesis inhibitors

79. The family history is suggestive of a hereditary

predisposition to bowel cancer, most probably hereditary, non-polyposis colorectal cancer (HNPCC).

Approximately 70% of families with HNPCC have mutations in one of six known genes. The lifetime risk of developing colorectal cancer in affected individuals with HNPCC is 70–80% for men and 40–65% for women, with a mean age of onset of colorectal cancer at 44 years compared to 62 years in the general population. Affected females in HNPCC kindreds have a 40–60% lifetime risk of developing endometrial cancer, so a history of endometrial cancers would further increase the likelihood that this is an HNPCC family.

80. Hepatocellular carcinoma (HCC) is the most common primary hepatic tumour and one of the most common cancers worldwide. HCC is a primary malignancy of

hepatocyte origin, and risk factors include alcohol abuse, viral hepatitis and metabolic liver disease.

81. Levels of 5-hydroxyindoleacetic acid (5-HIAA), a breakdown product of serotonin metabolism, are raised in carcinoid syndrome.

82. What is the most important criterion when deciding whether such a programme should be introduced = A clinically effective and cost effective method of early treatment

83. In which part of the cell cycle are cells most resistant to chemotherapeutic drugs = G0phase .

84. This patient presents with chronic lymphocytic leukaemia (**CLL**). A bone marrow examination is **not** always necessary, and **examination of the peripheral blood smear with clonal immunophenotyping for CD5, CD19, CD25 is usually sufficient for making the diagnosis.**

85. **Anaemia** is a major complication of end-stage renal failure, and is primarily due to a reduction in **erythropoietin production.**

86. Most cancer cells **activate telomerase.**

What is the most likely biological result of this

Activation = **Immortalisation** . فالخلايا مش هتموت .

87. A 45-year-old patient with recently diagnosed **acute myeloblastic leukaemia** presents with right-sided weakness. A CT scan of his brain shows **an intracerebral haemorrhage**. What is the most likely cause?
Hyperleucocytosis .

88. Patients with **hyperleucocytic leukaemia** (WBC count of more than $75 \times 10^9/l$) can suffer early death with central nervous system (CNS) haemorrhage and pulmonary capillary leakage, sometimes due to a delay in treatment. These patients are at great risk of vessel rupture.

89. There are three indications for **splenectomy** in chronic

lymphocytic leukaemia. 1. First, for **therapy-resistant disease with significant residual splenomegaly**. Second, in patients with 2. evidence of **hypersplenism**, that is cytopenia and active bone marrow haemopoiesis. Third, for 3. **autoimmune complications, haemolytic anaemia or thrombocytopenia which do not respond to therapy with corticosteroids and immunosuppressive drugs**.

90. What is the **most likely long-term risk of Radiotherapy === Secondary cancer** .

91. The major **delayed problem with radiotherapy is the development of secondary cancers**. This risk begins to appear beyond 10 years post-therapy, and by 20 years after therapy leads to a significant number of

deaths.

92. Chemotherapy is the preferred initial treatment for overt symptomatic multiple myeloma in persons older than 70 years, or in younger patients in whom transplantation is not feasible.

93. Recolonisation of the aplastic bone marrow with normal stem cells from a suitable donor has long been considered the most rational treatment for aplastic anaemia.

94. Mantle-cell lymphoma is a malignancy derived from naïve pregerminal cells localised in the primary follicle

or the mantle region of the secondary follicle. It was previously known as 'centrocytic', 'intermediate' or 'mantle-zone' lymphoma, and is part of the spectrum of diffuse small B-cell lymphomas. Cells express CD5 and are negative for CD10. **A specific translocation at t(11;14) (q13;q32) is seen in the majority of cases. This leads to deregulation of the cyclin D1 (BCL-1) gene.**

95. Which haemopoietic growth factor is most likely to lead to improvement in her **neutrophil count**? = **G-CSF** .

96. haemochromatosis. Regular weekly venesection was started. Which of these measures of iron is best used for **monitoring his therapy**? **Serum ferritin not T.saturation** .

97. Paroxysmal nocturnal haemoglobinuria is an acquired clonal defect of stem cells in which the cells are deficient in several glycosylphosphatidylinositol (GPI) ttt is **through Transfusion with plasma-reduced washed red cells .**

98. A leucoerythroblastic blood film is characterised by the presence of immature white blood cells, red cells, and large platelets visible on a peripheral blood film. It implies a breakdown in the blood–marrow barrier with egress of these cellular components before full maturation. It can be seen in disseminated malignant disease involving the marrow, myelofibrosis, osteopetrosis, septicaemia, and severe megaloblastic anaemia. Neutrophilia, anaemia, and thrombocytopenia are all late manifestations of metastatic malignant disease. Thrombotic thrombocytopenic purpura (TTP) with microangiopathy and thrombocytopenia may be a manifestation of malignant disease.

99. In terms of screening blood products for infectious agents, immunosuppressed patients should receive blood products specifically screened for which organism?

Cytomegalovirus

100. Which of the following is an appropriate use of blood

Products = *Transfusion of cryoprecipitate in a*

patient with disseminated intravascular coagulation (DIC) and

fibrinogen of 0.5g/l .

101. haemophilia B = **X-linked recessive .**

102. Patients with thrombotic thrombocytopenic purpura have a high risk of developing **thrombosis**. **Budd–Chiari syndrome is a well-recognised complication.**

103. Which of the following would be more suggestive of essential thrombocythaemia compared with a reactive thrombocytosis in a patient with a platelet count of 650×10^9 per litre = **Cutaneous bruising**

104. **Serum thyroglobulin** measurement is the main method of **early detection of recurrent papillary and follicular thyroid cancers**

105. The relative risk for developing small-cell lung cancer and squamous-cell lung cancer is increased **in smokers**

106. Which of the following genetic conditions would be most likely to be a relevant risk factor for the development of breast cancer ===== Ataxia–telangiectasia

107. A 41-year-old man presents with a neck lump, weight loss and night sweats. On examination, you note he has hepatomegaly.

What is the likeliest diagnosis ===== High-grade B-cell non-Hodgkin's Lymphoma

108. Investigations confirm the presence of a bladder carcinoma.

In his occupational history, exposure to which of the following substances would be a significant risk

factor for his current diagnosis?

Aromatic amines

109. Bleomycin can cause pulmonary toxicity, which typically occurs during or shortly after completing treatment.

110. **Indwelling lines** are often the cause of **Staph. Epidermidis infection**, esp in immunocompromised.

111. poor prognosis in patients with breast cancer ==== **Young age**

112. **Nausea** is common in patients taking **imatinib** .

113. anastrozole === It blocks the peripheral tissue conversion of androgens to oestrogens

114. all-transretinoic acid (ATRA).

Which of the following descriptions best fits with the features of ATRA therapy =====ATRA promotes the differentiation of APML cells into mature granulocytes and apoptosis of these cells

115. Painful chest crisis is the commonest cause of mortality in adults with sickle-cell disease.

Presentation is with acute chest pain, often pleuritic in nature, which can affect the sternum and ribs and may radiate to the back. Crises may often be

associated with recent chest infection like **Pulmonary infarction**

116. The commonest tumours causing bone metastasis include **bronchial carcinoma**, breast carcinoma and prostatic carcinoma.

117. **Renal-cell carcinoma** may rarely present with a **left-sided varicocele**, due to tumour invasion of the left renal vein

118. use of oxaliplatin therapy ===== **Concomitant folinic acid and 5-FU are usually prescribed**

119. Oxaliplatin is licensed for the treatment of metastatic colorectal carcinoma in combination with fluorouracil and folinic acid.

120. For which of the following tumours can radiotherapy alone be best considered a potentially curative intervention ===== Laryngeal carcinoma

121. Which of the following descriptions fits best with the characteristics of aldesleukin ===== It may be associated with vitiligo

122. Aldesleukin is recombinant interleukin-2. It is

indicated for the treatment of metastatic renal-cell carcinoma.

123. This patient has evidence of **aplastic anaemia** (anaemia due to marrow failure). The treatment of choice for a **patient too old to undergo** bone marrow transplantation is **antithymocyte globulin**

124. cyclophosphamide.

Which of the following is the most likely side-effect

====**Thrombocytopenia**

125. most women with a

previous DVT in pregnancy should qualify for prophylaxis in future

pregnancies on clinical risk alone

126. A woman is started on hormone replacement therapy for menopausal symptoms.

Which of the following is likely to be correct for her in 5 years' time =====Increased risk of pulmonary thromboembolism

127. Most oesophageal cancers are not resectable at presentation

128. microangiopathic haemolytic anaemia (MHA).

Which of the following features/ underlying conditions is most likely to be associated with MHA =====HELLP syndrome (haemolysis, elevated liver enzymes, low platelet count)

129. of the following is a cause of microangiopathic haemolytic anaemia ===Vasculitis

130. March haemolysis is a mechanical cause of haemolysis seen in soldiers who run over large distances and is a cause of false-positive urine dipstick testing (haemoglobinuria).

131. Thalassaemia occurs because of an imbalance in production of alpha and

beta globin chains

132. On physical exam she is

markedly dyspneic and extremely cyanotic. Arterial blood gases fail to reveal any hypoxia, but a ventilation-perfusion scan is obtained anyway, which is read as low probability

===**methaemoglobinaemia** ===**Administer methylene blue**

133. primary polycythaemia ===**H2-receptor antagonists may be useful in relieving itching**

134. The most appropriate therapy now that a diagnosis of **essential thrombocytosis** has been established is ===== **Aspirin and hydroxyurea**

135. anaplastic thyroid carcinoma can lead to metastasis **in lung** .

136. bcr/ablgene ===**It codes for production of a tyrosine Kinase**

137. nephrotic syndrome are predisposed to pulmonary embolus due to renal **antithrombin III losses and protein S deficiency**. Not protein C .

138. Which of the following most accurately represents the median survival prognosis for unselected patients

with multiple myeloma ==== **3 years** .

139. cisplatin?

It leads to cross-linking of DNA to form adducts

140. typical side effect of cisplatin based chemotherapy?

Ototoxicity

141. Which of the following anti-emetics acts via the neurokinin-

1 receptor ===== **Aprepitant**

142. Lymphoma is the second most frequent malignancy

apart from skin malignancy seen in patients post

transplant. The mean time of presentation is 34 months post transplant.

144. There is some evidence that **post transplant lymphoma** is increased in patients with a history of **previous EBV infection** and may be related to viral reactivation.

145. chronic lymphocytic leukaemia (CLL) so ttt by **Chlorambucil** .

146. myelofibrosis ====tear drop poikilocytosis ==== **fatigue is the most common symptoms**

147. Phenytoin may interfere with B12 and folate metabolism, leading to pancytopenia.

148. In AML,
the presence of del 5/5q is associated with an
unfavorable prognosis

149. to assess the
activity of her underlying MM ====Serum beta 2 microglobulin

150. (Uniform spherocytes seen on blood film)

===spherocytosis

151. cardiomyopathy ===== with trastuzumab

152. A 39-year-old man is receiving a cross-matched blood transfusion after being admitted after a motorbike accident and sustaining a pelvic fracture. The nurses call you as he has sustained a spike in temperature to 37.8

oC some 20

mins into the transfusion. His vital signs are normal with a stable BP of 115/70 mmHg; his pulse has slowed since starting the transfusion and fluid replacement from 105/min

to 92/min.

Which of the following is the correct course of

Action ===**continue the transfusion at the same rate and give paracetamol**

153. **trastuzumab** can lead to **cardiac failure** esp if you give it with **History of anthracycline chemotherapy**

154. **Isolated thrombocytopaenia** is present in around **8% of pregnancies**, and is usually **mild**, with platelet counts of **above 70**. No intervention is needed as platelet counts normally **recover spontaneously during the first few weeks after delivery**.

Basic science

First of all basic science from pastest is more than enough.....

The notes I made from one of the best notes I have ever made!

Anatomy

1. Which one of the following intrinsic hand muscles is supplied by the median nerve === **Abductor pollicis brevis**

2. The median nerve supplies the following structures in the hand:

The abductor pollicis brevis, flexor pollicis brevis, opponens pollicis and The lateral two lumbricales
The skin of the lateral three and half fingers

3. A C5/C6 lesion, Erb's palsy, produces sensory loss over the lateral aspect of the upper arm (deltoid paralysis), with loss of shoulder abduction, and paralysis of the biceps, brachialis and coracobrachialis. In addition to loss of elbow flexion,

4. The brachial artery bifurcates into the ulnar and radial arteries at the level of

the head of the radius

5. total ulnar nerve paralysis === Inability to grip a sheet of Paper between his fingers when the hand is placed flat on the table . fanning of fingers .

6. block of the median nerve at the elbow. Which neurological sign is likely to be present on examination ===== Inability to abduct the thumb .

7. A 78-year-old man had poliomyelitis as a child, which left him with total paralysis of the left deltoid muscle. Which feature is most likely to be present on clinical Examination ===== Detectable weakness in drawing the arm forward and internally rotating

the shoulder when this is compared with the right side

8. An 84-year-old man had his left sciatic nerve completely transected just inferior to the buttock crease by a piece of shrapnel during the D-day landings in 1944.

Which sign is likely to be present on current neurological examination == **Unimpaired hip abduction .**

9. **The popliteal artery lies against the **popliteal surface** of the **femur** deep to the popliteal vein, which itself lies deep to the tibial nerve**

10. A posterior gastric ulcer if led to bleeding mostly from **Splenic artery** .

11. The right and left renal arteries lie in the **transpyloric plane** at the level of **the first lumbar vertebra**

12. The VI cranial nerve (abducens) innervates the lateral rectus muscles, which controls abduction of the eyeball. So if lesion in it =====**The patient is unable to deviate his right eye laterally** .

13. A dental surgeon carries out a block of the **inferior alveolar nerve** by infiltrating local anaesthetic at the mandibular foramen.

Which clinical feature may result from this procedure?

Numbness of the lower lip on the injected side .

14. total division of the left facial (VII) nerve.

Postoperatively, which is the most likely sequel ===**Tendency for food and fluids to collect in the buccal sulcus after meals**

15. , his hypoglossal (XII) nerve on that side is damaged.

What is the most likely outcome ==== **All the intrinsic muscles of the left side of the tongue are paralysed**

16. inferior laryngeal nerve inadvertently divided during a partial thyroidectomy.

Which clinical features are likely to result from this ==== **The larynx is anaesthetic inferior to the vocal cord on the affected side .**

17. The spinal cord in the normal adult terminates anywhere from opposite the body of T12 to the body of L3; however, the commonest level is at the disc space between L1 and L2

18. The **internal capsule** receives its arterial supply from the **lenticulostriate** vessels derived from the roots of the middle and anterior cerebral arteries

19. The primary source of infection for patient with cavernous sinus thrombosis is =====**upper lip** .

20. The **middle cerebral artery** is the largest single artery arising from the **circle of Willis**

21. The anterior interventricular artery

supplies the majority of the left ventricle

22. The oblique fissure of the lung corresponds to the medial border of the scapula when the arm is fully abducted

23. One of the most common lesions at this site is carpal tunnel syndrome, in which the median nerve is compressed as it passes deep to the flexor retinaculum.

24. You have performed a liver biopsy, and shortly after the procedure the patient develops pain on the tip of his right shoulder. Which nerve is most likely to be responsible for his pain ==== Right phrenic nerve .

25. You suspect occlusion of the posterior descending coronary artery===== **The posterior portion interventricular septum and the posterior left ventricular wall**

26. Her MRI scan shows evidence of an acoustic neuroma. Where is compression of the trigeminal nerve most likely to be occurring?

Cerebellopontine angle

27. This is the **lateral medullary syndrome** (Wallenberg's syndrome), which is the commonest brainstem infarction syndrome 'Economy class syndrome' as described is more commonly related to deep vein thrombosis due **to occlusion of Posterior inferior cerebellar artery .**

28. He has sustained an injury to the brachial plexus, affecting the lowest roots (C8, T1), which provides the motor supply to the intrinsic muscles of the hand and the long flexors and extensors of the fingers. This deformity is known as **Klumpke's paralysis**.

29. In a man presenting with acute back pain following an episode of lifting a heavy weight, reduced force of which of the following movements would most suggest an **L4/5 (L5 root)** rather than an L3/4 disc lesion (L4 root) ===== **Extension of great toe** .

30. Typically, in a pyramidal tract lesion, the weakness affects the extensors in the arms and the flexors in the lower limb.

31.HH with macula sparing ===== **occipital cortex lesion .**

32. Which of the following stems best describes a property of **hyaline cartilage === **It is avascular** .**

33. Hyaline cartilage forms the articular surface and is avascular, relying on diffusion from synovial fluid for nutrients.

**34. The portal vein supplies 75% of liver
blood flow**

**35. He has a body mass index (BMI) of 38, where is the
correct position for central venous cannulation ===== 2 cm under
the mid-point of the clavicle and 1 cm laterally**

**36. Global muscle wasting of the hand indicates
damage to both the median and ulnar nerves with
damage to the T1 nerve root.**

37. Where would you visualise the azygous lobe on an antero-posterior (A-P) chest X-ray === **Right upper zone** .

38. Which of the following structures is located in the anterior mediastinum on computed tomography (CT)?

Thymus

39. Which organ lies anterior in direct contact with the left kidney without separation by visceral peritoneum === **Tail of the pancreas** .

40. What would be consistent with femoral nerve damage in a patient with pelvic trauma === **Loss of sensation over the anterior-lateral aspect of the thigh**

41. This woman has **foot drop**, a feature of **common peroneal nerve injury**.

42. **Medial epicondylitis** occurs with increased frequency in golfers and patients who have excessive use of the **elbow joint** such as **basketball players**.tennis elbow .

43. **The axillary nerve** supplies motor innervation to the **deltoid muscle**, and carries sensory fibres from the **regimental badge area**.

44. The clinical picture seen here is typical of **cauda equina syndrome** with lower back pain and saddle anaesthesia with bowel and bladder disturbance, caused by compression of nerve roots below the end of the spinal cord. **MRI or CT scanning of the lower spine is the investigation of choice**, with initial pain relief the cornerstone of management. Where a cause for compression is identified, such as intervertebral disc herniation, neurosurgical intervention is of value.

Biochemistry

1. Which of the following statements is most consistent with the Crigler–Najjar syndrome == **Autosomally inherited, severe unconjugated hyperbilirubinaemia**

2. Which of the following is an acute porphyria == **Variegate porphyria**

3. She has congenital adrenal hyperplasia (CAH) Late-onset disease can be due to partial enzyme deficiency.= **Partial 21-hydroxylase deficiency**

4. Which of the following physical signs would most suggest a diagnosis of familial **عصب الكولسترول** hypercholesterolaemia == **Tendon xanthomas** .

5. The combination of **hypertriglyceridaemia** and elevated **γ -glutamyltransferase** activity is typical of **alcohol-induced hepatic steatosis**.

Not hepatitis

6. **remnant**

hyperlipidaemia (familial dysbetalipoproteinaemia, broad beta disease) first line ttt is by **fibrates**

7. Which of the following statements best characterises low-density lipoproteins (LDL) == **They contain apolipoprotein B-**

100

8. Patients

with ileostomies can lose large amounts of magnesium through their stomas; **hypomagnesaemia impairs PTH secretion and can cause hypocalcaemia that is resistant to an increased provision of calcium.**

9. Osteoporosis is most effectively diagnosed by which one of the following techniques?

Dual-energy X-ray absorptiometry (DEXA)

10. Which of the following features most reliably suggests that a patient presenting with diabetes has

type 1 === **History of recent weight loss**

11. Weight loss in diabetes is highly suggestive of absolute insulin deficiency such as occurs in type 1 diabetes,

12. Antibodies to which of the following are most frequently present in the serum of patients with type-1 diabetes at diagnosis== **Islet cell antibodies** .

13. Which of the following is typically the **earliest lesion to develop in diabetic retinopathy===Dot haemorrhages**

14. Which of the following patterns of serum lipids is most characteristic of **diabetes mellitus** == Normal LDL-cholesterol, **low HDL-cholesterol, elevated triglycerides**

15. In a patient with chronic hyponatraemia (sodium concentration 112 mmol/l), which of the following findings would most suggest a diagnosis of the syndrome of inappropriate [secretion of] antidiuretic hormone (SIADH) == **Urinary osmolality 350 mOsmol/kg . and initial ttt is by water restriction .**

16. Which of the following findings would most suggest that fluid loss from the body was primarily hypotonic (water depletion) rather than isotonic (sodium

depletion) == **Production of a highly concentrated urine**
as it will lead to release of vasopressin and production of
concentrated urine .

17. hereditary haemochromatosis as the cause?

Liver biopsy

18. In **metabolic alkalosis** associated with prolonged
nasogastric aspiration in postoperative ileus, what is
the most important cause of the acid–base
disturbance == **Loss of gastric acid** .

19. A 75-year-old man with prostatism has a serum prostate-specific antigen (PSA) concentration of 15 ng/l.

Which of the following statements is true with regard to this result?

It could be explained by prostatitis

20. What is the medical treatment of choice for the majority of patients with **carcinoid syndrome**== **Octreotide**

21. In patients with iron poisoning who presented more than one hour the **standard treatment is an intravenous infusion of desferrioxamine**, which chelates iron and facilitates its urinary excretion.

22. Which one of the following features in an adult patient presenting with porphyrinuria would most **suggest lead poisoning** rather than acute intermittent porphyria as a cause === **anemia** .

23. The blood gas data indicate an **acute respiratory alkalosis**. This is particularly associated with poisoning with a **salicylate and theophylline**, both of which are respiratory stimulants.

24. **however, the most significant association is with cardiovascular disease – both coronary heart disease and cerebrovascular disease in obese persons** .so the mortality is high in obese persons from CVS dis .

25. Which of the following is the most important causative factor in the development of obesity in the majority of patients = **Energy intake in excess of expenditure** .

26. In deciding whether to provide nutritional support to a malnourished patient either enterally or parenterally, which of the following is the most important consideration== **Whether the small intestine is functioning normally** .

27. **IgA** is a dimeric immunoglobulin with a half-life of 5 days; it **is predominantly found in secretions** such as tears, **saliva**, colostrum, sweat and mucus. Due to its extensive secretion it is often seen as the body's major antibody. It protects the host by preventing organisms

attaching and penetrating epithelial cells. IgAs do not have complement receptors.

28. Over 95% of patients with **primary biliary cirrhosis** have **antibodies to mitochondria**,

29. **Angioedema** in the absence of urticaria is caused by **actual or functional C1 esterase inhibitor deficiency**.

And accumulation of bradykinin in tissue .

30. A patient receives too many infusions after an operation resulting in a 20% increase in his blood volume.

What is the physiological process that is most likely to correct this abnormality == **Atrial natriuretic peptide (ANP) release as it lead to naturesis and diuresis**

31. Protein C acts to inactivate the active forms of the procoagulant cofactors, factors Va and VIIIa.

32. A variety of amyloid plaques are observed in Alzheimer's disease.

33. A common cause of the amnesic syndrome is the Wernicke–Korsakoff syndrome resulting from thiamine (vitamin B1) deficiency in association with chronic Alcoholism

34. A patient with liver cirrhosis develops metabolic alkalosis.

What is the most likely pathological mechanism == **Reduced urea synthesis** .

35. A 19-year-old patient presents with gradual worsening myopia and **decreased night vision**. On examination there **is atrophy of the retina**.

What enzyme deficiency is this patient most likely to

Have===**Ornithine aminotransferase** .

36. The successful production of which compound is **best linked to vascular smooth muscle cell relaxation == Nitric oxide .**

37. Which of the following pathophysiological changes are most strongly associated with increased insulin resistance **=== Increased levels of Plasminogen activator inhibitor-1 PAI-1 .**

38. Which of the following best describes one of the main actions of **glucagon == Increased glycogenolysis and gluconeogenesis**

39. Which of the following best describes the metabolism of VLDL (predominant triglyceride) particles= = **They are synthesised continuously in the liver**

40. You suspect **G6PD deficiency**.

Given this, what is the likely underlying cause of

Haemolysis === **Reduced levels of NADPH** .

41. You suspect that a 48-year-old man is suffering from Cushing's syndrome.

At **what time of day is a random cortisol test most likely to be abnormal** === **2400 h** .

42. The expression of which glucose transporter (GLUT) is upregulated by insulin binding at this receptor site === **GLUT-4** .

43. Which of the following best fits the metabolism of bile acids=== **Their production is catalysed by cholesterol 7 α -hydroxylase** .

44. Which of the following statements best fits with porphyrias and haem production == **Protoporphyrin is formed as the penultimate step before haem formation**

45. This man most probably has **bronchial carcinoma** with bony metastases resulting in **hypercalcaemia**.

46. Which of the following investigations will most reliably confirm Wilson disease === **Urinary copper excretion after penicillamine challenge** .

47. TSH-secreting pituitary tumours are uncommon, but are a recognised cause of hyperthyroidism.

48. **Coeliac disease** is suspected.

Which of the following investigations will most

reliably diagnose this condition == **Microscopic examination of a small bowel biopsy specimen .**

49. The presence of hilar lymphadenopathy in a patient with hypercalcaemia should raise a suspicion that the latter is due to **sarcoid** (in which the **granulomas secrete calcitriol, 1,25-dihydroxycholecalciferol**).

50. Which one of the following porphyrias can be both acquired and inherited === **Porphyria cutanea tarda (cutaneous hepatic porphyria)**

51. A 48-year-old man is referred by his GP with suspected **acromegaly**.

Which of the following would be the most useful **initial investigation** to establish the diagnosis == **Measurement of serum insulin-like growth factor I (IGF-1, somatomedin C)** .

52. A patient with **hypoalbuminaemia** is suspected of having a **protein-losing enteropathy**.

Measurement of which of the following in a sample of faeces would be most appropriate to prove this == **a1- Antitrypsin** .

53. In **glibert S** === **Absence of bilirubin in the urine** .unconjugated hyperbilirbinemia

54. Jaundice with an elevation **of both AST and alkaline**

phosphatase suggests **mixed hepatocellular** damage and cholestatic liver disease, typical of **acute alcoholic hepatitis**

55. Which ECG abnormality is most likely to have occurred earliest as her hyperkalaemia developed = **Tall, tented T wave** .

56. A 19-year-old woman has been diagnosed as having **acute intermittent porphyria**. How is she most likely to have presented?

Acute abdomen

57. The presence of **hypocalcaemia in renal failure** suggests that this is, at least in part, of longstanding, and is due to **decreased renal synthesis of calcitriol (1,25-dihydroxycholecalciferol)**.also lack of vit D activation .

58. A 75-year-old woman is being followed by her GP for suspected **developing primary hypothyroidism**. Which of the following biochemical changes would you most expect to **occur first=== Increase in serum TSH** .

59. Which of the following fluids would be the most appropriate to replace the fluid being lost in a patient with a paralytic ileus draining 2 litres of fluid a day through a nasogastric tube == **0.9% sodium chloride ('normal saline')** .

60. A 70-year-old man with symptoms of prostatism has a serum prostate specific antigen (PSA) concentration of 20 µg/l (normal value, < 4 µg/l).

Which one of the following statements about the clinical importance of this result is the most likely ==**It is more likely to reflect prostatic**

cancer than benign prostatic hypertrophy .

61. Which one of the following statements best applies to renal tubular acidosis type 4 == It is a recognised complication of diabetes mellitus

62. A patient in the intensive care unit following liver transplant surgery has a metabolic alkalosis.

Which of the following biochemical abnormalities is most specifically indicative of this === High plasma bicarbonate concentration

63. Arterial pH is increased in both metabolic and respiratory alkalosis: plasma bicarbonate is always increased in metabolic alkalosis and can be low in chronic respiratory alkalosis.

64. Which of following is true regarding gamma-glutamyl transferase (GGT)?

It is increased in patients with fatty liver disease

65. Which of the following biochemical abnormalities, if present, would be most likely to exacerbate the digoxin? ===== **Hypokalaemia**

k is consider the antidote of digoxin toxicity

66. This patient has a hypokalaemic, hyperchloraemic metabolic acidosis. The most likely cause is gastrointestinal loss of bicarbonate and potassium due to **chronic severe laxative abuse**.

67. Which of the following is the most likely biochemical imbalance to be seen in a patient who was about to drown in a river
===Acidosis on ABG measurement .

68. In which of the following processes is **pyruvate**

kinase the rate limiting step?===== Glycolysis .

69. A Marfanoid habitus, against the background of learning difficulties, thromboembolic disease, hypotonia and a livedo type skin appearance is typical of homocystinuria .

70. Which of the following statements regarding the eukaryotic cell cycle is correct === DNA is made in the S phase .
p 53 control G1 phase and inhibit cell to enter S phase until DNA has been checked and repaired .

Genetics

1. Acute intermittent porphyria (**AIP**) presents with gastrointestinal and neurological symptoms. Central abdominal pain and bilious vomiting are characteristic. AIP occurs due to the absence of porphobilinogen (PBG) **deA**minase.
2. The **oral contraceptive pill** can precipitate an acute attack in **AIP**.
3. **Genomic imprinting** is seen in which of the following

Conditions === **Prader–Willi syndrome** .

4. Which of the following statements is true in the epidemiology of disease associated with α -1-antitrypsin deficiency === **The disorder is an indication for liver transplantation in a child**

5. Which of the following should be considered in the management of haemophilia A === **Desmopressin may be useful**

•

6. Which of the following is a feature of restriction fragment length polymorphisms (RFLPs) === **they may be used to diagnose Huntington's disease**

7. In Duchenne's muscular dystrophy, which of the following statements applies === **Exon deletion or duplication in the dystrophin gene occurs in 60% of patients .**

8. Duchenne's muscular dystrophy take care of **Cardiomyopathy**

.

9. Which other feature would be most helpful in making a diagnosis of **Marfan's syndrome** == **Early diastolic murmur** .

10. **Osteogenesis imperfecta** is a **dominantly inherited** disorder of collagen, and this woman most probably has the type 1 (least severe) form. Type 2 is lethal in utero or shortly after birth and type 3 is the severe form where affected individuals have hundreds of fractures and usually become wheelchair-bound. Clinical features include blue sclerae (not always present, as in this case), early-onset deafness and dentinogenesis imperfecta.

11. **Intracranial aneurysms** occur in approximately **10% of individuals with autosomal-dominant polycystic kidney disease (ADPKD)**, and approximately 50% of patients

with ADPKD have end-stage renal disease by age 60 years.

12. What is the main feature of DNA sequence polymorphisms that differentiates them from mutations == **They are common in the population .**

13. When is a gene mutation causing a particular genetic disorder said to be **highly penetrant** === **Individuals with the mutation invariably develop the phenotype**

14. Myotonic dystrophy is an **autosomal-dominant** neuromuscular disorder == Clinical features include

myopathic facies, ptosis, myotonia, cataracts, testicular atrophy and diabetes mellitus. Cardiac conduction defects of varying degrees of severity are common. The disease exhibits anticipation

15. Why can trinucleotide repeat disorders become worse in successive generations == **The repeat can expand from one generation to the next**

16. Which of these are well-recognised late complications of trisomy 21 (**Down's syndrome**) == **Alzheimer's dementia**

17. Angelman's and Prader–Willi syndromes both involve defects in the same chromosome region.

What is the best molecular explanation for differences in the phenotypes in these two conditions == It is due to the differential expression of genes depending on parental origin

18. Familial hypercholesterolaemia affects around 1 in 500 of the population and is associated with a significantly increased risk of cardiovascular disease.

19. Gaucher's disease is a recessively inherited deficiency of the enzyme glucocerebrosidase It is most prevalent in the Ashkenazi Jewish population and can be treated with enzyme replacement therapy.

20. A young man with severe learning difficulties and congenital heart disease is referred to you for a cardiac assessment. He is accompanied by his carer who says he has a chromosome abnormality.

What type of abnormality is most likely to cause such a severe phenotype === **Unbalanced autosomal translocation**

21. In which of the following hereditary conditions will affected males have a significant risk of fathering affected sons === **Myotonic dystrophy** .AD inheritance .

22. Which one of the following is true of Wilson's Disease === **An alternative diagnosis should be considered if chorea occurs with no evidence of Kayser-Fleischer rings**

23. Which one of the following inherited diseases is due to mutation in mitochondrial DNA == Leber's optic neuropathy .

24. Cystic fibrosis is an **autosomal-recessive disorder**,

25. The diagnosis is **hereditary spherocytosis**, the most frequent cause of which is a mutation in the **spectrin gene**.

26. having **Huntington's disease**.

Which of the following genetic abnormalities is

responsible for this condition ==**Triplet-repeat mutation** .CAG

27. Given the strong family history and low insulin requirement, the presumptive diagnosis is 'maturity onset diabetes of the young' (MODY) === A mutation in which of the following is likely to be responsible for her condition ===

Hepatic nuclear factor-1 α

28. This patient's clinical features are typical of **Kearns–Sayre syndrome**, which is a mitochondrial disorder characterised by rearrangements of mitochondrial DNA, including deletions and duplications. The clinical features that suggest a mitochondrial disorder include any combination of sensorineural hearing loss, retinitis pigmentosa, muscle weakness, ataxia, recurrent stroke, cardiomyopathy, insulin-dependent diabetes mellitus,

complete heart block and lactic acidosis. The tissues involved in mitochondrial disorders are those that depend heavily on oxidative phosphorylation for energy production.

Kearns–Sayre syndrome is the only mitochondrial disorder of the five possible answers provided. Other mitochondrial disorders include myoclonic epilepsy and ragged red fibres (MERRF); and mitochondrial myopathy, encephalopathy, lactic acidosis and stroke-like episodes (together known as MELAS).

29. Myotonic dystrophy is absolutely confirmed by which Investigation === **Genetic testing** .

30. The most likely diagnosis in this patient is Huntington's disease (**HD**)or **Huntington's chorea**. This is an **autosomal dominant** disorder that usually presents in

the third or fourth decade of life with personality change, dementia and chorea. It is a progressive neurodegenerative disorder leading to death about 15 years after onset. It is caused by the expansion of a cytosine-adenine-**guanine (CAG)** triplet repeat in the HD gene on 4p16. Normal repeat numbers are 9–35 and affected individuals have ³ 36 repeats.

31. Which enzyme breaks base pairs in a double-stranded DNA molecule?

Helicase المِهَلِك

32. The 3' to 5' exonuclease activity possessed by some DNA polymerases that enables the enzyme to replace misincorporated nucleotide is called what?

Proofreading

33. Which of the following is most prevalent in northern Caucasians === **a1-antitrypsin deficiency (A1AT)** .

34. **xeroderma pigmentosum** have a high risk of developing skin cancer.

What kind of genetic deficiency do those patients

Have ===== **Nucleotide excision repair** .

35. Xeroderma pigmentosum is an inherited skin disorder characterised by photosensitivity with severe sunburn in infancy, the development of numerous pigmented spots

resembling freckles, larger atrophic lesions associated with telangiectasis, and multiple solar keratoses. Transmitted in an autosomal recessive manner, xeroderma pigmentosa involves a defect in nucleotide excision repair (NER), leading to deficient repair of DNA damaged by UV radiation and chromosome breakage. Individuals with this disease develop multiple malignant cutaneous neoplasms at an early age, and may suffer from severe ophthalmic and neurological abnormalities.

36. In which of the following genetic diseases is DNA analysis most likely to be diagnostic === **Huntington's disease** .

37. Which of the following disorders may have an autosomal recessive mode of inheritance === **Ehlers–Danlos syndrome Type VI**

38. This boy has Wolfram syndrome, a rare progressive neurodegenerative disorder characterised by diabetes insipidus, diabetes mellitus, optic atrophy and sensorineural deafness (DIDMOAD).

39. Which of the following most accurately represents the mode of inheritance for **Dubin Johnson syndrome ===
Autosomal recessive .**

40. **Hereditary haemorrhagic telangiectasia (HHT), formerly known as Osler-Weber-Rendu syndrome is inherited in **autosomal dominant fashion**.**

41. The 12-year-old girl has **x-linked dominant Alport syndrome.**

42. What condition is responsible for most of the excess mortality associated with Turner's syndrome === **Thoracic aortic aneurysm rupture**

43. Which of the following genes may be involved in a familial cancer syndrome in this patient === **K ras .**

44. **Whilst Ehler's Danlos** is associated with soft, doughy hyperelastic skin which splits easily, and is associated with early bruising and scarring in childhood, **benign hypermobile syndrome** is associated **with bruising, moderately elastic skin and hypermobile joints.**

Immunology

1. Which of the following is a feature of the Sézary Syndrome == **T-cell malignancy** .

2. Antibodies to which of the following are found in patients with myasthenia gravis === **Acetylcholine receptors**

3. HLA Cw6 – **psoriasis**

4. DiGeorge syndrome – **absent T-cell Function**

5. The alternative, but not the classical pathway involves **the C3-convertase enzyme C3bBb complex**

6. Bacteria opsonised **by antibodies and complement** are more effectively phagocytosed than those opsonised by antibodies alone

7. In a patient developing anaphylaxis, which of the following is true?

Symptoms may be exacerbated by Exercise

8. In a healthcare worker with a proven natural rubber/latex allergy, which of the following foods is most commonly associated with this condition === **Bananas** .

9. In a patient with nickel-associated contact dermatitis which of the following statements is true === **Elimination of the responsible agent is the most important goal** .

10. In a 21-year-old female with systemic lupus erythematosus, which of the following investigations/statements is true?

CRP is typically normal in non-infected patients with active disease

11. In patients with systemic lupus erythematosus which of the following statements is correct?

Up to 80% of patients have anti-dsDNA antibodies .

12. Behçet's disease ==== is a **postcapillary Venulitis**

13. High titres of **antithyroid microsomal and antithyroglobulin antibodies would suggest which of the following diagnoses in a patient presenting with a**

complaint of tiredness?

Hashimoto's thyroiditis

14. Which of the following definitely excludes IgG

subclass deficiency ==== Good IgG antibody responses to immunizations

15. Which of the following would be true for the patient

with newly-diagnosed IgA deficiency == They are likely to have IgG2 deficiency leading to recurrent bacterial infections

16. In patients with severe oral and genital ulceration,

therapy with agents having **clinically significant anti-TNF- α activity** can be beneficial, which of the following is used for this indication === **Thalidomide** .

17. In an elderly patient found to have a large IgM-kappa paraprotein, which of the following helps to decide that it is related to Waldenstrom's macroglobulinaemia === **No isotype suppression (normal IgG and IgA levels)**

18. Regarding B cells and plasma cells, which of the following is true === **B cells can undergo isotype switching**

19. Latex can induce allergy through **IgE bound to mast cells.**

20. The **weal size** resulting from the skinprick test is an **excellent predictor of a positive food challenge to peanuts**

21. Which of the following adverse food reactions is mediated by IgE-dependent mechanisms and hence can be ascertained by skinprick testing === **Kiwi fruit** .

22. **Kiwi fruit** is a member of the **latex-associated foods** and adverse reactions to this **fruit are mediated by IgE.**

23. In a patient presenting acutely with severe abdominal pain presumed to be related to previously diagnosed hereditary angioneuritic oedema, which of the following treatment strategies would be optimal

=== Give an intravenous C1-inhibitor Concentrate

24. ACE inhibitor-associated angioedema is the commonest cause of these swellings involving the face and tongue in this age group; it often begins several years after starting an ACE inhibitor, especially ACE-1 inhibitors.

25. In a 20-year-old man, recurrent and/or severe infections with which of the following organisms would make you most suspect immunodeficiency

associated with hypogammaglobulinaemia === **Haemophilus influenza**

26. **Nasal swabs** should be routinely checked in patients with **recurrent staphylococcal abscesses**

27. Antiglomerular basement-membrane antibodies are associated with **Goodpasture's disease**

28. Concerning monoclonal free light chains, which of the following statements is true === **They are found in isolation in 20– 30% of cases of myeloma**

29. Younger women often have low-titred ANAs, and the titres increase with age so in elderly women you may see weakly positive ANA .

30. **Wegener's granulomatosis** is a primary small vessels vasculitis which involves the kidneys and causes glomerulonephritis with crescent formation. It is distinguished from other causes of glomerulonephritis by the absence of immune deposits on immunohistochemical analysis.

31. The patient's clinical features are highly suggestive of mixed connective tissue disease (MCTD). This diagnosis has been applied to a particular subset of patients with overlapping clinical features of lupus, scleroderma, and myositis. **An immune response to U1-RNP is the additional defining serological feature of MCTD.**

32. Which of the following tests most supports a malignant process?

Kappa light chains in the urine (Bence Jones protein) .

33. An 18-year-old suffers recurrent, proven bacterial chest infections requiring regular antibiotic treatment.

Which of the following is the best way to **exclude**

antibody deficiency === Specific antibodies to haemophilus and pneumococci

34. Which of the following investigations will be most useful in subsequently establishing an IgE-mediated process (anaphylactic mechanism) === **Skin-prick tests to anaesthetic agents**

35. bilateral claudication of her arms === **Takayasu's arteritis** .

36. In a patient with suspected hereditary angio-oedema (HAE), which of the following is most likely to be helpful in identifying this clinical condition ===== **Persistently low C4 levels, including between attacks**

37. **Mycophenolate mofetil** === A cytotoxic agent **selective for lymphocytes** can replace azathioprine .

38. The **birch pollen-induced oral allergy syndrome** occurs with stoned fruits, **apples**, carrots and potatoes. However, this only happens **with the raw form** as cooking denatures the allergen. The birch-tree pollen season is usually in **April/May**, giving the **typical rhinitis symptoms**.

39. Which disease occurring during pregnancy is most likely to lead to the neonate having low immunoglobulin levels and hence being prone to bacterial infections ===**Intestinal lymphangiectasia** .

40. Cryoglobulins are cold precipitable immunoglobulins that are present in blood.

41. An 82-year-old woman, who is not on drug therapy, presents with a bullous skin rash on her arms.

Which of the following tests is most likely to supply the definitive diagnosis ===== Skin biopsy for examination by immunofluorescence bullous pemphigoid

42. In PAN (medium-sized arteritis), the ANCA (anti-neutrophil cytoplasmic antibody) is usually negative.

43. Patch testing is the classical method for investigating contact dermatitis

44. Anti-Yo antibodies occur in patients with ovarian, breast and lung cancers,

45. Small-bowel biopsy is the 'gold standard' investigation for coeliac disease. However, serological tests such as IgA antiendomysial antibodies are the most discriminating of the above choices.

46. Which of the following diseases is most closely associated with HLA B5 == Behçet's syndrome .

47. A patient presents with eczema, thrombocytopenia and

recurrent infections.

What is the most likely diagnosis? == **Wiskott–Aldrich syndrome**

48. A patient presents with facial abnormalities that may include abnormal ears, a shortened philtrum, micrognathia and hypertelorism.

Which cells is this patient lacking?

T lymphocytes === DiGeorge S .

49. Which of the following immunoglobulin isotypes has the highest concentration in serum == **IgG . 75%**

50. IgG is the major serum immunoglobulin, while IgA is the predominant immunoglobulin in secretions and so

protects mucous membranes.

51. Immunoglobulin structure – which of the following regions forms the antigen binding site==== **The variable region of one heavy and one light chain**

52. Which immunoglobulin can fix complement via the **Alternative pathway === IgA .**

53. **IgG and IgM** can fix complement via the **classical pathway** through the Fc portion of the immunoglobulin.

54. Periodic fever can be associated with high levels of **IgD** .

55. Gluten-sensitive enteropathy (GSE) can be associated with low levels of **IgA** .

56. Susceptibility to Pneumocystis jirovecii can be associated with high levels of **IgM** .

57. Activation **of the classical complement pathway** occurs in SLE due to the large number of dsDNA and other immune complexes that form and fix complement. They deposit in the kidneys and other organs, where they attract other components of the immune system that

cause tissue damage.

58. A patient with AIDS develops *Pneumocystis jiroveci* pneumonia.

He is deficient of what immunological component == **T cells** .

56. Opportunistic bacterial infections, such as **meningococcus** and gonorrhoea, occur because of defects in the lytic complement pathway (**C5–C9**).

57. Cells from a patient with severe combined immunodeficiency disease (SCID) **lack the adenosine deaminase enzyme**.

This will have a direct effect on === **purine salvage** .

58. Where is the immune defect in chronic lymphocytic leukaemia situated=== **B cells** .

59. How is the **Mantoux test** administered ===**Intradermal**

60. Raised IgE levels are a normal finding in what % of the population ===**2.5%** .

61. **CD4 T** cells interact with **B cells** via **MHC class II**

62. What is the usual pattern of inheritance for **Wiskott – Aldrich** =====**X-linked recessive** .

63. Concerning HLA antigens, which of the following is an **HLA-class II antigen** =====**HLA-DR** .

64. “Latex fruit syndrome” is increasingly recognised as a cause of anaphylaxis. Proteins found in banana have significant structural homology to latex, and whilst allergy may be less severe to latex itself, repeated exposure to banana may eventually lead to anaphylactic type reactions. Apricots, apples, mangoes, kiwis, passion fruit and pears are also known to cause

the reaction. Treatment of fruit anaphylaxis is exactly like the management of anaphylaxis in other conditions, with use of fluid resuscitation, hydrocortisone, antihistamines, and adrenalin if required.

65. Which of the following autoimmune disorders is associated with **C1q deficiency** ===== **SLE** .as both have low C4 level

66. poststreptococcal glomerulonephritis ===== **example of Type-III hypersensitivity reaction**

67. **post splenectomy** there is def of **humoral immunity** .

77. acquired Lipodystrophy === low C3 .

78. **IgG2 deficiency appears**

to increase susceptibility to polysaccharide coated bacterial infections, including **haemophilus influenzae**, accounting for the **multiple presentations with otitis media and respiratory tract infections** .

cell biology

1. **Endothelin-1** is a 21-amino acid **polypeptide** and is a

highly potent vasoconstrictor.

2. Endogenous nitric oxide is derived from === **L-Arginine** .

3. Nitric oxide (NO), which used to be known as 'endothelium-derived relaxing factor', is a local cellular messenger. It is **derived from L-arginine** (an amino acid) by nitric oxide synthase.

4. Which of the following is a trinucleotide-repeat Disorder === **Kennedy's syndrome**, also known as 'X-linked bulbospinal neuronopathy

5. Which of the following is true concerning the cell

Cycle === **G1** is a gap phase under the influence of the p53 gene

6. Which of the following statements is true about the **matrix metalloproteinases**, which play a major role in pathological processes, including rheumatoid arthritis, periodontitis, vascular disease as well as tumour invasion and metastasis === **All share sequence homologies** Correct answer .

7. The polymerase chain reaction (PCR) is becoming widely used in both research and clinical medicine.

Which of the following statements is correct === **Reverse transcriptase-PCR (RT-PCR) is able to identify the transcripts of a**

given gene by detecting the messenger (m) RNA coding for the gene .can amplify RNA and quantify m RNA and form DNA from RNA .

8. Botulinum toxin has which of the following features === **It may be used in the treatment of Blepharospasm .**

9. Concerning the respiratory cell biology of an asthmatic individual, which of the following is true === **T cells are mobile and contribution to asthma is via cytokine Production .**

10. Which of the following statements is true concerning

Kinins == Their activation leads to release of chemotactic Cytokines .and phagocytic activity .

11. In the selection of an optimum agent to prevent rejection postrenal transplantation, which of the following cell biological principles is correct === Tacrolimus is calcineurin inhibitor

12. Which of the following is a feature of the early asthma response == Mast-cell degranulation is seen in response to IgE already produced by B-cells

13. Which of the following features applies to acetylcholine-mediated transmission at the motor endplate?

The synaptic fusion complex is made of

synaptobrevin, syntaxin and synaptosome-associated protein

14. Which of the following statements pertains to a resting neurone == It is positively charged externally .

15. Degranulation of eosinophils allows which of the following cellular processes == =Fusion of the lysosomal membrane with the plasma membrane

16. The cell and membrane biology of the gastric acid pump has which of the following features === The proton pump

spans the apical membrane of the gastric parietal cell

17. What are the stages in the cell biology of normal wound healing === Maturation and remodelling can continue for up to a year

18. Which of the following neoplasms responds to the specific tyrosine kinase inhibitor, imatinib?

Gastrointestinal stromal tumours

19. Irinotecan and topoisomerase Inhibition

20. Granuloma is seen in which of the following

conditions? **Syphilis**

21. Which of the following statements is true regarding the cellular and molecular mechanisms that control apoptosis == **Abnormalities of caspase control are associated with a range of lymphomas and carcinomas**

22. C-peptide cleavage is an example of **post-translational modification**

23. Duchenne muscular dystrophy: **X Chromosome**

24. Which enzyme **synthesises phosphodiester bonds** as part of DNA replication, repair and recombination processes====**DNA ligase** .

25. DNA ligase =====**synthesises phosphodiester bonds**.

26. Which enzyme **breaks** base pairs in a double-stranded DNA molecule === **Helicase** .**مهلك**

27. he 3' ® 5' exonuclease activity possessed by some DNA polymerases that enables the enzyme to replace misincorporated nucleotide is called what?

Proofreading

28. liver fibrosis.

What is the most likely cell responsible for this

Process === **Ito cells** .

29. The earliest lesions of atherosclerosis are fatty streaks. These consist of an accumulation of lipid-engorged macrophages (foam cells).

30. Which blood vessels are most sensitive to the vasodilatory effect of nitrates === Large veins .

31. Which of the following biochemical processes is likely to contribute most to energy creation in his long-distance running == **Fatty acid oxidation** .

32. pemphigus vulgaris ==== **It is a disorder affecting desmoglein-3**

33. Which of the following protein names best identifies the DNA-binding protein with which the papillomavirus interferes ==== **p53** .

34. Which of the following best describes the action of **beta-interferon** === **It leads to increased MHC class-I expression**

35. If his cells are not agglutinated by anti-A or anti-B, he must be **blood group O**.

36. Which of the following proteins is likely to be abnormal in MOCM ==== **Troponin T** .

37. Which of the following is the most likely presentation of Staphylococcus aureus food poisoning == **Severe vomiting 2–4 h after food ingestion**

38. A woman presented with diarrhoea that has persisted up to 2 weeks after cholecystectomy.

What is the most likely cause of the diarrhea ===

Bile acid malabsorption

39. **Rifampicin** may be used in combination for MRSA infections. روماتك

40. For what metabolic process is **riboflavin** required=== **The hydrogen-transfer chain in the Mitochondria**

41. The accumulation of gangliosidic GM2 in the central nervous system of individuals with **Tay-Sachs disease** is attributed to == **Decreased lysosomal hydrolysis** .

42. By which process are solute particles moved along a concentration gradient across a selectively permeable membrane == **Diffusion** .

43. Where **does RNA splicing occur** == **Nucleus** .

44. Which of the following best describes the mechanism currently used for cloning===**An enucleated oocyte is fused with the nucleus from a donor cell**

45. Which of the following best describes the location of **G-proteins** === **in cytoplasm** .

46. Which of the following best fits the position of the **Golgi body** within the cell === **Adjacent to the endoplasmic Reticulum .**

47. Which of the following best describes the step required for acyclovir activation? === **Conversion to monophosphate form by viral thymidine kinase**

48. Which of the following methods is a technique to identify a particular DNA sequence === **Southern blot .**

49. Where is the insulin receptor located === **Cell membrane** .

50. Which of the following is the appropriate method for identifying such a protein === **Western blot** . البروتين الغربي

51. How does reverse transcriptase work === **It transcribes DNA from RNA** . يعمل من الفسيخ شربات

52. Which cells are mainly responsible for production of **TNF alpha** === **Macrophages** .

53. Which of the following best describes the

predominant location of actin === **Cytoskeleton** .

physiology

1.in hypovolemia ====Certain intravenous solutions, which would be **hypo-osmolar, have dextrose added to ensure they are iso-osmolar**

2. Pre- or perioperative beta-blockade

can improve survival after major non-cardiac surgery in patients with **pre-existing cardiac disease**

3. The pulse can remain normal in patients with grade I shock

4. Which of the following pertains to the clinical physiology of faecal continence === Incontinence may be associated with rectal prolapsed

5. The oxygen–haemoglobin dissociation curve is **shifted to the left** by which of the following factors?

Rise in pH

6. A patient undergoes respiratory function tests.

Which of the following are normal readings for a 70-kg man ===

Inspiratory reserve volume of 3.3 litres

7. **Severe injury**: nitrogen requirement

0.3 g N/kg per day, calorie requirement 35 kcal/kg per day

8. A patient on enteral nutrition develops constipation.

What could explain the underlying clinical

Physiology ==== **Inadequate fluid replacement**

9. Which of the following takes place during inspiration

at rest === **A reduction in pressure of 1–3 mmHg is created**

10. Blood is circulated through the arteries by which of

the following physiological mechanisms === **Maintenance of diastolic pressure in the arteries and arterioles**

11. There is a **large rise in GnRH** just before **ovulation**

12. The **zona fasciculata** is predominantly **controlled by ACTH** and is often hypertrophied

13. Which of the following statements is correct regarding the clinical physiology of the ear === **The scala media contains the organ of Corti .**

14. The central portion of the **macula** is known as the **fovea centralis**

15. Central chemoreceptors are sensitive

to the **H⁺ content of the CSF**

16. Which of the following physiological characteristics relates to the lining of the respiratory tract === **The cilia are under the control of a physiological motor, dynein**

17. Pulmonary gas exchange occurs under which of the following physiological principles == **Gas exchange can occur in the final seven branches of the bronchoalveolar tree .**

18. The mean lower oesophageal sphincter pressure is reduced in which of the following situations === **Grade III oesophagitis**

19. Which one of the following is MOST likely to increase during exercise === **Stroke volume** .

20. Which one of the following is higher at the apex of the lung than at the base when a person is standing === **V/Q ratio** .

21. The secretion of growth hormone is increased by ==== **Exercise**

22. Involvement of the posterior inferior cerebellar artery is called **Wallenberg's syndrome**,

23. Which of the following findings would suggest that he has a generalised disorder of proximal tubular function === **Metabolic acidosis** .1

24. Bicarbonate is normally totally reabsorbed from the glomerular filtrate in the proximal convoluted tubule.
Decreased bicarbonate absorption causes metabolic
Acidosis

25. Which of the following findings would most strongly suggest that he had a chronic metabolic alkalosis ==== **Elevated**

arterial p(CO₂).....as a compensation .

26. Which of the following features, if present, would help most to identify possible aetiologies for his renal failure and suggest that it is longstanding === **Small kidneys on ultrasound examination**

27. malabsorption.

Which of the following investigations has the potential to indicate a single cause for this? ====

Lactose tolerance test

27. A 32-year-old woman on nasogastric aspiration for paralytic ileus following surgery develops a **metabolic alkalosis. Due to gastric acid aspiration**

Which of the following intravenous fluids would be the preferred treatment for the alkalosis === **Normal (0.9%) saline .**

28. A 39-year-old man presents with recurrent episodes of early morning dizziness, which resolve rapidly when he has his breakfast.

Which of the following metabolic pathways is most likely to be functioning abnormally?

Gluconeogenesis

40. The history is typical of hypoglycaemia. Blood glucose concentration is maintained in the fasting state through glucose release from glycogen (**glycogenolysis**) and **gluconeogenesis** (glucose synthesis from lactate and other precursors).

41. The clinical description and elevation of cholesterol and triglyceride concentrations to approximately equal levels is typical of **familial dysbetalipoproteinaemia** (also known as **remnant dyslipidaemia, broad beta disease, type-III hyperlipidaemia**). This condition is caused by an inherited abnormality of the remnant receptor responsible **for the removal of IDL from the circulation by the liver.**

42. **Decreased muscle glycogenolysis** === muscle pain, particularly in his legs. Within a few minutes of resting, however, the **pains resolve**. Investigation revealed a slight fall in blood lactate concentration during exercise.

43. A 75-year-old woman undergoes **total gastrectomy** for carcinoma of stomach.

With which of the following nutrients is she most likely to require parenteral replacement === **vit B12** .

44. The findings in this woman suggest **osteomalacia**, and the most important reason for the impaired

mineralisation of bone is reduced intestinal calcium absorption consequent on vitamin D deficiency.

45. Which of the following statements about prostaglandin synthesis is correct === **It is mediated by cyclooxygenase .**

46. Fatty acids are transported from adipose tissue to the muscle.

Which enzyme is essential for this process === **Carnitine acyltransferase I**

47. Respiratory alkalosis results from hyperventilation which is manifested by excess elimination of CO₂ from the blood and a rise in the blood pH. Examples of specific causes are listed below:

**catastrophic central nervous system (CNS) event
(CNS haemorrhage)**

drugs (salicylates, progesterone)

pregnancy (especially the third trimester)

decreased lung compliance (interstitial lung disease)

**48. What is the importance of the P1 receptor === Inducing
apoptosis**

**49. Which enzyme in serum is most increased in
Gaucher's disease === Acid phosphatase .**

50. What is the mechanism of action of erythropoietin when used as a performance-enhancing drug === **Improvement of exercise tolerance**

51. **Gherelin** is a hormone produced in the **fundus** of the stomach and in the pancreas, the levels of which **increase before meals** and decrease afterwards.
Lead to increase appetite .

52. **Downregulation of glucokinase activity in the liver is an example of which of the following=== Co-repression .**

53. An area of lung **unaffected** by pneumonia is likely to **experience vasodilatation**

54. In which site in the cardiac myocyte is troponin

Present === **Adjacent to the thin myofilaments**

55. which is said to have a partial thiazide

like action. Which part of the kidney are thiazide

diuretics thought to act upon == **Distal convoluted tubule** .

56. The clinical picture and positive patch testing supports a

diagnosis of Type 1 (immediate) hypersensitivity.

57. What is the importance of the P1 receptor === **Induce**

apoptosis .

**THIS PART IS FOR THOSE WHO WORK PREVIOUS MRCP EXAMS
FROM ELZOHRY PREVIOUS EXAM FILE**

6- Elzohry MRCP Questions - Previous examinations

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Previous examinations.pdf](http://www.mediafire.com/view/fwnsr11xek2situ/6-Elzohry_MRCP_Questions_-_Previous_examinations.pdf)

THIS LINK IS EXTERMELY IMPORTANT AND HELPFUL

**If you did not get elzohry previous exam download it from this
link or contact me on my group and I will send it to you !!!**

Cuz the rest of the notes is for those who will answer it !!

**Elzohry previous exam is a collection of previous mrcp exams
from pastest and mrcpass ans revise mrcp and contain a bout
3500 mcq extermily criticl for you to have it**

After second thought I will leave the previous exams with no notes

so you can think and get wrong more and more to learn more !!!

this also important the more you get wrong in answer mcq the more u learn !!!!

we get wrong today only to get right tomorrow in the exam !!!

I am grateful for dr.osama mahmoud who teach us
internal medicine and learn us how to be Human before
Being Doctors



أ.د.....اسامه محمود فخر طب عين شمس وقسم النفرولوجي
معلم اجيال واجيال من الاطباء اللهم اجزه عنا خير الجزاء

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.....dr.abdelhamid khalil.....dr.ali ahmed ali

each one of you was a source of inspiration for me

**all my family(my father –my mother –
my sisters) who support me and
believe in me I say I love you**

DONE BY FAISAL HEMEDA 16-1-204

1.52AM