Medicine MCQ’s

Question 1. Oxygen:

(a) Should be administered with a high inspired concentration (>50%) in the treatment of type II respiratory failure. (False)
(b) Should not be used at high concentration in patients with pulmonary embolism because respiration may be severely impaired when the hypoxic drive is reduced. (False)
(c) Continuous long-term (domiciliary) oxygen improves survival in patients with respiratory failure caused by chronic bronchitis and emphysema. (True)
(d) Is needed when respiratory failure is diagnosed by finding a pO₂ of less than 11 kPa in an arterial blood sample. (False)
(e) Comprises 21% of atmospheric air. (True)

Question 2. Dementia may result from:

(a) Parkinson’s disease. (True)
(b) Huntington's chorea. (True)
(c) Hypothyroidism. (True)
(d) Acquired immune deficiency syndrome (AIDS). (True)
(e) A cerebral tumour. (True)

Question 3. Digoxin:

(a) Is the treatment of choice for ventricular extrasystoles. (False)
(b) May cause xanthopsia. (True)
(c) Is excreted by the kidneys. (True)
(d) Adverse effects are reduced by hypokalaemia. (False)
(e) Must not be coadministered with an ACE inhibitor. (False)

Question 4. For self-poisoning:

(a) Gastric lavage is recommended for most drugs up to 12 hours after ingestion. (False)
(b) Naloxone is the specific antidote for benzodiazepine overdose. (False)
(c) Patients with tricyclic antidepressant overdose need cardiac monitoring for up to 48 hours. (True)
(d) All patients should be assessed by a qualified psychiatrist. (False)
(e) Pinpoint pupils could indicate opiate overdose. (True)

Question 5. Treatment of myocardial infarction:

(a) Aspirin and streptokinase are more effective than either alone after myocardial infarction. (True)
(b) Thrombolysis improves short-term complications but not mortality after myocardial infarction. (False)
(c) Tissue plasminogen activator and anistreplase are more effective than streptokinase but not used because they are far more expensive. (False)
(d) ACE inhibitors improve outcome after myocardial infarction for patients with ventricular dysfunction. (True)
(e) HMGCo-A reductase inhibitor therapy is contraindicated for patients after myocardial infarction. (False)
Medicine MCQ’s

Question 6. Paracetamol overdose:

(a) Ipecacuana followed by oral methionine is effective for most patients who are just over the treatment line. (False)
(b) Can cause renal failure. (True)
(c) Intravenous N-acetylcysteine frequently causes anaphylaxis. (False)
(d) The serum paracetamol level is of most value between 1 and 4 hours after ingestion. (False)
(e) In co-proxamol (distalgesic) overdose, sudden death is likely to be due to hypoglycaemia caused by paracetamol. (False)

Question 7. Oral corticosteroids:

(a) Are an effective treatment for SLE. (True)
(b) In the long term may cause cataracts. (True)
(c) Should be avoided in sarcoidosis because they induce pulmonary oedema. (False)
(d) May be stopped abruptly after 2 weeks of 40 mg prednisolone daily in patients who are not exposed to repeated courses. (True)
(e) May reveal that 15% of patients labelled as having chronic bronchitis, in fact have reversible airways disease. (True)

Question 8. Hypertension:

(a) An average diastolic blood pressure of >90 mmHg over prolonged observation is an indication for drug treatment in uncomplicated hypertension. (False)
(b) Thiazide diuretics are the least effective antihypertensive drugs. (False)
(c) Thiazide diuretics work on the loop of Henle in the kidney. (False)
(d) Resistant hypertension is defined as a failure to control the blood pressure adequately with a good three-drug regimen. (True)
(e) Thiazide diuretics are contraindicated in gout and diabetes. (True)

Question 9. Leukaemia:

(a) The common presenting triad is infection, bleeding, and fatigue. (True)
(b) Acute myeloid leukaemia (AML) may result spontaneously or follow on from CML, polycythaemia rubra vera or myelosclerosis. (True)
(c) The usual development of chronic lymphocytic leukaemia is a transformation to acute lymphoblastic leukaemia. (False)
(d) A platelet count of $40 \times 10^9/L$ would not normally give rise to spontaneous bleeding. (True)
(e) Bone marrow transplantation is a recognized treatment for AML. (True)

Question 10. Cushing's syndrome:

(a) May give rise to hypertension, diabetes, and truncal obesity. (True)
Medicine MCQ’s

(b) Is usually diagnosed by estimation of the urinary free cortisol followed by an overnight dexamethasone suppression test. (True)
(c) Could be associated with pigmentation. (True)
(d) The most common cause is probably iatrogenic. (True)
(e) Nelson's syndrome is a complication of bilateral adrenalectomy for pituitary-dependent Cushing's disease. (True)

Question 11. Respiratory failure:

(a) Type I failure results in a partial pressure of oxygen (pO2) <8 kPa and a partial pressure of carbon dioxide (pCO2) of >6.5 kPa. (False)
(b) In respiratory failure associated with chronic bronchitis, the level of carbon dioxide (CO2) determines the respiratory rate. (False)
(c) Respiratory failure as defined in (a) would be an indication for ventilation in pure asthma. (True)
(d) Doxapram is a respiratory stimulant used in respiratory failure associated with chronic obstructive pulmonary disease. (True)
(e) The main aim in type II failure is to keep the pO2 >7.0 kPa without worsening of the acidosis or pCO2. (True)

Question 12. Stroke:

(a) Cerebral haemorrhage accounts for more than 40% of acute strokes. (False)
(b) In supratentorial strokes with homonymous hemianopsia, patients cannot see on the hemiplegic side. (True)
(c) Vertigo, vomiting, dysphagia, and Horner's syndrome indicate occlusion of the vertebrobasilar circulation. (True)
(d) Pinpoint pupils and bilateral upgoing plantars could signal a brainstem stroke. (True)
(e) Carotid endarterectomy should be considered for patients with more than 70% stenosis because this is more effective than medical treatment. (True)

Question 13. Heart failure:

(a) The clinical features of left heart failure include: tachycardia, basal crepitations, pulsus alternans and a raised JVP. (False)
(b) Congestion of the pulmonary veins alone does not result in orthopnoea. (False)
(c) Chronic congestive heart failure leads to secondary hyperaldosteronism. (True)
(d) Causes of heart failure include ischaemic heart disease, hypertension, and thiamine deficiency. (True)
(e) Clinical features of right heart failure include a raised JVP, ankle oedema, and hepatomegaly. (True)
**Question 14. In the full blood count:**

(a) A haemoglobin of 10.0 g/dL would be considered normal in a premenopausal woman. (False)
(b) Polycythaemia rubra vera is usually indicated by elevation not only of the haemoglobin but also of the white cell count and platelets. (True)
(c) A low platelet count could indicate a flare-up of systemic lupus erythematosus (SLE). (True)
(d) High platelets can be seen in gastrointestinal bleeding. (True)
(e) A raised mean corpuscular volume is usual in significant alcohol excess. (True)

**Question 15. The electrocardiogram:**

(a) The PR interval is measured from the peak of the P wave to the start of the QRS complex. (False)
(b) Right axis deviation is indicated by a QRS axis of -35°. (False)
(c) Q waves in S-II, S-III and aVf indicate a transmural inferior myocardial infarction. (True)
(d) Left bundle branch block is suggested by broadening of the QRS complex to 0.10 seconds (two and a half little squares), and positive RSR' waves in V4-V6. (False)
(e) P mitrale is suggested by a P wave taller than 2.5 mm. (False)

**Question 16. The face:**

(a) A malar flush may indicate mitral valve disease or hypothyroidism. (True)
(b) A butterfly rash in the face is seen in dermatomyositis. (False)
(c) Bell's palsy can cause ptosis due to paralysis of orbicularis oculi. (False)
(d) Herpes labialis may be associated with pneumococcal pneumonia. (True)
(e) An expressionless face and drooling could indicate Parkinson's disease. (True)

**Question 17. Hand signs:**

(a) Clubbing may be caused by uncomplicated chronic bronchitis. (False)
(b) Koilonychia usually indicates liver disease. (False)
(c) Osler's nodes and Heberden's nodes both occur in osteoarthritis. (False)
(d) Splinter haemorrhages are due to embolic rather than immunological phenomena. (False)
(e) Psoriatic arthritis affects most joints in the hand but usually spares the distal interphalangeal (DIP) joints. (False)

**Question 18. The following would suggest an upper rather than a lower motor neuron lesion:**

(a) Fasciculation. (False)
(b) Increased tone. (True)
(c) An absent plantar reflex. (False)
(d) Clonus. (True)
(e) Relatively little wasting. (True)

**Question 19. Nystagmus:**

(a) Vertical nystagmus usually indicates a lesion of the medulla oblongata. (False)
(b) Horizontal nystagmus is usually ipsilateral to an irritative lesion of the labyrinth. (False)
(c) Ataxic nystagmus indicates a lesion of the medial longitudinal bundle. (True)
(d) May be absent in a lesion of the cerebellar vermis (the central part). (True)
(e) Pendular nystagmus may indicate partial blindness. (True)

**Question 20. The following would help distinguish between a kidney and a spleen in the left upper quadrant:**

(a) Dull to percussion over the mass. (False)
(b) A well-localized notched lower margin. (False)
(c) Moves with respiration. (False)
(d) A ballottable mass. (True)
(e) A family history of renal failure. (True)

**Question 21. The physical signs of an uncomplicated large pneumothorax include:**

(a) The trachea deviated to the opposite side. (False)
(b) A clicking sound synchronous with the heart beat. (True)
(c) Symmetrical expansion of the chest. (False)
(d) Increased breath sounds over the pneumothorax. (False)
(e) Increased percussion note over the pneumothorax. (True)

**Question 22. The jugulovenous pressure:**

(a) Is raised if it is 2 cm from the sternal angle with the patient seated at 45°. (False)
(b) Tall 'a' waves may be seen in pulmonary hypertension. (True)
(c) Irregular cannon waves indicate complete heart block. (True)
(d) Regular cannon waves may indicate a nodal rhythm. (True)
(e) Giant 'v' waves and a pulsatile liver indicate tricuspid stenosis. (False)

**Question 23. Pulsus paradoxus:**

(a) The volume of the pulse increases in inspiration. (False)
(b) Can be confirmed by detecting >10 mmHg difference in systolic pressure during the breathing cycle. (True)
(c) Is a sign of severe asthma. (True)
(d) Is called paradoxus because it is the opposite of what normally happens to the pulse. (False)
(e) Can occur in cardiac tamponade. (True)
Medicine MCQ’s

Question 24. Heart murmurs:

(a) A low rumbling diastolic murmur with presystolic accentuation may be heard in mitral stenosis accompanied by atrial fibrillation. (False)
(b) Causes of a pansystolic murmur include mitral regurgitation and ventricular septal defect. (True)
(c) A systolic murmur heard over the whole praecordium associated with a thrill usually indicates aortic stenosis. (True)
(d) Left heart murmurs are best heard during expiration. (True)
(e) An early blowing diastolic murmur at the left sternal edge indicates aortic incompetence. (True)

Question 25. The pulse:

(a) In pulsus paradoxus the rate slows during inspiration. (False)
(b) Pulsus alternans indicates a poorly functioning left ventricle. (True)
(c) A tachycardia of 150 beats per minute in a resting patient usually implies an underlying cardiac arrhythmia. (True)
(d) A collapsing pulse may be noticed in thyrotoxicosis. (True)
(e) Corrigan's sign supports a diagnosis of aortic stenosis. (False)