

More MFAEM/MCEM Questions

1 Staphylococcus aureus

- A. Is a gram negative bacteria.
- B. Exotoxin release leads to the toxic shock syndrome.
- C. Is usually sensitive to oral erythromycin.
- D. Causes Scarlet Fever.

2 The Brown-Sequard Syndrome

- A. Is the result of spinal cord hemisection.
- B. Occurs more commonly in closed than penetrating injury.
- C. Results in contralateral paralysis below the injury.
- D. Results in contralateral temperature sensory loss.

3 Electrical shock injuries

- A. May result in myoglobinuria and acute renal failure.
- B. Cardiac arrhythmias are more common if only a single limb is involved.
- C. Lightning causes a DC shock of very high voltage and short duration.
- D. Asymptomatic patients with a high voltage conduction injury should be admitted for observation and monitoring.

4 'Tetanus prone' wounds

- A. Include puncture wounds and those more than 6 hours old.
- B. Always require HATI treatment even if tetanus immunisation cover is adequate.
- C. HATI and TTB can both be given into the same limb.
- D. Pregnancy is a contraindication to tetanus prophylaxis.

5 Of physiological changes in pregnancy

- A. Cardiac output increases by around 30%.
- B. Diastolic BP drops slightly.
- C. pCO₂ rises.
- D. HCO₃⁻ rises.

6 The following toxic substances are correctly matched with their antidotes

- A. B-blockers.....Glucagon.
- B. Ethylene Glycol.....Dicobalt edetate.
- C. Iron salts.....Desferrioxamine.
- D. Paracetamol.....Methionine.

7 In prolonged hypothermia

- A. Defibrillation is contraindicated if temperature is below 30C.
- B. J-waves may be seen following the T wave on the ECG.
- C. Rapid rewarming is essential in elderly patients.
- D. Due to cold water immersion, neurological deficit is more commonly seen in young children following resuscitation.

8 Acute epididymitis

- A. Commonly results from chlamydia or gonorrhoea infection in the <35yr age group.
- B. Testicular torsion is an important differential diagnosis.
- C. The opposite testicle is seen to lie horizontally rather than vertically (Angells Sign).
- D. Appropriate first line antibiotic therapy would include ciprofloxacin.

9 Plain 1% lignocaine

- A. Contains 1mg of lignocaine per 1ml of solution.
- B. The safe dose is 7mg/kg in a child.
- C. Effects last around 30-60min.
- D. Risk of toxicity is increased by injection into infected tissues.

10 The following are absolute contraindications to Levonelle post-coital contraception

- A. Established pregnancy.
- B. History of ectopic pregnancy.
- C. Concurrent use of antiepileptic medications.
- D. History of porphyria.

11 Antibody molecules

- A. Consist of two identical light chains and two identical heavy chains.
- B. There are five major types of light chain (m, g, a, e and d).
- C. Are produced as integral membrane proteins of T cells.
- D. IgA is the most abundant immunoglobulin class in secretions.

12 Platelet count is commonly raised in

- A. Malignancy.
- B. Kawasaki disease.
- C. Megaloblastosis.
- D. Hypersplenism.

13 In retinal detachment

- A. The retina separates from the retinal pigment epithelium.
- B. Rate of onset is always instantaneous.
- C. A history of flashing lights and 'floaters' is common.
- D. It occurs more commonly in hypermetropes than myopes.

14 Causes of erythema multiforme include

- A. Sulphonamides.
- B. Barbiturates.
- C. Benzylpenicillin.
- D. Tuberculosis.

15 Therapeutic causes of gynaecomastia include

- A. Cimetidine.
- B. Ranitidine.
- C. Omeprazole.
- D. Cannabis.

16 Causes of erythema nodosum include

- A. Sarcoidosis.
- B. Herpes simplex.
- C. Ulcerative colitis.
- D. Combined oral contraceptives.

17 Acute phase proteins

- A. Include coagulation factors such as fibrinogen, prothrombin and factor VIII.
- B. Can facilitate phagocytotic uptake of bacteria.
- C. Are synthesised by the liver in response to inflammation.
- D. Include ferritin.

18 Regarding blood products

- A. Group O is the universal recipient.
- B. Whole blood more than 2 days old contains no effective platelets.
- C. A slow rising temperature ($<40^{\circ}\text{C}$) represents an ABO incompatibility and the transfusion must be stopped immediately.
- D. Platelet concentrates are stored at -30°C .

19 Side effects of typical neuroleptics include

- A. Akathisia.
- B. Parkinsonism.
- C. Tardive dyskinesia.
- D. Neuroleptic malignant syndrome.

20 Sickle cell anaemia

- A. Has the genotype HbAS.
- B. Sickle-shaped red blood cells have a life span of only 10-20 days.
- C. Is an autosomal dominant disease that results from the substitution of valine for glutamic acid at position 6 of the beta-globin gene.
- D. Can result in avascular necrosis.

21 Correct therapeutic dosages in paediatric advanced life support are

- A. Adrenaline (epinephrine) = 10mcg/kg.
- B. Atropine = 0.2mg/kg.
- C. 10% Calcium chloride = 10-30mg/kg.
- D. Initial fluid bolus = 20ml/kg.

22 The median nerve

- A. Supplies adductor pollicis brevis.
- B. Always supplies flexor pollicis brevis.
- C. Reliably supplies sensation to the pulp of the index finger.
- D. Arises from both medial and lateral cords of the brachial plexus.

23 Cerebral blood flow

- A. Is increased by ketamine anaesthesia.
- B. Is decreased by thiopentone and propofol anaesthesia.
- C. Is decreased by high pCO₂.
- D. Is only maintained by autoregulation with a MAP in the range 80 - 120mmHg.

24 Regarding vasopressors and inotropes

- A. Phenylephrine is a selective alpha agonist.
- B. Noradrenaline decreases afterload and is therefore appropriate for use in cardiogenic shock.
- C. Metaraminol induces release of noradrenaline and adrenaline.
- D. The adult dose of IM adrenaline for use in anaphylactic shock is 0.5mL of 1:10,000.

25 The femoral nerve

- A. Lies lateral to the femoral artery.
- B. Overlies the iliacus muscle.
- C. Gives a branch in the thigh to pectineus.
- D. The posterior division gives off the medial and intermediate cutaneous nerves of the thigh.

26 Regarding muscles of the orbit

- A. Levator palpebrae superioris is supplied by the oculomotor nerve.
- B. Lateral rectus is an abductor of the eyeball.
- C. Superior rectus turns the eye upwards and laterally.
- D. Superior oblique loops through a fascial sling before attaching to the eyeball.

27 Normal physiological ranges in a 3 year old include

- A. Weight of 14kg.
- B. Systolic blood pressure of 80-100mmHg.
- C. Total blood volume of 800mL.
- D. Pulse rate of 95-140.

28 The anterior triangle of the neck

- A. Is bordered superiorly by the mandible.
- B. Is bordered posteriorly by the posterior border of the sternocleidomastoid muscle.
- C. Contains the submandibular gland.
- D. Contains the inferior belly of the omohyoid.

29 Left common carotid artery

- A. Lies postero-laterally to the left vagus nerve in the neck.
- B. Lies anteriorly to the prevertebral fascia in the neck.
- C. Gives off the left inferior thyroid artery.
- D. Is a direct branch from the aortic arch.

30 Type II (antibody mediated) hypersensitivity reaction is implicated in

- A. Transfusion reaction.
- B. Serum sickness.
- C. Myasthenia gravis.
- D. Goodpastures syndrome