

"100" pages of MCQs

1. Which is true of dilated cardiomyopathy?
 - a. 80% are due to infective causes.
 - b. Chest pain in these patients is usually due to atherosclerosis of coronary arteries.
 - c. The ECG is almost always abnormal with LV hypertrophy, & L atrial enlargement being the most common abnormalities.
 - d. Use of digoxin has been shown to improve survival rates.
 - e. ECHO usually shows decreased diastolic and systolic volumes.

 2. Which is INCORRECT of hypertrophic cardiomyopathy?
 - a. 50% is familial with autosomal dominant inheritance.
 - b. Younger patients tend to have more severe symptoms.
 - c. The characteristic systolic murmur decreases with passive leg raising.
 - d. Syncope is a worrying symptom as often precedes sudden cardiac death.
 - e. Patients should be advised to avoid vigorous exercise.

 3. Which of the following is not a cause of restrictive cardiomyopathy?
 - a. Amyloidosis
 - b. Scleroderma
 - c. Carcinoid heart disease
 - d. Tuberculosis
 - e. Sarcoidosis

 4. A 28 year old man presents with fever, CHF and an episode of SVT. You suspect myocarditis. Which is true regarding the investigation of this man?
 - a. Global wall motion abnormalities on ECHO are characteristic of myocarditis.
 - b. A positive Troponin I rules out myocarditis.
 - c. Nuclear Med scanning of heart is not helpful in the diagnosis of myocarditis.
 - d. The gold standard for diagnosis of myocarditis is endomyocardial biopsy.
 - e. The ESR is always elevated in myocarditis.

 5. Which of the following is not a feature of pericarditis?
 - a. Sharp chest pain worse on lying supine.
 - b. Pericardial friction rub
 - c. Dysphagia due to irritation of oesophagus.
 - d. Tachypnoea
 - e. Sinus tachycardia.

 6. Which is true of cardiac tamponade?
 - a. The most common symptom of gradual tamponade is dizziness.
 - b. Clinical signs of pericardial effusion are easy to illicit.
 - c. During needle pericardiocentesis at least 50-100 mls needs to be removed to have an effect on hemodynamics.
 - d. CPR is ineffective during arrest.
 - e. The pericardial effusion needs to be at least 100 mls to see an enlarged cardiac silhouette on CXR

 7. Which is true of ischaemic chest pain?
 - a. 6% of patient with AMI present with pleuritic chest pain.
 - b. Up to 10% of all AMI's are silent.
 - c. Men are more likely to have atypical presentations.
 - d. Chest wall tenderness is an exclusion for AMI.
 - e. Of all patients presenting with AMI 75% will have diagnostic changes on initial ECG. (i.e. ST elevation).
- a. Troponin I ~c:~ s~> ..cc
b. Troponin I has sensitivity reaction ~i~~ ~2Ka ~aT Thrs 5cr XVI
c. Troponin I and T normalize on day 7

- d. Myoglobin is more specific than CKMB in AMI.
e. Size of troponin rise is not a predictor for mortality.
9. Which is true of right ventricular infarct?
a. Usually due to occlusion of dominant circumflex artery.
b. ST elevations of 1mm in V5R specific for right vent infarct.
c. There is a high risk of AV block.
d. Approx 20% will present with some hemodynamic compromise.
e. Isolated RV infarction is fairly common.
10. Which is true of complications of AMI?
a. Complete heart block in the setting of anterior AMI has a higher mortality than CHB in inferior MI.
b. Early VT in AMI is an indicator of poor prognosis.
c. Approx 40% of patients present with some degree of CHF in AMI.
d. There is a 50% mortality rate if the patient present in cardiogenic shock.
e. Free wall rupture usually occurs within the first 12 hours of AMI and is often fatal.
11. A 30 yr old man presents with crushing chest pain, with ECG criteria for anterior AMI. He volunteers that he uses cocaine on a regular basis. Which is true?
a. AMI's secondary to cocaine only occur in chronic users due to accelerated atherosclerosis.
b. The one year prognosis is more favourable in cocaine users who suffer AMI compared with the general population who suffer AMI.
c. Thrombolysis is contraindicated.
d. He does not require evaluation of his coronary arteries.
e. The ECG is as sensitive and specific for AMI as in non-cocaine users.
12. Which statement is INCORRECT of fibrinolytics used in AMI?
a. TPA has a higher risk of intracerebral haemorrhage compared with streptokinase.
b. ISIS -2 trial was a four arm trial comparing SK and aspirin alone and in combination and placebo and showed reduced mortality with combination SK and aspirin.
c. 0.2% of patients receiving streptokinase has anaphylaxis.
d. TPA may be advantageous over SK in patients under 75 years presenting within 4 hrs with ant AMI.
e. GUSTO 2b trial compared TPA and angioplasty and showed that TPA reduced mortality greater than angioplasty if presenting after 4 hrs of onset of symptoms.
13. Which is true of antiplatelet use in acute coronary syndromes?
a. Aspirin used alone is as efficacious as strep used alone in AMI as shown in the ISIS-2 trial.
b. Aspirin has little effect in non Q wave MI.
c. Tirofiban has been shown in the PRISM plus trial to efficacious in patients not undergoing PTCA.
d. Clopidagrel was shown in the CURE trial to offer no advantage over aspirin alone in patients not undergoing PTCA.
e. Ticlopidine is an alternative to aspirin as it is a safe drug to use long term with no harmful side effects.
14. Which of the following is correct regarding the treatment of AMI?
a. Nitrates offer advantage in reducing O2 demand through decreased venous return and especially helpful in inferior AMI's.
b. Beta blockers have been shown to reduce mortality in AMI due to coronary artery vasospasm.
c. ACE inhibitors have consistently been shown to reduce mortality if given to patients during or soon after AMI.
d. Calcium channel blockers while not shown to decrease mortality in AMI have no harmful effects in the acute setting.
e. The MLJRACL study clearly demonstrated an advantage of using statins early in AMI, reducing mortality rates.

15. Which is INCORRECT of APO?
- Pancreatitis is a cause of non cardiogenic APO
 - Morphine has not shown to be effective in the treatment.
 - Use of CPAP will improve oxygenation through increasing functional residual capacity.
 - CPAP will not alter length of stay or mortality but will reduce the number of patients requiring intubation.
 - Furosemide has been shown in studies to improve outcome in APO.
16. Regarding valvular disease which is correct?
- Mitral incompetence can present as massive haemoptysis.
 - Mitral valve prolapse is the most common heart lesion in the community affecting 3% of the population.
 - Angina in patients with aortic stenosis is almost never due to coronary artery disease.
 - Corrigan's sign is often present in aortic stenosis.
 - Critical aortic stenosis requiring surgery is when the valve area is less than 1.0 cm².
17. Regarding endocarditis which is INCORRECT?
- Valve leaflets are most susceptible secondary to large surface area.
 - Haemodialysis or peritoneal dialysis is a risk factor.
 - Acute endocarditis is usually more severe and affects young people with normal valves.
 - Aortic and mitral valves are most commonly affected except for in IV drug users.
 - Staph aureus and strep pneumoniae are the most common organisms affecting tricuspid and pulmonary valves.
18. Which is not an absolute indication for surgery in endocarditis?
- Severe CHF as a result of valvular lesion.
 - Vegetations greater than 10 mm.
 - Uncontrolled infection despite optimal management.
 - Relapse after optimal therapy in prosthetic valve patient.
 - Unstable prosthesis.
19. Regarding prophylaxis against endocarditis which is true?
- Although widely accepted practice prophylaxis has not shown to be effective.
 - HOCM is a low risk lesion not requiring prophylaxis.
 - Patients with high risk valve lesions require prophylaxis for IDC insertion even in the absence of UTI.
 - Prior endocarditis is not a recognized indication for prophylaxis.
 - Oral antibiotics are inadequate in prophylaxis and should be replaced with IV.
20. Which is the most common presenting symptom in PE?
- Dyspnea
 - Pleuritic chest pain
 - Anxiety
 - Cough
 - Haemoptysis
21. Which statement is correct regarding PE?
- The CXR is abnormal in 50% of cases of PE.
 - Wester mark sign is a semicircular opacity that is pleural based.
 - The latex agglutination test for D-dimer is more sensitive than the ELISA test.
 - 40-50% of the pulmonary arterial circulation must be occluded for someone to present with massive PE i.e. hypotensive and hypoxic.
 - Pulmonary angiography is 100 % sensitive for PE and is the gold standard.
22. From results gathered for the PIOPED study which of the following probabilities matches VQ scan result.
- High probability — 90% chance of PE
 - Low probability — 15-30% chance of PE

- c. Intermediate — 50% chance of PE
- d. Normal scan ~0-5% chance of PE
- e. None of the above is correct.

23. Which is true regarding treatment of PE?

- a. LMW heparin has been shown to be as effective as unfractionated heparin.
- b. Thrombolytics have been shown to reduce mortality in massive PE.
- c. Streptokinase appears to be the most effective thrombolytic agent.
- d. The dose of streptokinase is 1500 000 units over 60 mins.
- e. Surgical embolectomy without bypass facilities has a mortality rate of 90%.

24. Which of the following scenarios requires anticoagulation for treatment of PE without further investigation i.e USS or angiography?

- a. Intermediate probability scan with low clinical probability.
- b. High prob VQ with low clinical probability.
- c. Intermediate prob VQ with intermediate clinical probability.
- d. Low prob VQ with intermediate clinical probability and positive leg USS.
- e. Low prob VQ with high clinical probability.

25. Which of the following is incorrect regarding hypertensive encephalopathy?

- a. A diastolic BP of greater than 130 mmHg is pathognomic.
- b. Is an emergency as left untreated can lead to coma and death.
- c. Treatment should aim at reducing MAP by 25% in 2-4hrs.
- d. Clonidine should be avoided in the treatment.
- e. Sodium nitroprusside at does 0.5-10 micrograms/Kg/mm is the treatment of choice.

26. Which statement if correct regarding the management of hypertensive emergencies?

- a. Treatment of severe hypertension in the setting of stroke is standard practice.
- b. Pre-eclampsia can be treated with IV hydralazine and oral losarten.
- c. Sodium nitroprusside alone is adequate treatment for HT in the setting of aortic dissection.
- d. Beta blockers should be avoided in acute renal insufficiency.
- e. Trimethaphan is used as first line in aortic dissection and has relatively minor side effect profile.

27. Which is true of aortic dissections? a Male: Female ratio 1:1

The site of intimal tear is in the ascending aorta in 35% of cases. Stanford Type B dissections are distal to the left common carotid.

- d. A difference in BP of greater than 1 SmmHg between arms is seen in 40-50% of cases. Aortography remains the gold standard as sensitivity reaches 100%.

- ~ Regarding treatment and prognosis of aortic dissections which is true?

- a. Stanford type A dissections have mortality of 100% without surgery.
- b. An indication for surgery in Stanford Type B dissection is Marfan's syndrome.
- c. Ongoing chest pain with normal BP is not an indication for antihypertensives.
- d. Percutaneous self expanding stents and intraluminal grafts are only indicated in Type B dissections.
- e. Presence of pericardial tamponade in ED is an indication for Needle pericardiocentesis.

29. Which is INCORRECT regarding abdominal aortic aneurysms?

- a. 98% are infra-renal.
- b. Risk of rupture outweighs elective surgical risk when greater than 5 cm in otherwise healthy people.
- c. Cullen's sign signifies retroperitoneal haematoma, when associated with ruptured AAA.
- d. Saccular aneurysms have a higher risk of rupture than Fusiform.
- e. Presence of COAD is a risk factor for rupture.

30. Which statement regarding the ischaemic limb is true?

- a. Chronic critical limb ischaemia is defined as claudication occurring with minimal exertion.
- b. Thrombosis of pre-existing atheroma is the commonest cause of acute limb ischaemia.
- c. Irreversible changes start to occur at 4 hrs post acute limb ischaemia.
- d. Systemic thrombolysis has been shown to be as effective as intra-arterial thrombolysis in acute limb ischaemia.
- e. An arteriogram should be performed on all patients prior to embolectomy.

31. Which is not a risk factor for DVT?

- a. Old age
- b. Blood group A
- c. Protein C deficiency
- d. Diabetes
- e. Factor XII deficiency.

32. Which is true of DVT?

- a. Symptomatic DVT will be in popliteal or more proximal veins 80% of time.
- b. Wells criteria states that patients with a low probability score of 0 or lower have an incidence of DVT of 5-10%.
- c. D-dimer sensitivity is increased if DVT is present for greater than one week.
- d. Anticoagulation will decrease the risk of post phlebotic syndrome.
- e. Below knee DVTs have a 5% chance of propagation to the deep system so require surveillance scans or anticoagulation.

33. A 55 year old woman who is a cardiac transplant patient presents to ED. Which statement about this woman is true?

- a. Atropine is the first line agent for use of symptomatic bradycardia.
 - b. Reduction in limb lead voltages on ECG is fairly specific for rejection.
 - c. CMV infection is unlikely to occur if previous exposure prior to transplant.
 - d. She will have to stay on corticosteroids for life.
 - e. Chronic rejection will usually present as CHF secondary to AMI or sudden death.
1. A woman presents at 34/40 gestation with PV bleeding. The diagnosis of placenta praevia is more likely if she also has:

- a) a history of a normal scan at 15/40
- b) abdominal pain
- c) shock out of keeping with the degree of observed blood loss
- d) a history of recent trauma
- e) a history of previous caesarean section.

2. Factors associated for SIDS include all EXCEPT:

- a) Sleeping in the prone position
- b) Previous episode of apparent life threatening event (ALTE)
- c) Maternal alcohol use
- d) Winter months
- e) Family history of SIDS

3. On examining the chest of a 70 year old man you hear a pansystolic murmur. The apex beat is displaced to the 6th intercostal space, anterior axillary line. The murmur becomes softer on inspiration. Which of the following about this valvular lesion is true?

- a) Pulsatile hepatomegaly is an accompanying sign
- b) An opening snap precedes the murmur
- c) The Valsalva manoeuvre would make the murmur louder
- d) A soft first heart sound is a sign of severity
- e) Congenital parachute valve is the most likely cause

4. Lignocaine

- a) carries a greater risk of causing allergy than ester anaesthetics
- b) is an active agent in EMLA cream
- c) causes less pain during local infiltration if its pH is reduced
- d) has an onset of action at 10 minutes after infiltration
- e) is incompatible with bicarbonate

5. A patient has the following arterial blood gas results:

pH 7.50
pCO₂ 42
P^o₂ 59
HCO₃ 37
BE +12

The following are possible causes EXCEPT:

- a) Addisonian crisis
- b) Severe vomiting
- c) Massive blood transfusion
- d) Artificial ventilation of a COAD patient
- e) Bartter's syndrome

- a) Green is the colour designated for "Semiurgent" cases
- b) Urgency of a particular case is synonymous with severity
- c) Allocated triage categories may not be changed
- d) "Urgent" cases should receive medical attention within 30 minutes
- e) It differs from Disaster Triage only in the number of categories it uses

7. A 23 yo man presents to the ED with severe foot pain after accidentally stepping on a stonefish. Effective treatment includes the following EXCEPT:

- a) Regional anaesthesia
- b) Antivenom administration
- c) Pressure — immobilization
- ci) Local wound injection with hyoscine butylbromide (Buscopan)
- e) Immersion of the limb in hot water

8. A registrar who intubated a child with proven Haemophilus influenzae type b meningitis is 16 weeks pregnant. The most suitable prophylaxis regimen for her would be

- a) Rifampicin 600mg orally daily for 4 days
- b) Ceftriaxone 1g intravenously for 2 days
- c) Ciprofloxacin 500mg orally as a single dose
- d) Rifampicin 600mg orally bid for 2 weeks
- e) Ceftriaxone 1g intravenously as a single dose

9. A 12 month old child sustains partial thickness burns to the sole of its left lower limb. The percentage of total body area burnt is.

- a) 10
- b) 14
- c) 16
- d) 18
- e) 20

10. A 56 yo man presents with a penetrating wound to his leg from a wooden stake. The wound is contaminated with debris. His last tetanus booster was 12 years ago, but records reliably indicate he's had 3 doses of tetanus vaccine. The most appropriate anti-tetanus regimen for him is:

- a) ADT (Adult Diphtheria Tetanus) *plus* tetanus Ig (immunoglobulin)
- b) Tetanus Ig only
- c) ADT only
- d) Child diphtheria tetanus~ as he is immunologically "immature"
- e) Nothing. No vaccine is indicated

11. As team doctor for a mountain climbing expedition. you've been managing a 30 yo fellow climber who's suffered mild headache and nausea. Upon reaching 4500m in altitude, your patient becomes increasingly confused and ataxic. You note a left sixth cranial nerve palsy on examination. Further management would include the following EXCEPT:

- a) Oxygen
- b) IV fluids
- c) Hyperbaric therapy (eg Gamow Bag)
- d) Descent
- e) Dexamethasone

12. In a neonate who is 24 hours old, jaundice is likely to be due to:

- a) ABO incompatibility
- b) Breastmilk
- c) Congenital haemolytic anaemia
- d) Physiological causes
- e) Hypothyroidism

13. Which of the following patient features is LEAST associated with the risk of suicide?

- a) Male gender
- b) Divorced
- c) Excessive drug use
- d) Loss of rational thought
- e) Age between 19 and 65 years

14. The following can cause *Torsades de Pointes* EXCEPT;

- a) Organophosphate poisoning
- b) Congenital prolonged QT syndrome
- c) Hypercalcaemia
- d) Tricyclic antidepressants
- e) Class III antiarrhythmic agents

15. Examination of a patient's weak left upper limb reveals a clawed hand with wasted intrinsic muscles and sensory deficit on the ulnar aspect of the hand and forearm. Biceps jerk is normal, triceps jerk reduced.

The patient most probably has:

- a) Ulnar nerve palsy at the elbow
- b) Median nerve palsy
- c) Ulnar nerve palsy at the wrist
- d) Upper brachial plexus lesion (Erb's)
- e) Lower brachial plexus lesion (Klumpke's)

16. A 3 year old girl is referred to the ED because of a reluctance to use her right arm. An hour earlier, she was playing with her older brother. Examination reveals no deformity nor specific tenderness. The GP sent in Xrays of the elbow, on which you see no abnormality. The most appropriate action is:

- a) Xray the left elbow for comparative films
- b) Forced supination of the right elbow
- c) Immobilisation with a full plaster cast
- d) Referral to an Orthopaedic surgeon
- e) Repeating the elbow Xray

17. Criteria for the diagnosis of Kawasaki Disease includes

- a) An ESR greater than 60 seconds
- b) Fever of 4 days, polymorphous rash and suppurative conjunctivitis
- c) Positive serum Kawasaki antibodies
- d) Cervical lymphadenopathy, strawberry tongue and polymorphous rash
- e) Fever of 5 days, arthritis and erythema nodosum

18. Post exposure prophylaxis against Human Immunodeficiency Virus (HIV):

- a) is probably not effective when commenced 30 hours post exposure
- b) is administered intramuscularly
- c) is generally recommended by partners
- d) when given, precludes the need for follow up serology
- e) is absolutely contra-indicated in pregnant women

19. The following are used as Ranson Criteria in acute pancreatitis EXCEPT:

- a) Age over 55 years
- b) Systolic BP <90mmHg
- c) Hyperglycaemia
- d) Hypocalcaemia
- e) Metabolic acidosis

20. Risk factors for developing hypertension during pregnancy include the following EXCEPT:

- a) Chronic renal disease
- b) Age > 40 years
- c) Multiple gestation
- d) Diabetes mellitus
- e) Multiparity

21. Croup can be caused by the following EXCEPT:

- a) allergy
- b) Parainfluenza virus
- c) RSV
- d) Rhinovirus
- e) EBV

22. A 56 year old alcoholic man presents with jaundice, vomiting and epigastric pain. He tells you that he ingested 30 x 500mg tablets of Paracetamol 36 hours ago, along with some alcohol. The most appropriate treatment would be

- a) Expectant initially, then antidote (N-acetyl cysteine) only if Paracetamol level falls above "hepatotoxicity" line on nomogram
- b) Supportive care only
- c) Activated charcoal, intravenous NaHCO₃
- d) Antidote initially, then ceasing if serum Paracetamol falls below "hepatotoxicity" line
- e) Empiric antidote therapy and supportive care

23. Which of the following is LEAST likely to cause upper lobe pulmonary fibrosis?

- a) Tuberculosis
- b) Asbestosis
- c) Sarcoidosis
- d) Silicosis
- e) Ankylosing Spondylitis

24. Hyperkalaemia causes the following ECG changes EXCEPT:

- a) Peaked T waves
- b) QRS widening
- c) Sine wave
- d) J wave
- e) Small P waves

25. The GUSTO trial (NEJM, 1993)

- a) had two arms
- b) observed a mortality benefit of tPA (compared with SK) only in North America
- c) suggested a higher incidence of intracranial haemorrhage from SK compared with tPA
- d) involved around 4500 patients
- e) also compared primary angioplasty with tPA

26. The Revised Trauma Score

- a) has a lowest score of three
- b) considers the GCS, pulse rate and respiratory rate
- c) has a highest score of 12
- d) is the score of four different patient parameters
- e) is applicable only to children

27. In children with urinary tract infections:

- a) Klebsiella species are the commonest causative organism
- b) Trimethoprim is contraindicated
- c) The incidence of renal scarring is greatest in those under 1 year of age
- d) Renal ultrasound is not indicated in girls with the first presentation
- e) Fluoroquinolones are recommended first line antibiotics

28. Archives of Emergency Medicine has just published a retrospective study reporting on the utility of a new bedside Doppler ultrasound to diagnose testicular torsion in the ED.

You read the following data (numbers are absolute values):

	Test Positive	Test Negative
Torsion Present*	90	10
Torsion Absent*	180	1620

*determined at operation, or following complete recovery of patient

Which of the following statements is CORRECT?

- a) The sensitivity of the test is 0.8
- b) The specificity of the test is 0.8
- c) The positive predictive value is 0.333
- d) The prevalence of torsion in the group tested was 0.10
- c) The positive predictive value would not be different if the prevalence of torsion in this group was higher

29. Regarding Non Ketotic Hyperosmolar Coma:

- a) It occurs most often in Type 1 diabetes
- b) The prognosis is generally better than that of DKA
- C) --Non ketosis is actually a misnomer. as ketosis is usually significant
- d) Fluid overload is an associated feature.
- e) Its onset is usually slow. occurs over days.

30. A 68 year old man presents with sudden, painless, complete loss of vision in one eye. The most likely diagnosis is:

- a) Retinal detachment
- b) Optic neuritis
- c) Central / Branch Retinal Vein Occlusion
- d) Acute angle closure glaucoma
- e) Central Retinal Artery Occlusion.

31. Regarding childhood supracondylar fracture:

- a) It is most commonly associated with ulnar nerve damage
- b) Posterior angulation of 5 degrees requires manipulation
- c) It is associated with a fall on the point of the elbow
- d) Following manipulation, the ideal position is flexion of the elbow
- e) In a 2 year old the medial epicondyle should be visible on x-ray

32. A patient who has been taking a MAO Inhibitor for years presents to the ED with hyperthermia, confusion, hypertension and diaphoresis. He has no known allergies/adverse reactions. Which of the following agents should NOT be used in his management?

- a) Diazepam
- b) Pethidine
- c) Chlorpromazine
- d) Cyproheptadine
- e) Methysergide
- a) A bruise with any yellow is older than 18 hours
- b) A pulled elbow is pathognomonic
- c) Non accidental trauma occurs most commonly in children over 5 years of age
- d) Purple bruises cannot occur within 2 hours of the injury
- e) It has no association with prematurely born children

34. During defibrillation for VF, transthoracic impedance may be reduced by the following EXCEPT:

- a) Defibrillation in inspiration
- b) Conductive electrode pads
- c) Repeated countershocks with short intervals
- d) Paddles of appropriate size

e) Applying firm pressure on paddles against the chest wall

35. Regarding Paediatric resuscitation:

- a) The internal diameter (mm) of a suitable endotracheal tube is $\text{age}/2 + 4$
- b) The initial dose of IV adrenaline for asystole is 0.01 mg/kg
- c) Primary cardiac disease is the commonest cause of cardiac arrest
- d) The initial energy for monophasic defibrillation of VF is 4 Joules/kg
- e) Head extension achieves optimal airway opening in neonates

36. Which of the following agents in NOT effectively eliminated by haemodialysis in overdose?

- a) Salicylate
- b) Iron
- c) Lithium
- d) Theophylline
- e) Methanol

37. Examination of a 65 year old man reveals jaundice, spider naevi, palmar erythema and gynaecomastia. Which of the following is the LEAST likely cause?

- a) Alcohol
- b) Chronic right heart failure
- c) Hepatitis B
- d) Budd Chiari syndrome
- e) Hepatitis A

38. A patient has known small cell bronchogenic carcinoma. He has no other medical history, and is on no medications. He presents with a serum Na of 126 (measured by ion sensitive electrode), and is clinically euvolaemic. Investigations will also reveal:

- a) Nonnal serum osmolarity
 - b) Urine osmolarity less than plasma osmolarity
 - c) Urinary Na less than 10 mmol/L
 - d) Low serum thyroxine
 - e) None of the above
- a) The female to male ratio is 4:1
 - b) Ileo-colic intussusceptions are the most common form
 - c) Red currant jelly stools present as an early sign
 - d) It most frequently occurs in the 2-3 year age group
 - e) It is uncommonly idiopathic

40. An intern presents you with a rhythm strip ECG, showing sinus rhythm with a rate of 60bpm. The measured QT interval is 420msec, but he inquires about the *corrected* QT interval (QT_c). You would inform the intern that:

- a) There is insufficient information, as a 12 lead ECG is required
- b) The QT_c is $420 / (\text{square root of } 2) \text{ msec}$
- c) Calculation of QT_c is irrelevant when the heart rate is less than 70bpm
- d) The QT_c is 420msec
- e) The QT_c is $420 / (\text{square root of } 60) \text{ msec}$

41. Regarding trans-cutaneous cardiac pacing:

- a) The positive pad is placed posteriorly
- b) Current output is measured in millivolts (mV)
- c) Chest muscle contraction is a reliable sign of capture

- d) Demand mode ensures that pacing output continues regardless of patient's native rate
- e) It is contraindicated in digoxin toxicity

42. A 12 month old child with partial thickness burns to 28 % of its body is brought in 2 hours post injury. Fluid requirement in the first 6 hours in hospital is likely to be:

- a) 280 ml
- b) 560 ml
- c) 780 ml
- d) 1060 ml
- e) 1413 ml

43. An adult with severe asthma has been intubated. Mechanical ventilation should:

- a) Deliver high minute volumes
- b) Be set at a high inspiratory flow rate
- c) Be adjusted to maintain a normal PaCO₂
- d) Employ a high PEEP
- e) Have a short expiratory time (TE)

44. A Salter-Harris **type 5** injury is best described as:

- a) Crushing of all or part of the epiphysis
- b) The whole epiphysis is separated from the shaft
- c) The epiphysis is displaced carrying with it a small triangular metaphyseal fragment (the commonest injury)
- d) Separation of part of the epiphysis
- e) Separation of part of the epiphysis with a metaphyseal fragment

45. Contralateral foot and leg weakness or hemiplegia (leg > arm), grasp reflexes, incontinence and abulia is consistent with thrombotic stroke in the territory of

- a) Ophthalmic artery
- b) Middle cerebral artery
- c) Anterior cerebral artery
- d) Posterior cerebral artery
- e) Vertebral and basilar artery

46. The use of verapamil:

- a) is preferable to adenosine in infants with SVT
- b) is ineffective in SVT treatment if Ca-gluconate has been given previously
- c) is of equivalent expense to adenosine
- d) is preferable to adenosine in broad complex tachycardias as a diagnostic aid
- e) is contraindicated in SVT associated with congestive cardiac failure

47. A patient with severe **haemophilia A** is likely to have

- a) normal APTT but high INR
- b) Hepatitis B, C and HIV if transfused between 1991 and 1994
- c) an 80% chance of having inhibitors present due to previous factor VIII infusions
- d) a low risk of haematoma from CVC insertion prior to factor replacement
- e) a poor response to desmopressin

48. A 2 year old boy is bitten by a snake. Antivenom is

- a) mandatory if the snake is positively identified by a herpetologist as venomous

- b) safely given once the dose is adjusted to the boV s weight
- c) used on the basis of bite site venom detection and coagulopathy
- d) associated with reduced risk of serum sickness if polyvalent
- e) only ever given once the venom type can be identified

49. Regarding iron overdose:

- a) Ferric 3± iron is better absorbed than ferrous (Fe²⁺) iron
- b) Activated charcoal has a role only if presentation occurs within 1/24 of ingestion
- c) If early GI symptoms resolve after 6 hours then significant ingestion is effectively excluded
- d) The absence of vomiting or other GI symptoms in the *first 6 hours* **essentially** excludes significant toxicity
- e) The return of normal coloured urine after desferrioxamine administration is an indication to increase the infusion rate

50. A 28 year old man has been removed from the scene of a house fire. Evidence of cyanide exposure may include all EXCEPT:

- a) Elevated anion gap
- b) Metabolic acidosis with a nonnal P⁰2
- c) Decreased measured O2 saturations
- d) An increased arterio-venous (A-V) O2 difference
- e) Elevated erythrocyte cyanide levels
 - a) the onset is slow
 - b) there is aggravation by movement
 - c) severe nausea is present
 - d) nystagmus is purely horizontal
 - e) there is fatigue of eye signs

52. A diver brought to a small regional ED has symptoms and signs suggestive of cerebral arterial gas embolism (CAGE): Management includes the following EXCEPT:

- a) High flow O2
- b) Sitting the patient up to reduce cerebral oedema
- c) Recompression at an appropriate facility
- d) Titrated intravenous crystalloids
- e) Transport in a vehicle at, or pressurized to 1 atmosphere (ATA)

53. Regarding Low Molecular Weight (LMW) heparin:

- a) Its effects are fully reversed by protamine
- b) It has a higher bioavailability than unfractionated heparin by subcutaneous injection
- c) There is a higher risk of thrombocytopenia than unfractionated heparin
- d) Enoxaparin Clexane is measured in international units (IU)
- e) APTT is a reliable measure of its antithrombotic activity

54. Fallot's Tetralogy does NOT include:

- a) ventricular septal defect VSD
- b) right ventricular hypertrophy
- c) transposition of the great vessels
- d) overriding aorta
- e) pulmonary stenosis

55. Which of the following is an example of a clinical indicator?
- a) A positive serum troponin
 - b) A postgraduate education tutorial
 - c) Guidelines for the management of paracetamol poisoning
 - d) A death audit
 - e) The National Triage Scale
56. A patient is brought in with a core temperature of 28.0 C. He is likely to have the following EXCEPT:
- a) atrial fibrillation with a rate of 40bpm
 - b) Osborne waves on the ECG
 - c) muscular rigidity
 - d) hypotension
 - e) shivering
- a) mercury / British anti-Lewisite
 - b) cyanide / dicobalt edetate
 - c) paraquat / Fuller's Earth
 - d) isoniazid / pralidoxime
 - e) amitriptyline / Na HCO₃
58. Which area of the mandible is most commonly fractured?
- a) angle
 - b) condyle
 - c) molar
 - d) mental
 - e) symphysis
59. Which of the following anatomical regions is NOT routinely examined in a Focused Abdominal Sonography in Trauma (FAST study)?
- a) Pericardium
 - b) Splenorenal recess
 - c) Morisons Pouch (hepato-renal recess)
 - d) Paracolic Quarter
 - e) Pouch of Douglas
60. A 13 year old boy presents with 3 days of right hip stiffness and groin pain after activity. Examination reveals a well, afebrile child with a slight limp and pain on internal rotation of the right hip. The most likely diagnosis is:
- a) Congenital hip dislocation
 - b) Slipped upper femoral epiphysis
 - c) Septic arthritis
 - d) Transient synovitis
 - e) Legg-Calv[L]-Perthes disease
18. Which cranial nerve does not travel through the orbital foramen?
- a) 2
 - b) 3
 - c) 4
 - d) 5
 - e) 6
19. Which substances are found in CSF but not simple rhinorrhoea?

- a) glucose
- b) lactate
- c) acid
- d) base
- e) galactose

20. Which facial view x-ray is the best for examining the orbits and maxilla?

- a) OPG
- b) Waters or occipito-mental
- c) Caldwell or PA view
- d) Submental vertex
- e) Towne

21. A tripod fracture involves what?

- a) it is another word for Le Fort fracture
- b) zygomatico-temporal and zygomatico-frontal suture diastasis and infraorbital rim fracture
- c) fracture through maxilla, zygomatic arch and nasal bones
- d) fracture through neck angle and body of the mandible
- e) superior and inferior orbital rim fracture and diastasis of zygomatico-frontal suture

22. What is the name of the fracture that is clinically detected by tugging on the maxilla/hard palate causing the nose to move.

- a) Le Fort 5
- b) Le Fort 4
- c) Le Fort 3
- d) Le Fort 2
- e) Le Fort 1

23. Which investigation of the abdomen in trauma is described by: rapid, sensitive, not specific, not examine retroperitoneum, repeatable, non invasive?

- a) physical examination
- b) CT
- c) FAST
- d) DPL
- e) Plain x-ray

24. What RBC count constitutes a positive DPL?

- a) >30 000/cm³
- b) >60 000/cm³
- c) >100 000/cm³
- d) >200 000/cm³
- e) >500 000/cm³

25. Where is Zone 1 in the Roon and Christensen classification of neck trauma?

- a) clavicles to cricoid cartilage
- b) cricoid cartilage to angle of mandible
- c) angle of mandible to base of skull
- d) Midline to anterior border of sternomastoid
- e) Post border of sternomastoid to ant border of trapezius

26. Which statement is incorrect with regards to penetrating neck injury? a) if the platysma muscle is clearly intact local wound repair is all that is required

- b) if the platysma has been violated it must be assumed that significant injury has occurred
- c) in a stable patient with a zone 1 injury angiography and oesophagoscopy are mandatory ±1-bronchoscopy
- d) in a stable patient with a zone 3 injury angiography and oesophagoscopy are mandatory +1-bronchoscopy
- e) Zone 2 injuries some people advocate mandatory exploration

27. Which statement is true regarding Cx spine fracture in hanging?
- this is the usual mechanism of death with associated spinal cord transection
 - it is often seen but is not usually associated with spinal cord injury
 - it is only seen if the person falls the distance of their height and their feet do not touch the ground
 - the lower Cx spine is usually involved when it occurs
 - spinal cord injury tends to happen without Cx spine fracture
28. When should thoracotomy be considered in traumatic haemothorax?
- if initially drain 800ml
 - if initially drain 1000ml
 - if sustained loss of 50ml/hr for 2 hours
 - if sustained loss of 200ml/hr for 2 hours
 - always
29. What is the largest size haemothorax that an injury to an intercostal artery can cause?
- Negligible-50ml
 - Small 200ml
 - Moderate=600ml
 - Large = 1200ml
 - Massive=> > 1600ml
30. What percentage of rib fractures may not be apparent on CXR?
- 10%
 - 20%
 - 30%
 - 40%
 - 50%
31. Which is incorrect with regards to the use of investigations to investigate myocardial trauma in sternal fractures?
- troponin should be requested in most patients
 - ECG should be done in most patients
 - If ECG normal and normal vital signs, no need to investigate further
 - If abnormal ECG they should be admitted and monitored
 - Transthoracic Echo can be used to assess myocardial wall motion
32. Which part of the heart is most often damaged in blunt cardiac trauma? a)RV
b) LV c)RA d)RV
e) Interventricular septum
33. What percentage of pts with blunt trauma to the aorta who survive to hospital will be dead within 24 hours if left untreated?
- 10%
 - 20%
 - 30%
 - 40%
 - 50%
34. What is the next step if you see a stable patient with a good mechanism of injury for traumatic aortic dissection and a widened mediastinum on CXR?
- MRI
 - OT
 - Spiral CT
 - Aortography
 - TOE
35. Which sign on CXR is most specific and sensitive for traumatic aortic dissection? a) widened mediastinum
b) Esophageal deviation of >2cm to right at level of T4
c) obscuration of the aortic knob
d) small left haemothorax

e) depression of the R main bronchus >40 degrees below horizontal

36. Which burn can be treated with calcium gluconate?

- a) hydrochloric acid
- b) acetic acid
- c) sulphuric acid
- d) hydrofluoric acid
- e) nitric acid

37. Which is not seen in hydrofluoric acid burns?

- a) Hyperkalaemia
- b) hypocalcaemia
- c) hypomagnesaemia
- d) hypematremia
- e) severe pain

38. Which is false about chemical burns?

- a) alkalis cause more damage than acids
- b) irrigation is not the mainstay of treatment in elemental metals
- c) eyes should be irrigated at least 30 mins with 1-2L normal saline
- d) calcium gluconate can be given by intra-arterial infusion for hydrofluoric acid burns
- e) alkali burns should be doused in sand prior to irrigation

39. What percentage of a 1 year old child is burnt if their anterior torso and all of R arm are burnt?

- a) 10%
- b) 15%
- c) 24%
- d) 32%
- e) 49%

40. Which is not a feature of lightning strike?

- a) death due to VF
- b) cataracts
- c) keraunoparalysis
- d) feathering burns
- e) perforated ear drum

41. Which is false about a lightning strike?

- a) the patient should not be handled as they are charged and dangerous
- b) flashover is potentially life saving
- c) the likelihood of long term impairment after recovery is low
- d) being struck directly is more dangerous than side flash and step voltage
- e) if caught in a lightning strike you should keep your feet together and crouch down

42. Which is false of electrocution?

- a) death is usually due to VF
- b) delayed fatal arrhythmias are extremely rare
- c) blood vessels, nerves and muscles are the most conductive
- d) DC current is worse than AC
- e) if pregnant the fetus is usually OK

43. How much blood loss is necessary to first show hypotension?

- a) 10%
- b) 2000
- c) 25%

- d) 30%
- e) 40%

ANSWERS

- 18)C 19)A 20)B 21)B 22)D 23)C 24)C 25)A 26)D 27)C 28)D 29)E
 30)E 31)A 32)A 33)E 34)B(C?) 35)A 36)D 37)D 38)E 39)C 40)A
 41)A 42)D 43)D

1. Which is not a risk factor for subarachnoid haemorrhage? a) female
 b) 1st degree relative with SAH
 c) polycystic ovaries
 d) smoking
 e) Marfans syndrome, coarctation of the aorta

2. What percentage of pts with SAH have a prior sentinel warning hemorrhage?
 a) 10%
 b) 20%
 c) 30%
 d) 40%
 e) 50%

3. A patient with a SAH has a severe headache with nuchal rigidity but no focal neurological signs. What is her Hunt and Hess classification?
 a) 1
 b) 2
 c) 3
 d) 4
 e) 5

4. Which statement is incorrect with regards to non contrast CT in SAH
 a) <12 hours ~97.5% detection
 b) 24 hours ~95% detection
 c) 1 week 50% detection
 d) 3 days = 75% detection
 e) 1 hour = 100% detection

5. Which statement is FALSE about xanthochromia and SAH?
 a) Inspection of CSF with the naked eye reliably detects xanthochromia
 b) it is present in all CSF at 6 hours
 c) it remains in CSF for 2 weeks
 d) it is not present in a traumatic tap
 e) it is detected with spectrophotometry

6. Which statement is INCORRECT with regards to vasospasm in SAH?
 a) it usually occurs at day 4-14
 b) it affects 30% of pts with SAH
 c) it has a 30% morbidity and mortality untreated

- d) hypertensive therapy with iv fluids and inotropes is contraindicated
- e) the treatment of choice is Nimodipine

7. Which interventions are NOT recommended and proven in Australia for treatment of isehemic strokes?

- a) thrombolysis if less than 3 hours and normal CT
- b) aspirin
- c) specialized stoke unit
- d) warfarin if atrial fibrillation
- e) clopidogil

8. A patient presents with right sided arm weakness and a R facial droop with aphasia. Which artery distribution is the likely to be the cause of her stoke?

- a) right MCA
- b) left MCA
- c) right anterior cerebral artery
- d) left anterior cerebral artery
- e) left vertebrobasilar system

9. A patient presents with a left arm weakness > left leg weakness and left special neglect. Which of the above arteries is the likely distribution of her stroke?

10. Which is true of the recent trial (NINDS) of thrombolysis in acute ischemic stroke?

- a) streptokinase has the same risk benefit profile as tPA
- b) the mortality rate of tPA given within three hours of onset of ischemic stroke is lower than that of the stoke without thrombolysis
- c) the mortality rate of tPA given within three hours of onset of ischemic stroke is higher than that of the stoke without thrombolysis
- d) the long term disability rate in patients surviving their stoke is less if they were given tPA
- e) the long term disability rate in patients surviving their stoke is higher if they were given tPA

11 Which statement is FALSE about carotid stenoses?

- a) in a patient with an anterior circulation isehemic event, the presence of a bruit suggests a moderately severe stenosis
- b) in a patient with an anterior circulation ischemic event, the absence of a bruit dismisses a moderately severe stenosis
- c) a symptomatic stenosis >70% is often operated upon
- d) an asymptomatic stenosis of > 70% is usually not operated upon
- e) all patient with stenoses < 30% should not be considered for endarterectomy

12. When would heparin be given in an ischemic stroke or TIN?

- a) all
- b) vertebro basilar ischemic stroke
- c) anterior circulation ischemic stroke with no prior history of cerebrovascular disease
- d) ischemic stroke or TIA secondary to proven cardioembolic source
- e) lacunar infarct with 80% carotid stenosis

13. Which statement is FALSE regarding migraine?

- a) pathophysiology involves inflammation of the trigeminovascular system
- b) serotonin plays an integral part
- c) the aura, if present, should last less than 60 mins and be totally reversible
- d) it is typically bilateral, pulsating and occipital
- e) the headache usually last 4-72 hours

14. Which is incorrect regarding the pharmacological treatment of migraine? a) chlorpromazine is a first line agent

- b) sumatriptan is a first line agent
- c) dihydroergotamine should not be given if sumatriptan has already been taken
- d) pethidine is not as effective in treatment and has a higher rebound c.f other agents
- e) dexamethasone has been proven to decrease rate of recurrence

15. Which statement is FALSE regarding other headaches?

- a) cluster headaches are short lived lasting 15-180 mins
- b) oxygen can relieve a majority of cluster headaches
- c) temporal arteritis usually produces an ESR of 20
- d) temporal arteritis can cause ischemic optic neuritis if left untreated
- e) treatment of temporal arteritis involves oral prednisolone

16. What percentage of the population will have at least one seizure in their lifetime?

a~ 2.5%

- b) 50o
- C) 10%
- d) 1506
- e) 17.50o

17. How long does a pt have to be seizing for to be in Status Epilepticus?

- a) 20 mins
- b) 30 mins
- c) 40 mins
- d) 50 mins
- e) 60 mins

18. Which statement is false about Phenytoin?

- a) the loading dose is 15-20 mg/kg
- b) if a Pt on phenytoin arrives in status epilepticus then the full loading dose should still be given
- c) side effects include hypotension and bradyarrhythmias
- d) it is extremely effective in alcohol induced seizures
- e) it is contraindicated in 2nd and 3rd degree heart block

19. Which statement is false about benzodiazepines and seizures?

- a) there is little evidence to support any particular one
- b) the dose of clonazepam in a child is 0.5 mg, and an adult 1mg
- c) diazepam can be safely used PR, IM or IV
- d) the rectal dose of diazepam for a 3 year old is about 5mg
- e) the IV dose of diazepam in a 1 year old is about 2-3mg

20. Which of the features below is not consistent with a pseudoseizure?

- a) rhythmic thrusting of the pelvis
- b) extremity movements out of phase bilaterally
- c) head rolling from side to side
- d) recall of events during the seizure
- e) tongue biting

21. What is the recommended antibiotic regimen for empirical treatment of bacterial meningitis in a 40 year old?

- a) Ceftriaxone 2gm and Benzylpenicillin 1.8gm
- b) Ceftriaxone 2gm
- c) Benzylpenicillin 1.8gm
- d) Ceftriaxone 2gm and Benzylpenicillin 1.8gm and Vancomycin 5QOmg
- e) Ceftriaxone 2gm and Vancomycin 500mg

22. How long should you wait to get an LP before giving antibiotics?

- a) ~ive antibiotics immediately
- b) 10mins
- c) 20mins
- d) 30mins
- e) 45mins

23. Which CSF finding is incorrect?

- a) antigenic studies are useful where partial treatment with antibiotics renders the CSF sterile on culture
- b) antigenic studies are more sensitive when urine and serum are used as opposed to CSF
- c) in viral meningitis the main white cells usually seen are monocytes
- d) you would expect to see a raised CSF pressure in bacterial meningitis
- e) in viral meningitis you would expect to see a low glucose and a high protein

24. Which statement is incorrect about prophylaxis in meningitis?

- a) there is no prophylaxis available for pneumococcus only meningococcus and Hib
- b) it does not need to be given to the index case
- c) it should include all household contact where there has been close contact eg. Share eating utensils
- d) it should be given to the attending medical staff only if they did mouth to mouth
- e) rifampicin or ceftriaxone or ciprofloxacin are in the drugs involved

25. Which of the signs or symptoms below would concern you that the cause of a patient's vertigo was central?

- a) associated vomiting
- b) worsens with position change
- c) associated tinnitus
- d) vertical nystagmus
- e) sudden onset

26. Which of these is not consistent with vestibular neuronitis?

- a) horizontal nystagmus
- b) dysarthria
- c) vomiting
- d) constant for eight hours
- e) vertigo

27. What is NOT true of Guillain Barre Syndrome?

- a) frequently patients report an antecedent viral illness
- b) classical motor weakness is greater and earliest in the legs
- c) there is a lack of deep tendon reflexes
- d) there is peripheral sensory loss greater in the arms than the legs
- e) There may be autonomic disturbances

28. Which statement is false regarding Bells Palsy?

- a) The use of steroids is well proven to decrease duration of illness
- b) Steroids are definitely not of use if the presentation is one week post symptom onset
- c) The feature that excludes it from an upper motor nerve lesion is the inability to furrow the forehead
- d) Other cranial nerves are always normal
- e) It involves the 7th cranial nerve

29. Which of the drugs below is not known to cause an exacerbation of myasthenia gravis?

- a) prednisolone
- b) lignocaine
- c) chlorpromazine
- d) lithium
- e) penicillin

30. Which is not a feature of myasthenia gravis?

- a) motor weakness is usually of proximal extremities and bulbar
- b) there is usually no sensory loss
- c) there is usually no reflex loss
- d) symptoms are often worse as the day progresses
- e) it is due to antibodies formed against acetylcholinesterase

23)E

1 2)D

24)B

31 .Which statement is FALSE about MS?

- a) 30% of patients will initially present with optic neuritis
- b) CSF protein and gammaglobulin levels are reduced in MS
- c) nearly all patients will demonstrate some abnormality on MRI
- d) the overall life expectancy is not usually reduced with MS
- e) MS symptoms will often worsen with fever and exercise

ANSWERS

1)C 2)E

13)D 14)E

25)D 26)B

3B

15)C

27)D

4)E

1 6)C

28)A

5B

17)B

29)E

6D

1 8)D

30)E

7)A

1 9)C

31)B

8)B

20)E

9)A

21)A

1 0)D

22)C

Which of the following agents is LEAST likely to cause hypotension at standard doses?

- A. Morphine
- B. Meperidine
- C. Fentanyl
- D. Midazolam
- E. Propofol

2. Which of the following statements regarding toxicity of local anaesthetics is FALSE?

- A. The first signs of toxicity are dizziness, tinnitus, periorbital tingling, and nystagmus.
- B. Systemic convulsions are rare and usually self-limited.
- C. Most allergic reactions are to aminamide compounds.
- D. For patients allergic to local anaesthetics, diphenhydramine hydrochloride 1 percent can be injected into the wound.
- E. To prevent toxicity, avoid rapid injections of local anaesthetic into the wound.

3. What percentage of unstable angina patients can be identified by positive troponin assays?

- A. 10
- B. 25
- C. 33
- D. 50
- E. 75

4. The Global Utilization of Streptokinase and Tissue Plasminogen Activator for Occluded Coronary Arteries (GUSTO) trial found a reduced mortality rate in groups taking heparin intravenously with tPA rather than streptokinase. For which of the following subgroups of patients were these relatively small benefits of tPA over streptokinase fewer or non-existent?

- A. Patients younger than 75 years
- B. Patients with anterior MI
- C. Patients with inferior MI
- D. Patients with posterior MI
- E. Patients in whom thrombolysis was not initiated within 2 hours of symptom onset

5. Which of the following conditions is NOT associated with a risk of aortic dissection?

- A. Aortic regurgitation
- B. Aortic stenosis
- C. Bicuspid aortic valve
- D. Marfan's syndrome
- E. Coarctation of the aorta

A 62-year-old man is brought to the ED by ambulance with confusion and dyspnea. BP is 80/60. With inspiration, SBP decreases to 55. The monitor shows a HR of 121 beats per minute, with vacillating amplitude of the QRS complex. RR is 26 breaths per minute, and oximetry saturation is 91 percent. Physical examination shows jugular venous distention (JVD), distant heart sounds, cool extremities, and diaphoresis. Chest x-ray is grossly normal. Which of the following would be the MOST effective therapeutic intervention?

- A. Large-volume resuscitation with crystalloid, oxygen, and emergent diagnostic spiral CT.
- B. Large-volume resuscitation with crystalloid, oxygen, and dopamine.
- C. Immediate intubation, large-volume resuscitation, and dopamine.
- D. Large-volume resuscitation, oxygen, and immediate involvement of cardiology consult for placement of an intra-aortic balloon pump.
- E. Large-volume resuscitation, oxygen, and pericardiocentesis.

7. All of the following are true about erysipelas EXCEPT

- A. facial and scalp manifestations occur in infants and the elderly
- B. it progresses to skin desquamation
- C. bacteremia common in the lower extremity manifestations
- D. fever
- E. a sharp well-demarcated edge.

8. Which of the following is a contraindication to the application of a femoral traction splint?

- A. Angulated tibia fracture
- B. Femur fracture
- C. Pelvic fracture
- D. Ankle fracture
- E. Severe head trauma

9. All of the following are true of chemical burns EXCEPT
- A. acids cause deeper tissue injury than do alkalis
 - B. most chemical burns should be copiously irrigated with water
 - C. calcium gluconate is a specific antidote for hydrofluoric acid burns
 - D. Neosporin ointment is useful for removing tar from skin
 - E. time of exposure is the most important factor in determining the extent of tissue damage.

10. All of the following statements are true regarding cold-related injury EXCEPT
- A. chilblains (pernio) is more common in women
 - B. dry heat is the best method for rewarming frostbite
 - C. early surgical intervention is contraindicated for severe frostbite
 - D. body parts affected by cold injury are more sensitive to reinjury
 - E. trench foot may result in irreversible damage.

A 30-year-old contact-lens wearer complains of 2 days of left eye pain and discharge with blurred vision. She immediately stopped using the contact lenses at the onset of symptoms and began antibiotic drops left over from a previous eye infection. There is moderate conjunctival injection and a pinhole-corrected visual acuity of 20/40 on the left. Slit lamp shows an oval-shaped corneal abrasion with dense fluorescein uptake and a halo of white stromal infiltrate. The MOST likely infective organism associated with this disorder is

- A. *Herpes zoster*
- B. *Herpes simplex*
- C. *Pseudomonas*
- D. *Candida albicans*

12. A 65-year-old female arrives via ambulance minutes after accidentally instilling several drops of cyanoacrylate (SuperGlue) into the left eye. She mistook the tube of glue for the artificial tears she uses for dry eyes. The upper and lower lids are joined medially, and there is a large concretion of glue on the lateral corneal surface. All of the following are accepted treatments EXCEPT

- A. immediate copious water irrigation
- B. acetone soaks
- C. mineral oil
- D. mechanical debridement
- E. surgical debridement

13. What is the most common form of barotrauma in recreational scuba divers?

- A. Barotitis media
- B. Canal squeeze
- C. Eustachian barotrauma
- D. Inner ear barotrauma
- E. Auncular barotrauma

14. Which of the following is the LEAST likely clinical feature of a zygomatic-maxillary complex (ZMC) fracture?

- A. Diplopia
- B. Epistaxis
- C. Facial emphysema
- D. Mental nerve anaesthesia
- E. Subconjunctival haemorrhage

15. Which of the following maxillofacial fractures extends bilaterally through the frontozygomatic suture lines?

- A. LeFort I
- B. LeFort II
- C. LeFort III
- D. Mandibular fracture

E. Pyramidal fracture

A 5-year-old male presents to the ED 3 h after a possible button battery ingestion. The patient is in no acute distress, vital signs are stable, and examination is benign. A chest x-ray shows what appears to be a small button battery in the stomach. Which of the following is the MOST appropriate next action?

- A. Upper GI series to further delineate the exact location of the foreign body
- B. Attempt battery removal by the Foley balloon catheter technique
- C. Immediate GI consultation for endoscopic removal
- D. Immediate surgical consultation
- E. Discharge to home with parental observation and weekly radiographs.

17. Which of the following is TRUE regarding meat impaction in the oesophagus?

- A. Endoscopy should be performed within 6 h, even in patients who are handling their own secretions.
- B. Oesophageal pathology is present in up to 50% of patients.
- C. Glucagon, nifedipine, and meat tenderiser should all be tried before endoscopy.
- D. After the patient feels the bolus has passed, a barium swallow should be performed.
- E. Patients without airway compromise can be observed as outpatients and scheduled for a 24-h follow up.

18. Which of the following statements is MOST correct regarding abdominal pain the elderly?

- A. Elderly patients are unlikely to have the problems of younger patients, such as appendicitis or cholecystitis.
- B. Given the same underlying diagnosis for an acute abdominal disorder, the elderly have about the same mortality rate as younger patients.
- C. The elderly exhibit less pain and tenderness than younger patients, but they are more likely to have fever and leukocytosis than are younger patients.
- D. Diagnostic delays and pre-existing illnesses lead to a higher mortality in elderly patients than in younger patients.
- E. The elderly are more likely than younger patients to seek early medical attention for abdominal pain.

19. An 80-year-old male is brought by ambulance from church for evaluation of a syncopal episode. The patient denies chest pain or palpitations and has no history of cardiac or cerebrovascular disease. Witnesses report no seizure activity. They loosened his shirt and tie immediately after the event, and the patient regained consciousness quickly. The patient has had several previous similar episodes for which he did not seek medical attention. One occurred while shaving and another occurred while dressing for church. Of the following, what is the MOST likely diagnosis?

- A. Gastrointestinal haemorrhage
- B. Psychogenic syncope
- C. Carotid sinus hypersensitivity
- D. Transient ischemic attack (TIA)
- E. Pulmonary embolism

All of the following statements regarding platelet abnormalities are TRUE, EXCEPT

- A. bleeding complications may arise if platelets are $< 50,000/pL$
- B. patients are at risk for spontaneous bleeding if platelet counts are $< 10,000/pL$
- C. when platelets drop below $10,000/pL$, the patient should receive a platelet transfusion
- D. patients with ITP respond well to platelet transfusion
- E. each unit of platelets transfused should raise the platelet count by about $10,000/pL$

21. A 15-year-old male with haemophilia A presents with hoarseness, stridor, and anterior neck swelling after an assault in which he sustained a "karate chop" to the throat. What is the MOST appropriate sequence of actions?

- A. endotracheal intubation, factor VIII replacement, neck CT

- B. factor VIII replacement, lateral soft-tissue film of the neck
- C. factor VIII replacement, neck CT, close observation for need to intubate
- D. check PTT and factor VIII assay, neck CT, close observation for need to intubate
- E. surgical airway, check factor VIII levels.

22. An HIV-positive patient presents to the ED complaining of shortness of breath and non-productive cough. Chest x-ray shows diffuse interstitial infiltrates, and O₂ saturation is 85% on room air. All of the following statements regarding this patient's probable diagnosis are TRUE, EXCEPT

- A. *Pneumocystis carinii* pneumonia (PCP) is the most common opportunistic infection in AIDS patients.
- B. Pentamidine isothionate is an effective alternate therapy to TMP-SMX.
- C. A normal chest x-ray rules out acute POP infection.
- D. 65% of patients relapse within 18 months.
- E. Oral steroid therapy should be started in patients with a PaO₂ < 70 mmHg, or an alveolar-arterial gradient > 35.

23. ONS disease occurs in 75 to 90 percent of patients with AIDS. Which of the following is the MOST common cause of opportunistic infection of the ONS in AIDS patients?

- A. Cryptococcal meningitis
- B. Bacterial meningitis
- C. HSV encephalitis
- D. Toxoplasmosis
- E. AIDS dementia

24. A young male presents to the ED unable to give a history. As part of the work-up, you find an anion gap (AG) of 38. All of the following are possible etiologies of this patient's problem EXCEPT

- A. lactic acidosis
- B. ethylene glycol
- C. hyperglycemic hyperosmolar state
- D. renal failure
- E. isopropanol

A 58-year-old female presents to the ED with headache, tender temples, and flashes of blindness consistent with temporal arteritis. Which of the following actions is MOST appropriate?

- A. Consulting surgery for an immediate temporal artery biopsy.
- B. Confirming the diagnosis with an elevated erythrocyte sedimentation rate and then consulting surgery.
- C. Referring the patient back to her primary medical doctor in the morning for extensive rheumatologic evaluation.
- D. Initiating high doses of indomethacin.
- E. Initiating prednisone therapy.

32. The MOST important factor in determining foetal risk from diagnostic imaging is the amount of ionizing radiation produced by the test. Rank the following radiation exposures from lowest to highest dose of radiation.

1. Head computed tomography (CT)
2. Posteroanterior and lateral chest x-ray
3. Lumbrosacral spine series (three films)
4. Abdominal CT
5. Intravenous pyelogram (IVP)

- A. 2,3,1,4,5
- B. 2,1,3,5,4
- C. 3,2,1,5,4
- D. 1,4,2,3,5
- E. 2,1,5,3,4

33. A woman in the third trimester of pregnancy presents to the ED complaining of abdominal pain without vaginal bleeding. Vital signs are remarkable for a systolic blood pressure of 160, heart rate of 105, and a respiratory rate of 18. Which one of the following statements is TRUE concerning this patient?

- A. A normal ultrasound excludes the diagnosis of placental abruption.
- B. Lack of vaginal bleeding excludes the diagnosis of placental abruption.
- C. A pelvic examination should be avoided.
- D. A CBC, electrolytes, and renal and liver function tests should be obtained.
- E. Immediate delivery is indicated.

34. A 58-year-old female is brought to the ED by her family. They state that her words do not make sense, the right side of her face is drooping, and she is weak on the right side. On examination you note that the patient is awake and alert, has an expressive aphasia, right-sided facial droop, three-fifths right arm strength, four-fifths right leg strength, and decreased sensation to pin-prick on the right side. Which stroke syndrome is MOST likely?

- A. Anterior cerebral artery infarct
- B. Basilar artery occlusion
- C. Middle cerebral artery infarct
- D. Lacunar infarct
- E. Intracerebral haemorrhage

When a gravid female presents in cardiac arrest, all of the following statements are TRUE, EXCEPT

- A. the "human wedge" is useful in bystander CPR.
- B. ideally, a Cardiff wedge should be placed under the patient's left hip and flank.
- C. manual displacement of the uterus off the inferior vena cava helps increase venous return.
- D. pregnant women are in an edematous state that can make intubation difficult.
- E. the use of a femoral line to deliver medications should be discouraged.

36. Which of the following statements about lunate fractures is FALSE?

- A. The most common mechanism is a fall on an outstretched hand.
- B. Lunate fractures are the third most common type of carpal fracture.
- C. The lunate occupies two thirds of the radial articular surface.
- D. X-rays reliably demonstrate the fracture.
- E. This fracture may be associated with avascular necrosis of the lunate.

37. All of the following statements about Volkmann's ischemic contracture are TRUE, EXCEPT

- A. Volkmann's ischemic contracture is a complication of supracondylar fracture.
- B. signs include refusal to open the hand in children, pain with passive extension of fingers, and forearm tenderness.
- C. local oedema causes decreased venous outflow and arterial inflow, resulting in local tissue ischemia.
- D. muscle and nerve necrosis may occur, leading to permanent disability.
- E. absence of radial pulse is diagnostic.

38. Which of the following statements about anterior shoulder dislocations is FALSE?

- A. Nerve injury occurs in 25 percent of acute dislocations.
- B. Most neural injuries involve the axillary nerve.
- C. Successful reduction occurs in 70 to 90 percent of cases, regardless of technique.
- D. Associated rotator cuff injuries occur in 80 percent of patients older than 60 years.
- E. Vascular injuries are rare, but when they occur, tend to involve the brachial artery.

39. What is the MOST common site for a compartment syndrome?

- A. Anterior compartment of the lower leg
- B. Peroneal compartment of the lower leg
- C. Deep posterior compartment of the lower leg
- D. Volar compartment of the forearm
- E. Dorsal compartment of the forearm.

40. Which one of the following is the LEAST consistent with a diagnosis of intussusception?
- A. Intermittent colicky abdominal pain, interspersed with symptom-free periods.
 - B. Grossly normal appearing stool.
 - C. Normal plain films of the abdomen.
 - D. Previously healthy 9-year-old.
 - E. Altered, lethargic appearance.

A 4-month-old infant presents with a rectal temperature of 38.7°C, a respiration rate (RR) of 60, a heart rate (HR) of 160, and an SpO₂ on room air of 92%. He is smiling, drooling, and taking his bottle well, despite prominent intercostal retractions. On auscultation, he has diffuse coarse breath sounds with sibilant wheezes at both bases. All other household members have colds. There is no family history of atopy or asthma; no one smokes. ED therapy for this child could include all the following EXCEPT

- A. supplemental O₂ (by blow-by or nasal cannula as tolerated by the child)
- B. a trial of nebulized albuterol
- C. a trial nebulized racemic adrenaline
- D. a dose of glucocorticoids
- E. admission.

42. One day after discharge from the normal newborn nursery, a jaundiced infant exhibits fleeting bicycling movements of the limbs, sucking of the lips, and occasional apneic episodes with colour change. You interpret these as possible neonatal seizures. Work-up and treatment should include all of the following EXCEPT

- A. evaluation for inborn errors of metabolism (including urine for reducing substances, organic amino acids, serum for lactate, pyruvate and ammonia)
- B. correction of electrolyte, calcium, magnesium, glucose, and acid-base imbalances
- C. sepsis work-up
- D. administration of diazepam as a first-line drug to control seizures
- E. loading with phenobarbital.

43. An 11-month-old patient with no primary care physician is called back to the ED for re-evaluation because blood that was drawn the day before as part of a work-up of fever is positive for *N. meningitis*. The clinical impression at discharge was otitis media, and the patient was treated with amoxicillin and acetaminophen. The patient is now afebrile and playful. What is the MOST appropriate action?

- A. Repeat blood culture. intravenous ceftriaxone, admit.
- B. Repeat blood culture. perform lumbar puncture and CSF culture, start intravenous ceftaxone, admit.
- C. Repeat blood culture, intramuscular ceftriaxone, home with follow-up in 24 hours.
- D. Repeat blood culture, continue oral amoxicillin, follow up in 24 hours or sooner if worse.
- E. Home after thorough history and physical examination, with reassurance to the parents.

44. A 2-week-old infant presents with congestion, mild wheezing, and a history of "feeling warm". Except for wheezing and mildly increased respiratory effort, the baby has normal vital signs and a normal examination. All the following historical elements would place this child at increased risk for apnea EXCEPT

- A. sluggish feeding and progressive increase in constipation.
- B. frequent paroxysms of cough, often followed by emesis, but no colour change.
- C. 1-week duration of symptoms.
- D. 2-day duration of symptoms.
- E. premature birth.

A non-toxic, playful, 18-month-old toddler is febrile to 40.5°C but has no focus for fever on examination. A 24-hour follow-up visit is arranged. Which of the following would be INAPPROPRIATE management?

- A. Blood and urine cultures; intramuscular ceftriaxone
- B. Blood and urine cultures, intramuscular ceftriaxone only if WBC > 15,000
- C. Intramuscular ceftriaxone, no cultures
- D. Blood and urine cultures, no antibiotics
- E. B, C, and D are all inappropriate.

46. A 1-year-old baby presents with signs of severe dehydration and shock during a severe bout of gastroenteritis. Which of the following is the MOST appropriate fluid therapy?

- A. Isotonic crystalloid bolus of 20 mL/kg
- B. Isotonic crystalloid infusion at 20 mL/kg/h
- C. D₅W 0.45 NS bolus of 20 mL/kg
- D. D₅W 0.45 NS infusion at 20 mL/kg/h
- E. D₅W 0.25 NS infusion at 20 mL/kg/h.

47. All of the following may have a role in the acute management of severe asthma EXCEPT A. magnesium

- B. salmeterol
- C. halothane
- D. helium
- E. ketamine.

48. Which one of the following has the highest sensitivity for pulmonary embolism?

- A. A high-probability ventilation-perfusion radionuclear scan
- B. A medium-probability ventilation-perfusion radionuclear scan
- C. A low-probability ventilation-perfusion radionuclear scan
- D. Transoesophageal echocardiography (TEE)
- E. Dynamic (spiral) computed tomography (CT).

49. Which of the following is TRUE regarding *Legionella* pneumonia?

- A. Accounts for less than 2% of bacterial pneumonias.
- B. Has a higher incidence in the winter and spring.
- C. Mode of transmission is through person-to-person contact.
- D. Usually resolves without sequelae, even if not treated with antimicrobials.
- E. The organism is a gram-negative rod.

50. Symptoms heralding respiratory arrest during an asthma exacerbation include all of the following EXCEPT

- A. lethargy
- B. severe respiratory alkalosis and the use of accessory muscles of respiration
- C. a normal pCO₂ on arterial blood gas
- D. a silent chest on auscultation
- E. agitation.

Complications of *Mycoplasma* pneumonia infection include all of the following EXCEPT

- A. Guillain-Barré syndrome
- B. aseptic meningitis and encephalitis
- C. haemolytic anaemia
- D. pericarditis and myocarditis
- E. septic arthritis

52. Which of the following is the BEST view to request when assessing for the presence of pneumothorax on chest x-ray?

- A. Supine anteroposterior
- B. Upright posteroanterior (PA)
- C. Inspiratory PA
- D. Lateral decubitus with the patient lying on the unaffected side
- E. Expiratory PA

53. What is the BEST position in which to place patient with massive haemoptysis?
- Affected side up
 - Affected side down
 - Trendelenburg
 - Reverse Trendelenburg
 - None of the above
54. All of the following can cause acute renal failure (ARF) EXCEPT
- rhabdomyolysis
 - non-steroidal anti-inflammatory drugs (NSAIDS)
 - ethylene glycol
 - penicillin
 - iron
55. A chronic renal dialysis patient is brought to the ED in cardiac arrest. The MOST likely cause is
- pneumothorax
 - hyperkalemia
 - hypocalcemia
 - malignant hypertension
 - post-dialysis hypotension
56. If sodium bicarbonate therapy is ineffective, which of the following anti-dysrhythmics may be used to treat ventricular dysrhythmias associated with TCA overdose?
- D-blockers
 - Calcium channel blockers
 - Phenytoin
 - Lignocaine
 - Class IA or IC anti-dysrhythmics
57. All of the following statements concerning decontamination of the poisoned patient are TRUE, EXCEPT
- ipecac syrup continues to be a front-line tool in home management of poisoning.
 - gastric lavage is of limited utility except in selected overdoses when the airway has been adequately protected.
 - current superactivated charcoal has 1.5 times the absorptive area of older preparations.
 - cathartics may cause electrolyte derangements and dehydration.
 - whole bowel irrigation is a highly effective method for dealing with body "packers" or "stuffers" and overdoses with enteric-coated or sustained release medications.
58. A 22-year-old female presents to the ED comatose after a seizure, with a blood pressure of 80/40 and a pulse of 148. QRS duration is 280 ms. She has been depressed and began taking nortriptyline 2 weeks ago. What is the MOST appropriate initial therapeutic intervention?
- Intravenous access and sodium bicarbonate at a dose of 1 to 2 mEq/kg.
 - Intravenous access, gastric lavage, and diazepam to control seizures.
 - Airway control, intravenous access, and activated charcoal per nasogastric tube.
 - Airway control and mechanical ventilation, intravenous access, and sodium bicarbonate at a dose of 1 to 2 mEq/kg.
 - Physostigmine, 0.5 to 2.0 mg intravenously, diluted in 10 mL saline and given over 5 min.
59. All of the following statements concerning serotonin syndrome are TRUE, EXCEPT
- it is characterised by alterations in cognitive-behavioural ability, autonomic nervous function, and neuromuscular activity
 - it is usually seen when monoamine oxidase inhibitors or selective serotonin reuptake inhibitors are combined with other serotonergic drugs.
 - morphine and fentanyl are contraindicated for treatment.

- D. neuromuscular symptoms are greatest in the lower extremities.
- E. mandatory treatment includes discontinuation of all serotonergic medications.

60. Which of the following statements about acetaminophen poisoning is FALSE?
- A. Hepatotoxicity has traditionally been defined as an ALT or AST level > 500 IU/L.
 - B. The Rumack-Matthew nomogram predicts the risk of hepatotoxicity after a single overdose of acetaminophen based on blood levels obtained 4 to 24 hours after ingestion.
 - C. The risk of death in an untreated patient whose blood level is in the "probable toxicity" zone of the nomogram is 5 to 24 percent.
 - D. The toxic metabolite of acetaminophen is N-acetyl-para-benzo-quinoneimine (NAPQI).
 - E. There are four stages of acetaminophen toxicity.

Pain and numbness in the left upper extremity, extending down to the ring and little fingers, together with Homer's syndrome, are suggestive of:-

- A. Shoulder-hand syndrome.
- B. Scalenus anticus syndrome.
- C. Herniation of a nucleus pulposus in the neck.
- D. A Pancoast tumour (carcinoma of the superior sulcus of the lung).
- E. A cervical rib.

2. With regard to carbon monoxide poisoning:-

- A. Endogenous production results in HbCO levels up to 5%
- B. Loss of consciousness results from HbCO levels of 40%.
- C. Toxicity is produced by binding of CO to cytochrome oxidase.
- D. High HbCO levels produce focal cerebral necrosis.
- E. 100% O₂ reduces the HbCO half-life to 5-6 hours.

3. Which of the following is NOT true of intoxication with lysergic acid diethylamide (LSD):-

- A. Recovery is usually complete after 8 hours.
- B. Pupillary dilation is the most frequent early sign.
- C. Hypertension is a common finding.
- D. Salivation and lacrimation may occur.
- E. In an acute panic attack diazepam is the drug of choice.

4. A man with hypertension presents with acute mono-articular arthritis:-

- A. A normal uric acid level rules out the diagnosis of gout
- B. An increased uric acid level establishes the diagnosis of gout.
- C. Allopurinol is likely to give a rapid clinical improvement if he has gout.
- D. 20 percent of untreated hypertensive patients have increased uric acid levels.
- E. X-ray of the joint will not assist in reaching the diagnosis.

5. Which of the following drugs possess similar antiarrhythmic action:-

- A. Lignocaine and Bretylium.
- B. Quinidine and Disopyramide.
- C. Amiodarone and Procainamide.
- D. Verapamil and Sotalol.
- E. Lignocaine and Digoxin.

6. Which of the following is associated with severe anorexia nervosa:-

- A. Increased deep tendon reflexes.
- B. Hyperkalaemia.
- C. Diabetes insipidus.
- D. Menorrhagia.
- E. Rapid gastric emptying.

7. Patient presents with pain in neck and shoulder plus weakness and wasting of the whole of the right arm and absent reflexes. The likely diagnosis is which of the following:-

- A. Herpes Zoster myelopathy.
- B. Polymyositis.
- C. *Paneta*) lobe wasting.
- D. Median nerve compression due to carpal tunnel syndrome.
- E. Malignant infiltration of brachial plexus.

8. Which one of the following drugs do not cross the placenta:-

- A. Phenytoin.
- B. Heparin.
- C. Diazepam.
- D. Salicylates.
- E. Promethazine.

9. Traumatic asphyxia (ecchymotic mask) is caused by:-

- A. Tracheal obstruction.
- B. Air embolism.
- C. Obstruction of extrathoracic veins.
- D. Obstruction of superior vena cava.
- E. Crush injury to the chest.

10. Of the following factors which does not influence wounding potentiality of a missile:-

- A. Velocity of the missile.
- B. Tumbling effect in tissue.
- C. Size of the wound of entry.
- D. Type of tissue being traversed.
- E. Ballistic shape of missile.

11. According to the rule of nines in calculating body surface area, which of the following is NOT correct:-

- A. One lower extremity = 9 percent.
- B. Head and neck = 9 percent.
- C. Genitalia = 1 percent.
- D. Posterior chest = 9 percent.
- E. Anterior abdomen = 9 percent.

12. Which of the following usually shows the highest body temperature:-

- A. Shock.
- B. Peritonitis.
- C. Acute osteomyelitis.
- D. Sunstroke.
- E. Acute cholecystitis.

ANSWERS TO SAMPLE QUESTIONS, PART A

- 1. D
- 2. D
- 3. C
- 4. D
- 5. B
- 6. C

- 7. E
- 8. B
- 9. E
- 10. C
- 11. A
- 12. D

1. Which is incorrect with regards to Prinz Metal Angina?

- a) it produces ST elevation
- b) it is usually relieved by nitrates
- c) 15% of sufferers have coronary artery disease
- d) aetiology = spasm of epicardial coronary arteries
- e) it occurs at rest

2. Which is not true in the management of Unstable Angina?

- a) aspirin has been shown to decrease risk of AMI and death by 50%
- b) 13 blockers reduce progression to AMI
- c) Nitrates work by decreasing preload and after load and causing a moderate arterial vasodilatation
- d) Clopidogrel is an ADP receptor antagonist which decreases platelet aggregation
- e) Ticlopidine has less severe side effects than Clopidogrel

3. Which statement is false with regards to cardiac markers?

- a) myoglobin is very sensitive very early but has very poor specificity
- b) both troponin T and troponin I are specific to cardiac muscle
- c) CKMB is found in small but significant amounts in skeletal muscle
- d) If the CKMB as a percentage of CK is higher than 10% it suggests AMI
- e) CRP is raised in AMI

4. Which is incorrect with regards to Troponin I?

- a) at 12 hours its sensitivity and specificity for cardiac pain is about 95%
- b) can be used to diagnose unstable angina
- c) its presence indicates myocardial cell damage
- d) it is predictive of further episodes of angina or AMI in patients with unstable angina
- e) normalization can take up to 14 days

5. Which is not true of the ISIS 2 study?

- a) It was a large study of about 20 000 patients with AMI
- b) it showed that aspirin alone was better than placebo
- c) it showed that SK alone was better than placebo
- d) it showed that aspirin alone and SK alone had a similar decrease in mortality
- e) SK and aspirin together did not lower mortality significantly more than when each agent was given alone

6. When is not true of tPA (GUSTO trial)?

- a) it is indicated if a patient has had 5K previously
- b) it has an increased incidence of ICH in patients over 75 years compared with 5K
- c) it is only better than SK if the patient is <75 years with an anterior AMI of less than 4 hours duration
- d) it improves outcome in RV infarcts compared with SK
- e) it is 10 times as expensive as SK

7. Which is not a likely time to use angioplasty in AMI?

- a) cardiogenic shock
- b) RV involvement
- c) Increasing age
- d) Ongoing pain post thrombolysis
- e) Previous thrombolytic treatment (previous AMI)

8. Which is not an indication for thrombolysis in AMI (knowing that you need 2 criteria)?

- a) ischaemic chest pain for at least 30 minutes
- b) ST elevation of at least 2 mm or more in two or more consecutive chest leads

- c) ST elevation of at least 2 mm or more in two or more consecutive limb leads
- d) New LBBB
- e) Elevation of the blood cardiac enzyme levels

9. Which is not an absolute contraindication to CPR?

- a) BP > 180/120
- b) Intracerebral hemorrhage within 6 months
- c) Pericarditis
- d) CPR
- e) Pregnancy

10. Which agent has been shown to improve short term mortality in an AMI given thrombolysis?

- a) B blockers
- b) Calcium channel blockers
- c) Heparin
- d) Magnesium
- e) All of the above

11. Which agent may be used in the treatment of acute pulmonary oedema but no study has ever proven its benefit?

- a) CPAP
- b) Intravenous nitrates
- c) Furosemide
- d) Nitroprusside
- e) high flow oxygen

12. Which is not a true statement with regards to acute pulmonary oedema?

- a) management with CPAP or without (not including ventilated patients) does not alter hospital mortality or length of stay
- b) CPAP usage as opposed to intubation did not alter length of hospital stay or short term mortality
- c) Recovery is related to the production of a diuresis
- d) It can be caused by Naloxone, head injury and pancreatitis
- e) BiPAP needs further study as it may be associated with higher AMI rates

13. Which is incorrect with regards to atrial fibrillation?

- a) two thirds will revert spontaneously within 24 hours
- b) true lone defibrillators have no increased risk of stroke and death
- c) the risk of stroke in AF is 4.5% if not anticoagulated
- d) with anticoagulation the incidence of stroke is negligible
- e) AF requires higher joules than atrial flutter to defibrillate to sinus rhythm

14. Which arrhythmia is relatively benign?

- a) complete heart block
- b) Mobitz 2
- c) Wenckebach
- d) ventricular tachycardia

Which is incorrect?

- a) the normal PR interval is 0.16—0.2 secs
- b) the normal QRS complex is no greater than 0.12 secs
- c) the QT interval is measured from the beginning of the Q to the beginning of the T
- d) the normal QTc is < 0.47 secs
- e) the PR interval is measured from the beginning of the P to the beginning of the R

16. Which would not cause a left axis deviation?

- a) left anterior hemiblock
- b) left ventricular hypertrophy
- c) pregnancy
- d) dextrocardia
- e) inferior AMI

17. Which is not a cause of a wide QRS complex?

- a) hypothermia
- b) hyperkalemia
- c) right bundle branch block
- d) left anterior hemiblock
- e) tricyclic antidepressants

18. Which feature of an ECG would not help make you think that a wide complex QRS rhythm was more likely to be VT than SVT with aberrancy?

- a) fusion beats
- b) QRS of 0.15 secs
- c) Concordance across chest leads
- d) Normal axis
- e) Fusion beats

19. Which is not true with regards to Torsades de Pointes?

- a) it is nearly always due to a prolonged QT interval
- b) it can be caused by IA and IC antiarrhythmics, sotalol and amioderone
- c) DCR is dangerous
- d) Magnesium 1-2 mg over 60 secs then an infusion is the treatment mainstay
- e) Increasing the HR to 120/min with isoprenaline or overdrive pacing can be effective as it shortens ventricular repolarisation

20. Which is false with regards to the Vaughan Williams classification of antiarrhythmics? a) class 2 and 4 increase the PR interval

- b) lignocaine is a class IC drug
- c) class 1 and 3 increase the QT interval
- d) sotalol is a class 2 and 3 drug
- e) **amioderone fits into all 4 classes**

21. Which is not good management in RV AMI?

- a) **IV GTN**
- b) 1 —2 L Normal Saline
- c) thrombolysis
- d) pacing if CHB
- e) nitroprusside if associated LV dysfunction

22. Which is true with regards to LMW heparin versus unfractionated heparin in AMI?

- a) It has a higher mortality
- b) It has a lower mortality
- c) It makes no difference to mortality
- d) Trials are still underway
- e) Its levels need to be monitored

23. Which ECG change should not be seen in any stage of pericarditis?

- a) diffuse ST elevation less than 5mm
- b) PR depression
- c) Normal ECG
- d) T wave inversion

e) Diffuse Q waves

24. What is not true of Beck's triad?

- a) There is hypotension
- b) There is pulmonary oedema
- c) There are soft heart sounds
- d) There is an elevated JVP
- e) It is found in cardiac tamponade and tension pneumothorax

25. Which may you not see in an ECG of a patient with HOCM?

- a) P mitrale
- b) LV hypertrophy
- c) Large septal Q waves
- d) Prolonged QT interval
- e) You may see all of the above

26. Which antibiotic is not recommended in Antibiotic Guidelines 2001 to empirically treat endocarditis of either native or prosthetic valves?

- a) benzyl penicillin
- b) flucloxacillin
- c) gentamicin
- d) vancomycin
- e) ceftriaxone

27. Which is incorrect with regards to severe aortic stenosis?

- a) hypovolemia can exacerbate symptoms
- b) the most common cause is congenital abnormality
- c) in an acute deterioration nitroprusside will be beneficial
- d) syncope is a common presenting complaint
- e) acute atrial fibrillation may cause a sudden deterioration

28. Which is the incorrect classification of aortic dissection?

- a) Stanford type A — involves ascending aorta
- b) De Bakey type 2 — involves ascending aorta only
- c) De Bakey type 1 — involves the arch aorta only
- d) Stanford type B - involves descending aorta only
- e) De Bakey type 3 — involves the descending aorta only

29. Which is not true of imaging of aortic dissection?

- a) TOE and MRI have an extremely high sensitivity making them good diagnostic tests
- b) Conventional CT has an unacceptably low sensitivity and if negative requires another investigation
- c) Aortography, if negative, adequately excludes an aortic dissection
- d) Spiral CT is possibly as sensitive as MRI and TOE
- e) Aortography can detect branch vessel involvement and aortic incompetence

30. Which is incorrect with regards to management of aortic dissection?

- a) Narcotic analgesia is required
- b) B blockade is used to lower HR and thus BP
- c) Nitroprusside is the initial agent used to lower BP
- d) Ascending aortic dissections are usually treated surgically
- e) Descending aortic dissections are usually treated medically

31. Which is not a predisposing factor for aortic dissection?

- a) hypertension

- b) raynauds disease
- c) marfans syndrome
- d) aortic valve disease
- e.) angiography

32. Which is not true of superficial thrombophlebitis?

- a) antibiotics are indicated
- b) if moderately severe, treatment is with bed rest, elevation of the limb and hot compresses, if mild with elastic stockings and normal activity
- c) if associated with a varicose vein, it may recur unless the vein is excised
- d) the Pt 15 at no increased risk of DVT
- e) anticoagulation is only necessary if the process extends into the deep system or approaches the saphenofemoral junction

33. Which is not true with regards to DVT management?

- a) all DVTs of the popliteal vein and above should be treated with anticoagulation
- b) the sensitivity and specificity of ultrasound is 95%
- c) the chance of a PE from a below knee DVT is 5%
- d) LMW heparin is probably as safe and efficacious as unfractionated i.v. heparin
- e) Below knee DVT's should be treated with aspirin alone

34. What is considered to be 'hypertensive'?

- a) >140/90
- b) >150/90
- c) >160/95
- d) >170/100
- e) >180/100
- a) cotton wool spots
- b) retinal hemorrhages
- c) papilloedema
- d) silver wiring
- e) all of the above are potentially an effect of malignant hypertension

36. Which is an incorrect statement with regards to the management of a hypertensive emergency? a) in all

- bar preeclampsia, sodium nitroprusside is usually the first line agent
- b) the aim is to lower the MAP by 20-25% over 2 hours
- c) if signs of end organ damage worsen after lowering the MAP by 20 %, then the BP should be lowered another 20% then reassess
- d) the MAP is closer to the DBP than the SBP
- e) labetalol and GTN are other useful intravenous agents

37. Which statement is correct with regards to finding a BP of 190/110 with no signs of symptoms of actual or impending end organ damage?

- a) iv. Nitroprusside should be commenced to prevent a hypertensive emergency
- b) a GTN patch should be applied and the patient discharged for review by LMO within 24 hours
- c) sublingual nifedipine should be given immediately and the patient discharged on a daily oral dose
- d) if the patient is otherwise well they should be discharged without intervention for LMO reassessment within 24 hours
- e) they should be discharged with a 24 hr halter monitor

38. Which is true with regards to the use of D Dimer in the diagnosis of PE?

- a) it is a fibrin degradation product
- b) the latex test lacks sensitivity making it useless
- c) the ELISA test has a sensitivity of > 90% making it useful if the test is negative
- d) DDH and MMC do the latex test
- e) All of the above are true

39. Which statement is false with regards to PB?

- a) in 80% of pts the CXR is abnormal
- b) only 5% of patients have $pO_2 > 80\text{mmHg}$
- c) 20% of patients will have a normal A-a gradient
- d) the most sensitive symptoms are dyspnoea and pleuritic chest pain
- e) the mortality is 30% left untreated and 10% treated with anticoagulation

40. Which is incorrect with regards to thrombolysis in PB?

- a) thrombolysis has not been proven to improve mortality compared with heparin in massive PB
- b) embolectomy if available is associated with a better outcome than thrombolysis
- c) tPA and SK have the same angiographic and qualitative improvements at 12 hrs
- d) pulmonary dynamics improve more quickly with tPA
- e) tPA has significantly better outcomes at two hours

41. Some education: the PIOPED study

Prospective Investigation of Pulmonary Embolism Diagnosis compared VQ scan to angiogram

- results released in 1990
- VQ scan (low intermediate or high probability) = 98% sensitive for PB but only 10% specific
- ie many pts without PB also had these results
- In 88% of high probability VQ scans the patient had a PE on angiogram
- Of those with PB only a minority had a high probability VQ (41% sensitive, 97% specific)
- In only 33% of intermediate VQ scans did the pt actually have a PB
- In only 12% of low probability VQ scans did the pt actually have a PB

Conclusion: clinical assessment and VQ scan established the diagnosis in only a minority of patients

42. Which drug should be avoided if Viagra has been taken in the previous 24 hours? a) captopril]

- b) nitrates
- c) verapamil
- d) sodium nitroprusside
- e) adenosine

43. Which drug below does not interact with Warfarin increasing its anticoagulant effect?

- a) amioderone
- b) doxycycline
- c) metronidazole
- d) SSRI
- e) Sotalol

44. Which is false about thrombolysis and heparin?

- a) Unfractionated heparin should be given following SK
- b) Unfractionated heparin should be given following tPA
- c) Unfractionated heparin should be given following rPA
- d) when given, the heparin can be commenced before, during or after the thrombolysis
- e) all of the above are correct

45. Which antiarrhythmic is OK in Torsades de Pointes?

- a) sotalol
- b) amioderone

- c) lignocaine
- d) flecainide
- e) quinidine

46. Which is incorrect with regards to the JVP?

- a) the a wave is due to right atrial contraction
- b) the v wave is due to right atrial filling
- c) the JVP is measured from the sternal angle with the patient at 45 degrees
- d) giant a waves are seen in tricuspid stenosis or raised pulmonary pressures
- e) large v waves are seen in tricuspid incompetence
- f) kussmaul's sign is a fall of the JVP on inspiration

47. With regards to cardiac murmurs which is false?

- a) VSD is a pansystolic murmur
- b) HOCM is an ejection/mid systolic murmur
- c) PDA and coarctation murmurs are continuous
- d) Aortic stenosis is an ejection/systolic murmur
- e) Aortic incompetence is late systolic murmur

48. Which statement is incorrect??

- a) the third heart sound can be physiological in pregnancy and below the age of 40
- b) the third heart sound is an important sign of left ventricular failure
- c) the third heart sound may occur in AI, MI, VSD and PDA
- d) the fourth heart sound can be physiological below 40 years of age
- e) the fourth heart sound is due to a high pressure wave reflected back from a non compliant ventricle

49. Which is a false statement in the management of unstable angina?

- a) unfractionated heparin when used with aspirin reduces death and AMI c.f placebo
- b) enoxaparin is superior to unfractionated heparin but dalteparin is not
- c) the benefits of glycoprotein 2b3a receptor antagonists are additive to the use of revascularisation
- d) nifedipine and felodipine alone reduce death and AMI
- e) glycoprotein 2b3a receptor antagonists plus aspirin and unfractionated heparin decrease death and AMI

50. Which is false?

- a) I could not think of question number 50
- b) I did not want a question number 50
- c) I did not care about question number 50
- d) I struggled with question number 50
- e) All of the above are true

1. A 33 year old man presented to the Emergency Department after a motor vehicle traffic crash. He is noted to have a severe head injury with a GCS of 6/15 and multiple wounds. All of the following treatments may be appropriate in this man EXCEPT:

- a) in line traction of the cervical spine
- b) high flow oxygen
- c) rapid sequence intubation
- d) intravenous fluids
- e) tetanus injection

2. All of the following could possibly be cerebral protection measures in a head injured patient EXCEPT:

- a) 30 degree tilt of patient's head
- b) judicious TV fluid administration
- c) lignocaine pre intubation
- d) thiopentone as an induction agent
- e) hyperventilation to pCO₂ of 25mmHg

3. Regarding hangings which occur in the community: all of the following are true EXCEPT:

- a) patients who have lost consciousness and have had a significant injury ~h~rni1d he observed in the ho~it2] for 24 bour~ even ~fthi~y appear stable at the time of presentation
- li) cervical immobilisation should occur until clinical andlor radiological clearing of the cervical spine has occurred
- c) cervical fractures, such as the Hangman's fracture commonly occur
- d) the difficult intubation kit should be available when inuubaJng these patients
- e) cerebral oedema may occur

4. Emergency Department thoracotomy.

- a) is useful in blunt trauma
- b) should always be carried out by the emergency department ophysician
- c) is usually done via median stemotomy
- d) is more successful for stab woends compared with gur'Ghot wounds
- e) always carries a success rate cf less than 10 %

a) ~e'~r~s foil vinc~ traumatic fitYKI trPIrV ocrIp 7'

- c) The duodenum is the i,art of the intestine most common)v
mc~re ~ to Y :Th ~rv~2'l mjuri~s tl1aX~.~t
- e) Isoiatecl chest ~aurna comes a 4 — 12 % mortality rate

6. Spinal shock is characterised by

- a) Flaccid areflexia
- b) Hypotension and bradycardia
- c) Hypovolaemia
- d) Diaphragmatic injury
- e) Priapi~in

7. In childhood cardiac arrest

- a) Ventricular fibrillation is the most common rhythm
- b) The initial dose of adrenaline is 10 ug/kg intravenous or intraosseous
- c) Bicarbonate may be given via the endotracheal tube
- d) Initial defibrillation is a 4 Jtkg
- e) The outcome is better than for adults

S. A 3 month old child presents with episodes of cyanosis noted when she cries. There is no improvement when you apply 100 % oxygen. This is MOST

- a) Respiratory disease
- b) Cardiac disease
- c) Sepsis
- d) Hypothermia
- e) Hypoglycaemia

9. A 13 month old female is brought to the attention of her mother with loss of consciousness and collapse at home.

- a) hypoglycaemia is a common cause of the problem in children this age
- b) she is most likely to have suffered from breath holding attacks as an infant
- c) there is no need for a Karyotype in this setting
- d) she is most likely to have had a vasovagal event
- e) there is a high chance that she will demonstrate orthostatic hypotension on a tilt table testing regardless of the cause of her collapse

- a) Bacteria are the commonest causes of pneumonia in the 2 to 5
- b) A respiratory rate of 45 breaths per minute is abnormally high for a 6 month old child
- c) The predominant causative organism of pneumonia in neonates is Streptococcus pneumoniae
- d) Mycoplasma pneumoniae causes CXR evidence of lobar infiltrates in 10 to 25% of cases
- e) Blood cultures are often positive (60—80%) in children with pneumonia

11 Regarding seizures of the following are true EXCEPT:
paediatric all

- a) Up to 70% of late posttraumatic seizures recur
- b) 30 to 40% of children with febrile convulsions have recurrences
- c) neurologic sequelae result when status epilepticus lasts an average of ten hours
- d) a child who has tuberous sclerosis may present with seizures
- e) phenytoin is the drug of first choice for neonatal seizures

12. Regarding intussusception

- a) The male: female ratio is 1: 4
- b) Classic red currant jelly stools are present in 80% of cases
- c) It is the most common cause of intestinal obstruction in children aged less than three months
- d) Plain abdominal xray is normal in up to 30% of cases
- e) The recurrence rate post reduction of intussusception is 20%

13) Expected blood loss at term delivery is approximately 400 ml

Denaturation is

- a) 100 ml
- b) 250 ml

- c) 500 ml
- d) 750 ml
- e) 1000 ml

14) A 30-week pregnant woman arrives in the emergency department after a motor vehicle crash. She is alert, BP 100/60, HR 95, RR 16, SpO₂ 95%. Her main complaint is that of mild abdominal pain. All of the following are true EXCEPT

- a) There is less likelihood of serious maternal or foetal injury if she was wearing a 3 point rather than a 2 point restraint
- b) If she has no neck pain or neurological deficit, the left lateral position is most appropriate for the rest of her management
- c) Ultrasound is more sensitive than 4 hour cardiotocography in detection of placental abruption in this setting
- d) She has less chance of sustaining significant abdominal solid organ injury than if she was not pregnant
- e) Her vital signs cannot be explained on the basis of physiological changes of pregnancy only

15) A 38-year-old primiparous lady presents to the Emergency Department and delivers a baby. On delivery the baby is floppy, somewhat cyanosed and has a heart rate of 50/minute. Which of the following statements is TRUE about the subsequent management

- a) Suctioning of the nose and pharynx should be sufficient treatment
- b) Cardiac compressions should be commenced if there is no change after 30 seconds of ventilatory support.
- c) Oxygen administration would be delayed to see if the child responds to suctioning
- d) The child should be placed on the mother's abdomen immediately after birth
- e) Ventilation with a cardiac massage is recommended at a rate of 1:5

16) Ectopic pregnancy

- a) 15% of all pregnancies are ectopic
- b) Up to 50% of pregnancies following tubal sterilisation are ectopic
- c) If a 19 year old girl with abdominal pain says that she is definitely not pregnant then she doesn't need a pregnancy test
- d) Rhesus negative women with ectopic pregnancies do not need anti D immune globulin
- e) Most patients with ectopic pregnancies present to ED unstable

17) With respect to Amanita Phalloides mushroom toxicity all of the following are true EXCEPT

- a) Large doses of penicillin IV may be useful
- b) Silybinin, a milk thistle extract, may inhibit hepatic uptake of Amatoxin
- c) Multiple dose charcoal should be used
- d) Haemoperfusion may be useful if utilised within 48 hours of ingestion
- e) Symptoms typically occur within the first 4 hours of ingestion

18) 'Which of the following is NOT a feature of Amanita Phalloides poisoning?'
 a) Salivation, vomiting, diarrhoea and constipation

- a) Rhododendron
 - b) Datura
 - c) Daphne
 - d) Capsicum
 - e) Aloe
- 19) Regarding hallucinogens

- a) Amanita phylloides mushroom causes hallucinations as its main side effect
 - b) LSD is structurally similar to ketamine
 - c) Nyst~grni1'~ **conscious patient is cilajaci-crISIC** (not necessaniv pathognomonic) of PCP ingestion
 - d~ TUC (tetradvurocannabinol) causes oron&i1ucw1~~fiCtiOfi
- 21) Gastrointestinal bieedin~ is an early feature of

- a) Isopropanol poisoning
- b) Digoxin oviniöse
- c) Lead poisoning
- d) Arsenic p~J13orAng
- e) Hydrocarbon ingestion

22) A patient with mydriasis, thirst, tachycardia, and urinary retention could have ingested all of the following EXCEPT

- a) Tricyclic antidepressants
- b) Trumpet lily
- c) Scopolamine
- d) Organophosphates
- e) Antihistamines

23) The mo~t impm~t~nt treatment for high altitude cerebral oedema is

- a) Thiazide diuretics
- b) Acetazolamide
- c) Descent to a lower altitude
- d) AntierrieLios
- e) Head elevation 30 de~ees

1. With respect to inflammatory bowel disease, which of the following is incorrect?

- a. Cypt abscesses are seen frequently in Crohn's disease
- b. "Skip areas" are often seen in Crohn's
- c. Crohn's involves all layers of the bowel
- d. Ulcerative colitis involves mainly the mucosa and submucosa
- e. Ulcerative colitis is associated with a large increase in the risk of developing colonic cancer

2. Which of the following is incorrect?

- a. Anal fissure are most likely on the left side
- b. Thrombosed external haemorrhoids can be managed by elliptical excision and clot removal
- c. Internal haemorrhoids are located proximal to the dentate line
- d. Portal-systemic shunting can occur about the internal haemorrhoidal veins -
- e. Posterior fistulas typically follow an irregular path to the skin

3. With regards to biliary pathology, which of the following is correct?

- a. Most gall stones are predominantly formed from pigment~\
- b. Pain from an impacted gall stone is typically of short duration and colicky -
- c. Acalculous cholecystitis occurs in otherwise healthy patients

- d. Murphy's sign is 97% sensitive in diagnosing acute cholecystitis
- e. Charcot's triad occurs in 97% of patients with ascending cholangitis~.
- 4. With regards to viral hepatitis, which of the following is incorrect?
 - a. Anti-HBc is the most reliable marker of acute infection
 - b. Hepatitis B results in chronic hepatitis in 5% of patients
 - c. Patients with hepatitis A are infectious for 1 week after resolution of jaundice
 - d. Hepatitis C results in chronic hepatitis in over 50% of~ infected patients
 - e. Interferon therapy has a successful role in treating selected patients with hepatitis C
- 5. Which of the following anti-venoms is typically given IM?
 - a. Snake polyvalent anti-venom
 - b. Red-back spider anti-venom
 - c. Funnel web spider ant-venom
 - d. Box Jelly fish anti-venom
 - e. Blue ringed octopus
- 6. With respect to erythema multiforme. Which of the following is incorrect?
 - a. EM is idiopathic in 50% of cases
 - b. Pathogenesis is thought to result from hypersensitivity to immunoglobulin and complement in the cutaneous microvasculature,
 - c. Erythematous papules appear on the dorsum of the hands and feet and on the extensor surfaces
 - d. There is good evidence to support the use of steroids in EMK
 - e. Kawasaki's disease is an important differential diagnosis in the paediatric population
- 7. In Toxic Shock syndrome, which of the following is incorrect?
 - a. Staphylococcus colonisation or infection is the causative organism
 - b. Toxic Shock Syndrome Toxin is an entero-toxin responsible for many of the symptoms and signs of TSS
 - c. The rash of TSS is a painless, blanching erythroderma
 - d. Hypotension is a common feature of the syndrome
 - e. Exfoliation is an uncommon result of the syndrome ~
- 8. Which is not true of Streptococcal Toxic Shock Syndrome
 - a. Has a mortality of around 1%
 - b. More serious infections are associated with myositis or fasciitis.
 - c. Three exotoxins have been indentified and they behave as superantigens
 - d. Violaceous or blue vesicles at the sight of infection is an ominous sign of necrotizing fasciitis or myositis~.
 - e. 90% of patients have positive skin culture from sight of infection
- 9. With respect to cardiac arrest, which of the following is incorrect?
 - a. Survival of in-hospital cardiac arrest is 40% at 28 days and 5% at 2 years
 - b. Survival of out of hospital witnessed VTNF is 10%
 - c. Survival for asystole is 0.1%
 - d. ACLS medications are correlated with increased survival
 - e. Early defibrillation has been shown to improve outcomev~
- 10. In Basic Life Support, which of the following is correct?
 - a. HIV, hepatitis B/C are major risk factors in CPR K
 - b. Lay CPR has been shown to improve survival —
 - c. Open chest CPR results in better long-term outcomes.
 - d. Current ARC guidelines suggest CPR always prior to defibrillation in VF/VT
 - e. The carotid artery is the best place to palpate pulses in infants
- 11. Which of the following is best suited to aeromedical evacuation?
 - a. Fractured skull with pneumocephalus
 - b. Pneumothorax
 - c. Decompression injury
 - d. Pneumonia
 - e. Penetrating eye injury
- 12. Valid consent includes which of the following?

- a. The patient is legally capable of giving consent
- b. Consent is informed
- c. Consent is specific
- d. Consent is freely given
- e. All of the above

13. Which of the following is not a reportable death to the coroner?

- a. Death from a subdural following a fall in a nursing home patient
- b. Narcotic overdose
- c. Road traffic accident
- d. Drowning
- e. Ruptured abdominal aortic aneurysm managed without operation

14. Which of the following is most correct about respiratory infections in patients with HIV?

- a. CMV is a common cause of clinically significant disease
- b. CAP pneumonias are more common than POP in patients with HIV
- c. POP occurs when the CD4 count is between 800 and 1000
- d. Mortality from bacterial pneumonia is higher in patients with HIV than in patients who are HIV-negative
- e. Pulmonary aspergillosis is not a life threatening illness.

15. With regard to aspiration pneumonia, which of the following is incorrect?

- a. The right lower lobe is the commonest area for aspiration in the erect position
- b. pH less than 2.0 is associated with a higher mortality
- c. Many of the symptoms of aspiration are due to the body's inflammatory response to the infectious or irritative material.
- d. Streptococcus species are the commonest infecting organism
- e. All patients who aspirate should be commenced on broad spectrum antibiotics.

16. In patients with Tuberculosis, which of the following is incorrect?

- a. Aerosolised saliva and sputum are the commonest modes of transmission.
- b. Interferon 8 levels increase in patients who are responding to treatment.
- c. Pulmonary TB is an AIDS-defining illness.
- d. Extra-pulmonary manifestations are unlikely in HIV patients.
- e. Initial therapy is with isoniazid, rifampicin, ethambutol and pyrazinamide for 2 months.

17. In spontaneous pneumothorax, which is incorrect?

- a. 95% will have pleuritic chest pain on the side of the pneumothorax
- b. Only 5% will be tachypnoeic or tachycardic
- c. Spontaneous pneumothoraces of 35% deflation can be managed conservatively
- d. CT scan is the current "gold standard" for measuring deflation
- e. Spontaneous pneumothorax in HIV patients suggests POP infection and carries a high mortality

18. With respect to inorganic lead poisoning which of the following is incorrect?

- a. CaNa₂EDTA should only be administered after BAL as it may increase ONS toxicity if administered alone in encephalopathic patients
- b. DMSA is a suitable oral agent for chelation in asymptomatic patients
- c. Inorganic lead can be seen on x-ray in acute ingestion'
- d. The half-life of lead in bone is 30 months
- e. Blood levels of lead are the best test for evaluating toxicity

19. In cyanide (ON) poisoning, which of the following is incorrect?

- a. Rhodanese is a naturally occurring enzyme that detoxifies ON
- b. Cyanide interrupts oxidative phosphorylation and results in anaerobic metabolism
- c. Ventricular tachycardia and Fibrillation are the commonest arrhythmias in cyanide poisoning

- d. Nitrites are often used as the initial means of detoxification
 e. Sodium thiosulfate is the preferred definitive detoxifying agent
20. Which of the following is incorrect?
 a. Onset of hypoglycaemia after sulfonylurea overdose is unpredictable
 b. Metformin can cause a lactic acidosis
 c. Glucagon is ineffective in glycogen depleted patients
 d. Octreotide inhibits glucose-stimulated insulin release
 e. 50% dextrose is the preferred solution for managing hypoglycaemia in children
21. With respect to hypoglycaemia, which of the following is incorrect?
 a. Glycogen stores will be depleted after 24-48 hours of fasting
 b. Venous blood has a 10% lower glucose concentration than arterial blood
 c. Short acting insulin has a prolonged half life in massive OD
- d. Response to glucagon is usually evident within 30 seconds of administration
 e. Administration of glucose to alcoholics can precipitate encephalopathy unless thiamine is also given
22. In organophosphate poisoning which of the following is incorrect?
 a. Toxicity may acute, chronic or delayed
 b. Toxicity is due to the effects on red cell cholinesterase and not plasma cholinesterase
 c. Miosis and muscle fasciculations are a reliable sign of toxicity
 d. Aging occurs in 24 —48 hours in pesticide organophosphates
 e. Transdermal exposure has the most rapid onset
23. Which of the following is incorrect?
 a. Carbamates bind irreversibly to cholinesterase
 b. Pyrethrins exposure most commonly results in allergic phenomenon
 c. Paraquat overdose results in superoxide production at high oxygen tension
 d. Superwarfarins have half lives of up to one month and may require prolonged dosing of vitamin K
 e. Strichnine poisoning results in conscious generalized convulsions
24. With respect to mercury poisoning, which of the following is incorrect?
 a. Elemental mercury is poorly absorbed through an intact GIT
 b. Short chain alkyl compounds have devastating CNS effects
 c. Erethism is a common CNS toxicity manifestation
 d. Blood levels are accurate in determining levels of toxicity
 e. GIT decontamination is an important step in reducing mercury levels
25. Which of the following statements about sympathomimetic use is incorrect?
 a. amphetamines are mostly indirect-acting sympathomimetics
 b. Beta-blockers are suitable for managing sinus tachycardia in cocaine toxicity
 c. Succinylcholine and mivacurium have prolonged half lives in cocaine overdose
 d. Benzodiazepines are the best treatment for seizures in sympathomimetic overdose
 e. Amphetamine urine screening is subject to false positive reactions
26. Which of the following is correct?
 a. Acute digoxin toxicity is best predicted by the digoxin level
 b. Calcium chloride is an important antidote to digoxin toxicity
 c. Cardioversion is the method of choice for reverting ventricular tachycardia
 d. Digoxin Fab fragments increase serum digoxin levels'.~
 e. The digoxin-fab fragment complex is eliminated by hepatic metabolism
27. With respect to iron toxicity which of the following is correct?
 a. Normal serum iron levels exclude toxicity
 b. Stage 2 toxicity is primarily marked by GIT symptoms
 c. Whole bowel washout is ineffective in treating overdose
 d. Oral desferrioxamine increases iron toxicity
 e. Diarrhoea is the clinical sign most often associated with

toxicity

28. With respect to facial trauma, which of the following is correct?
- Rapid sequence intubation carries no particular risk in facial trauma.
 - Facial trauma commonly causes haemorrhagic shock.
 - It is imperative to obtain nasal xrays in patients with fractured nose.
 - TMJ dislocations are usually unilateral.
 - Fractures of the maxilla occur with low energy impacts.
29. With respect to neck trauma, which of the following is incorrect?
- Local wound repair can be undertaken if the platysma muscle has not been breached.
 - Cervical spine injury is common when patients fall less than their body height in cases of hanging.
 - Cryothyroidotomy should be avoided in potential laryngeal injury as this may worsen the injury.
 - Larygotracheal injury is often associated with pharyngo-oesophageal injury.
 - Traumatic carotid dissections are managed with anticoagulation.
30. With respect to spinal trauma, which of the following is incorrect?
- Fracture-dislocations are the most damaging of injuries:
 - Vertebral body compression of more than 50% is, considered unstable.
 - The Brown-Sequard syndrome involves contralateral loss of pain and temperature and ipsilateral loss of motor function and proprioception.
 - The central cord syndrome affects the neural tracts for the distal extremity.
 - Neurogenic shock occurs with injuries below the level of T6.
31. With regard to radiation accidents which is INCORRECT?
- management of life threatening injuries takes priority over complete and proper decontamination
 - exposed victims to ionising radiation from X-ray equipment and accelerators are not a threat to others and do not need decontamination
 - the most sensitive tissues to the effects of radiation are the haemopoietic system and the GIT
 - X-rays and gamma rays are more penetrating than alpha and beta rays
 - The RBC count in the first 48 hours is a marker of severity ~ of exposure
32. Which statement is incorrect?
- the risk of malignant hyperthermia is genetically inherited
 - drugs which classically cause malignant hyperthermia include inhalational anaesthetic agents, suxamethonium and amide local anaesthetics
 - the drug used to treat malignant hyperthermia is dantrolene
 - serotonin syndrome classically causes ONS, autonomic and motor dysfunction
 - the drug used to treat severe serotonin syndrome is bromocriptine
33. Which is not an AIDS defining illness?
- oesophageal candidiasis
 - POP
 - CD4 count <200 cells/microL
 - Pulmonary TB
 - Herpes Zoster
34. Which is FALSE regarding POP pneumonia in AIDS?
- it is usually only seen when the CD4 count <200
 - prophylaxis should be given in all pts with CD4 count <200

- c. CXR characteristically shows bilateral diffuse infiltrates
 - d. Once a patient has had it they are unlikely to get it again
 - e. CXR may be normal in up to 20% of patients
35. Which drug should not be given with midazolam?
- a. zidovudine
 - b. lamivudine
 - c. nevirapine
 - d. indinavir
 - e. ritinovir
36. Which organism is least likely to show the characteristic periodicity of fever in malaria?
- a. p. malarie
 - b. p. vivx
 - c. p. ovale
 - d. p. falciparum
 - e. none of them
37. What is the highest likelihood that a doctor acquires HIV from a needlestick injury from an HIV pt?
- a. 0.3%
 - b. 2%
 - c. 5%
 - d. 10%
 - e. 30%
38. What is a normal direct bilirubin in neonates?
- a. <10
 - b. <20
 - c. <30
 - d. <40
 - e. <50
39. In a term baby at what unconjugated bilirubin level do you consider phototherapy?
- a. 200mmol/L
 - b. 280mmol/L
 - c. 350mmol/L
 - d. 450mmol/L
 - e. 500mmol/L
40. Which of these is not one of the possible criteria for the diagnosis of Kawasaki disease?
- a. conjunctivitis, non purulent
 - b. polymorphous rash
 - c. erythema or oedema of the palms or soles
 - d. cervical LN,
 - e. vomiting

- 1. a
- 2. a
- 3. d
- 4. c
- 5. b
- 6. d
- 7. e
- 8. a
- 9. d
- 10. b
- 11. d
- 12. e
- 13. e
- 14. b

- 15. e
- 16. d
- 17.c
- 18.a
- 19. c
- 20.e
- 21.d
- 22. e
- 23. a
- 24.d
- 25. b
- 26.d
- 27.d
- 28.d
- 29. b
- 30.d
- 31. e
- 32. e
- 33.e
- 34.d
- 35.d
- 36. d
- 37.a
- 38. a

In a disaster situation

- a. Triage category "red" denotes dead patients.
- b. Media personnel should be told to keep away from the hospital.
- c. A junior doctor should be in charge of triage as the senior doctors are needed to take care of the urgent cases.
- d. Radiographic and laboratory studies should be used only if the test results will change therapeutic intervention.
- e. The hospital should have separate triage areas, which depend on triage category assigned at the scene.

2. Regarding re-entrant SVT

- a. 60% of these patients have re-entry within the AV node.
- b. Re-entrant SVT always occurs in a normal heart.
- c. Digoxin toxicity is often implicated as a cause.
- d. Manoeuvres that may revert SVT to sinus rhythm include bilateral carotid sinus massage.
- e. 1 x 200J sync DC shock is recommended for unstable patients with re-entrant SVT.

3. All of the following are associated with/can cause torsades de pointes, except

- a. Acute rheumatic carditis
- b. I-hypercalcaemia
- c. Sotalol
- d. Liquid protein diets
- e. Hypothyroidism

4. Defibrillation is done commonly in the Emergency Department. It is imperative that it is done correctly.

- a. Larger paddles have increased impedance.
- b. Paddle placement can be either anterior-posterior or apex-left parasternal.
- c. Firm pressure of 10-12.5kg/cm² is used to gain good electrical contact.

- d. An initial shock of 4)/kg should be administered to paediatric patients.
e. None of the above are correct.
5. Regarding cardiac markers
- a. The specificity of total CK ranges from 93- 100%.
b. Studies of single CKMB measurement on ED presentation have demonstrated a sensitivity for MI of 800/0.
c. Troponin T and I may be elevated in patients with hepatic failure.
d. In one study — sensitivity for MI 3 hr post onset of symptoms was 100% for myoglobin.
e. Following AMI — Troponin I and Troponin T levels peak at 6 hours.
6. Syncope is a very common presentation to ED. Which of the following statements is correct?
- a. Up to 20% of patients diagnosed with PE have an initial syncopal episode that is likely secondary to the acute obstruction to flow by a large embolus.
b. Patients who have recurrent syncope with > 5 episodes in one year are more likely to have dysrhythmia as the cause.
c. Core components of the ED evaluation of sycope are a fult blood count, U&E, creatinine, cardiac markers, and an EGG.
d. Syncope is a common presenting complaint of patients who have subarachnoid haemorrhage.
e. Up to 55% of patients with other causes of syncope have orthostatic hypotension on physical examination.
7. Patients with acute myocardial infarctions need to be managed emergently.
- a. Some 15-20% of patients with AMI present in some degree of CHF.
b. Patients in Killip Class IV have an 80% mortality rate.
c. Approx 30% of inferior wall MI's involve the right ventricle.
d. Intraventricular conduction disturbances occur in 10-20% of patients with AMI.
e. All of the above are true.
8. Regarding cocaine induced myocardial ischaemia
- a. f3 blockers are useful in BP control.
b. Up to 43% of patients with cocaine associated chest pain without MI met TIMI criteria for thrombolysis.
c. Diazepam should be avoided in management as there is high risk of respiratory compromise.
d. Mortality rates are high from cocaine associated myocardial infarction.
e. Phentolamine is absolutely contraindicated in treatment of cocaine induced myocardial ischaemia as it causes hypotension.
9. According to Tintinalli
- a. Dyspnoea is the most common symptom in patients presenting with PE.
b. The classic triad of dyspnoea, haemoptysis and pleuritic chest pain occurs in 40% of patients.
c. The initial CXR is normal in nearly 1/3 of patients with PE.
d. Clinical evidence of DVT occurs in 75% of patients with PE.
e. The most common EGG abnormality in PE is T wave inversion in precordial leads.
10. An example of a hypertensive emergency is
- a. A symptom free patient *with* a systoi~c BP of 200mmHg.

- b. A symptom free patient with a diastolic BP of 120 mmHg.
- c. A symptom free patient who have been previously normotensive who presents with a BP of 160/100.
- d. A 36/40 pregnant patient with a BP of 170/90 presenting with headache and "jitteriness".
- e. A BP of 170/100 in a patient with pre-existing renal impairment.

11. A patient has the following blood profile:
- Elyponatraemia
 - Hyperkalaemia
 - Hypoglycaemia
 - Normal anion gap metabolic acidosis

The most likely diagnosis here is:

- a. Nephrotic syndrome.
- b. Addison's disease.
- c. SIADH.
- d. Vomiting and diarrhoea.
- e. Porphyrria.

12. Regarding ectopic pregnancy

- a. Ectopic pregnancy represents " 2% of pregnancies.
- b. Vaginal bleeding occurs in up to 50% of cases of ectopic pregnancy.
- c. Ectopic pregnancy remains the second leading cause of maternal death in the first trimester.
- d. A serum BhCG that fails to double in 48 hours is diagnostic of an ectopic pregnancy.
- e. If an intrauterine pregnancy exists on ultrasound scan — the diagnosis of an ectopic pregnancy has been reliably ruled out.

13. Patients presenting with PV bleeding > 20/40 gestation needs to be attended to emergently. Which of the following statements is correct?

- a. Speculum examination is always safe in these patients.
- b. Placenta previa accounts for 40% of bleeding episodes in pregnancy.
- c. V2 of foetuses die when vaginal bleeding occurs after 20 weeks of gestation.
- d. Placental abruption is frequently misdiagnosed as preterm labour.
- e. Traumatic placental abruption is more common than spontaneous placental abruption.

14. All of the following are contraindicated in pregnancy, except

- a. Ondansetron
- b. Erythromycin estolate
- c. Aspirin
- d. ACE inhibitors
- e. Fluoroquinolones

15. The radiology procedure in the list below that exposes the foetus to the most radiation

- a. Chest xray
- b. PelvimetryCT
- c. Mammography
- d. Lumbar spine CT

16. Patients who present to ED with headache often represent a diagnostic dilemma. Which of the following statements is correct?

- a. Migraines generally worsen in pregnancy, especially after the 1st trimester.
- b. Up to 70% of patients with brain tumours complain of headache at the time of diagnosis.
- c. Between 5-10% of patients who undergo LP develop a headache within 24-48 hours due to persistent CSF leak.
- d. 55% of patients with ischaemic strokes complain of headache at the onset.
- e. Subarachnoid haemorrhage represents 10% of all non-traumatic headaches seen in the ED.

17. All of the following features are suggestive of a central cause of vertigo except

- a. Vertical nystagmus.
- b. No fatiguability of symptoms/signs.
- c. Aggravated by position/movement.
- d. Nil associated tinnitus or hearing loss.
- e. Slow onset vertigo.

18. Quadriparesis greater in the upper extremities than the lower extremities after trauma suggests

- a. Anterior cord syndrome.
- b. Cauda equina syndrome.
- c. Spinal shock.
- d. Central cord syndrome.
- e. Brown Sequard syndrome.

19. Patients presenting with head injuries often present management dilemmas. Which of the following statements is correct?

- a. Only 10% of patients with a GCS score of 15 will have positive CT scans, less than 1% will require surgery.
- b. Severe head injury (GCS <9/15) accounts for approximately 20% of all ED patients with traumatic brain injury.
- c. 25% of patients with mild traumatic brain injury will continue having complaints such as impaired memory, inability to concentrate, and headaches weeks after the injury.
- d. 20% of moderate traumatic brain injured patients (GCS = 9-13) will deteriorate due to secondary brain injury and progress to severe traumatic brain injury.
- e. The mortality of severe traumatic brain injured patients approaches 70%.

20. Regarding chest trauma

- a. A massive haemothorax in an adult is defined as 500ml or more.
- b. The initial manoeuvre in ED for a patient with an open pneumothorax is to cover the wound with a 4 sided dressing.
- c. A sternal fracture is often an indicator of significant blunt myocardial injury.
- d. Up to 80% of rib fractures may not be apparent on xray.
- e. The main cause of the hypoxaemia of flail chest is the underlying lung contusion.

21. Absolute indications for laparotomy in blunt trauma patients include all of the following, except

- a. Anterior abdominal injury and hypotension
- b. Abdominal wall disruption.
- c. Positive DPL or FAST in stable patient.

- d. CT diagnosed injury requiring surgery, ie pancreatic transection.
- e. Free air on CXR.

22. Regarding injuries to the GU tract

- a. Bladder injuries are the most common injury to the genitourinary tract.
- b. Intraperitoneal bladder rupture is more common than extraperitoneal bladder rupture.
- c. Renal pedicle injuries make up 10% of all renal injuries.
- d. All posterior urethral injuries should be surgically repaired.
- e. Testicular salvage following penetrating trauma is on the order of 35%.

23. Pelvic injuries are commonly seen as part of major trauma. Which of the following statements is correct?

- a. Destot's sign = palpation of a bony prominence or large haematoma, or tenderness along the fracture line on rectal exam.
- b. Acetabular fractures account for 20% of pelvic fractures.
- c. Overall — about 15% of patients with pelvic fracture require embolisation.
- d. Open book type pelvic fractures are best dealt with conservatively —with bedrest.
- e. Mortality rates approach 13% for severe vertical sheer injuries.

24. Regarding upper limb fractures

- a. Isolated fractures of the radius are referred to as “nightstick” fractures.
- b. A Monteggia fracture is a fracture of the distal third of the radius, associated with a distal radioulnar joint dislocation.
- c. Flexion type fractures occur in up to 40% of supracondylar fractures
- d. 2/3 of scaphoid fractures occur at the waist or middle third of the bone.
- e. Lateral humeral epicondyle fractures are more common than medial epicondyle fractures.

25. The Ottawa Knee Rules determining the need for xrays have proven sensitive for fracture. All of the following rules to determine xray are correct except

- a. Inability to flex knee to 90°.
- b. Tenderness over the joint line.
- c. Patient older than 55 years.
- d. Inability to transfer weight for 4 steps both immediately after the injury and in the ED.
- e. Isolated patellar tenderness.

26. The most frequent aerobic organism isolated in human bites is

- a. Pasteurella multocida
- b. Elkenella corrodens
- c. Haemophilus aphrophilus
- d. Streptococcus viridans
- e. Capnocytophaga canimorsus

27. The suture material which poses the highest risk of infection is

- a. Vicryl
- b. Chromic gut
- c. Silk
- d. Prolene
- e. Nylon

28. All of the following skin disorders cause lesions on the palms and soles except

- a. Erythema multiforme
- b. Toxic Shock syndrome
- c. Scarlet fever
- d. Kawasaki disease
- e. **30** syphilis

29. Regarding swallowed foreign bodies

- a. The most common site of foreign body oesophageal obstruction in the paediatric patient is at the level of the aortic arch.
- b. Button batteries lodged in the oesophagus can be treated by watching and waiting for them to pass.
- c. Meat impaction in the oesophagus should be treated immediately with papain.
- d. 15-35% of ingested open safety pins or razor blades will cause intestinal perforation.
- d. Coins in the oesophagus lie in the sagittal plane on xray
- a. A white count above 10000/ul is highly specific for appendicitis.
- b. Graded compression ultrasonography for diagnosis of appendicitis is reported to have sensitivity of 60-69%.
- c. Vomiting occurs in >80% of patients presenting with acute appendicitis.
- d. Appendicitis is the 2nd most common extrauterine surgical emergency in pregnancy.
- e. Mortality rates for patients over 70 with acute appendicitis approach 30%.

31. Many patients with abdominal pain present to ED daily. gallstone disease must be treated emergently. Which statements is correct?
Complications of of the following

- a. The classic Charcot triad of fever, jaundice, and RUQ pain is noted in about 45% of patients with cholangitis.
- b. Emphysematous cholecystitis complicates the course of “ 5% of patients with cholecystitis.
- c. Of all patients with gallstones, 15-20% will develop pancreatitis as a result of biliary calculi.
- d. Gall bladder empyema is usually caused by staphylococcal organisms.
- e. The sensitivity of Murphy's sign is only 68% in the elderly.

32. All of the following can cause macrocytic anaemia except

- a. Chronic liver disease
- b. Thalassaemia
- c. B12/folate deficiency
- d. Hypothyroidism
- e. Phenytoin

33. Regarding blood products

- a. Each bag of FFP contains 1 — 2mg of fibrinogen per ml of FFP.
- b. Platelets can be stored for up to 14 days at 20-24~.
- c. Each unit of packed RBC should raise the haematocrit by 13%.
- d. Cryoprecipitate can be stored frozen for up to 6 months.

e. Washed RBCs must be infused within 72 hours because bacterial contamination during processing.

34. Signs indicating severe aortic stenosis include all of the following except

- a.
- b.
- c.
- d.
- e.

Thrill in aortic area

54

Paradoxical S2 split

Austin Flint murmur

LVF

of the risk of

35. Which of the following conditions causes pulmonary fibrosis predominantly in the lower lobes of the lungs?

- a. Ankylosing spondylitis
- b. Tuberculosis
- c. Scleroderma
- d. Histiocytosis
- e. Coal Workers' pneumoconiosis

36. The dermatome supplying the posterior aspect of the thigh is

- a. L4
- b. S1
- c. S2
- d. L5
- e. L2

37. Regarding the syndrome of inappropriate ADH

- a. This causes hypertonic hyponatraemia
- b. Urinary sodium is low (typically < 20mmol/e)
- c. Serum osmolality is greater than urinary osmolality.
- d. Total body sodium is usually near normal.
- e. This usually resolves with isotonic saline administration.

38. Regarding hyperkalaemia

- a. At potassium levels of 7.5-8.0mmol/e the QRS pattern may degrade into a "sine wave" pattern.
- b. The most common cause of hyperkalaemia is pseudohyperkalaemia.
- c. Spironolactone is the diuretic of choice for removing K⁺ from the body.
- d. Calcium gluconate serves to help redistribute the potassium back into the cells.
- e. Death from hyperkalaemia is usually the result of VT.

39. Regarding diagnostic imaging for renal colic

- a. Non contrast helical CT has sensitivity of 90% in detection of renal stones.
- b. Patients with pre-existing renal insufficiency or diabetes mellitus have a 20% risk of nephrotoxicity attributable to radiocontrast dye.
- c. Ultrasound may miss stones <2mm in diameter — it picks up most of the others.
- d. Uric acid stones are usually picked up on plain AXR as they are radiopaque.
- e. Up to 22% of apparent cases of hydronephrosis by ultrasound do not represent obstruction.

40. Which of the following is true with regards to basic statistics
- a. Specificity can be used to see if a condition or event can be ruled out.
 - b. A result is usually considered significant if there is a 1 in 20 chance that the result could be incorrect.
 - c. A type 1 error is to accept a statement when it is false.
 - d. The Null Hypothesis is that there is a distinct difference between 2 groups.
 - e. A student t-test can be used for non-parametric data.
41. Which of the following is true with regard to the D-dimer test for pulmonary embolism
- a. The test is considered useful because of its high sensitivity
 - b. The test is considered useful because of its high specificity
 - c. The test is considered useful because of its high positive predictive value
 - d. The test is considered useful because of its high negative predictive value
 - e. The test is considered useful because of its independence from the clinical pre-test probability
42. You are the only person on the scene in the aftermath of a lightning strike. There are 5 victims. Which victim would you attend to first?
- a. A 25 year old female with an isolated penetrating eye injury.
 - b. A 35 year old male, arrested with obvious head and neck injury.
 - c. A 55 year old female, arrested with a penetrating leg injury.
 - d. A pregnant woman who is staggering away from the scene.
 - e. A 25 year old arrested male.
43. A worried 25 year old woman presents to ED after having been hit by lightning. She thinks she was unconscious for a few minutes. Her only symptom now is a paralysed tingling right leg — no injuries are apparent. Which of the following is the most correct?
- a. This is obviously compartment syndrome and she needs urgent fasciotomy.
 - b. She likely has been hysterical following the lightning strike — and this is a conversion disorder.
 - c. She most likely has a sizeable left intracranial bleed as a result of falling during the lightning strike.
 - d. Watch and wait 12— 24 hours — the symptoms are likely to resolve.
 - e. Gain urgent arteriography of right leg.
44. Regarding electrical injuries
- a. An oral injury sustained by a child chewing through insulation on an electrical cord has no risk of later complications.
 - b. Arrhythmias are seen in 20 — 30% of high voltage injuries.
 - c. The radial nerve is the most common peripheral nerve affected in patients with an electrical injury.
 - d. Adults with electrical injuries < 600V should be admitted as risk of delayed complications is high.
 - e. Amniotic fluid is a very poor conductor of electricity, thus foetal risk is low in electrical injuries.
45. Heat stroke is a medical emergency. Which of the following statements is correct?
- a. Cooling efforts should be discontinued when rectal temperature reaches
 - b. Anhidrosis needs to be present for the diagnosis to be made.

- c. complications of heat stroke. Hyperkalaemia and hypocalcaemia may be seen as delayed
- d. stroke victims. Immersion cooling is the technique of choice for quickly cooling heat
- e. The cerebellum is resistant to heat, so ataxia is a late finding.
46. Which of the following plants is not poisonous?
- a. Oleander
- b. Castor bean
- c. Wandering jew
- d. Water hemlock
- e. Foxglove
47. Mushrooms are one of the more common toxic exposures — many occurring in children < 6. Which of the following pairings is correct?
- a. Coprinus sp / visual hallucinations, ataxia
- b. Amanita muscaria / delayed hepatic dysfunction
- c. Psilocybe / delayed onset renal failure
- d. Gyromitra esculenta / CNS excitement — anticholinergic effects
- e. Clitocybe / muscarinic syndrome
48. Digoxin poisoning can be catastrophic. Which of the following statements is correct?
- a. Bidirectional ventricular tachycardia is the most common dysrhythmia seen with Digoxin poisoning.
- b. Acute toxicity most closely correlates with the serum digoxin level.
- c. Hypomagnesaemia predisposes toward digoxin toxicity.
- d. Calcium chloride is the agent of choice in treatment of digoxin induced hyperkalaemia.
- e. 0.5 — 1.0 vials of digoxin specific Fab are required to treat life threatening digoxin toxicity when the ingested dose is unknown.
49. Phenytoin levels are increased by all of the following drugs except
- a. Ethanol
- b. Cimetidine
- c. Amiodarone
- d. Trimethoprim
- e. Fluconazole
50. An ECG with a prolonged QT interval may be seen as a result of which overdose?
- a. Ethanol
- b. Isopropanol
- c. Ethylene glycol
- d. Paraldehyde
- e. Methanol
51. Regarding serotonin syndrome
- a. Muscle rigidity when present is especially prominent in the upper limbs.
- b. Associated seizures are usually prolonged.
- c. There is an estimated 1% mortality rate associated with serotonin syndrome.

- d. Hypertension associated with serotonin syndrome is associated with a more favourable prognosis than hypotension.
- e. Dantrolene is the 1st line treatment agent.

52. Ingestion of caustic agents has significant morbidity associated. Which of the following statements is correct?

- a. Injuries by strong acids cause liquefaction necrosis.
- b. Follow up endoscopy examination should be avoided between days 5 — 15.
- c. Steroids are useful in treatment of grade 2a upper GI lesions.
- d. NG tube placement and aspiration of gastric contents is the chief means of decontamination in alkali ingestion.
- e. Increased risk for oesophageal malignancy is up to 50 times greater in patients with a history of caustic ingestion.

53. All of the following can cause jaundice in neonates < 24 hours old except

- a. Sepsis
- b. ABO incompatibility
- c. Congenital atresia of bile ducts
- d. Toxoplasma congenital infection
- e. Excessive bruising from birth trauma

54. A 2 week old term baby has presented to ED with signs of congestive heart failure. The most likely diagnosis is:

- a. Hypoplastic left ventricle
- b. VSD
- c. PDA
- d. Myocarditis
- e. Coarctation of aorta

55. Regarding seizures ~n children

- a. 3-4% of young children have febrile seizures.
- b. Myoclonic seizures in neonates indicate a good prognosis.
- c. Phenytoin is the 1st line drug of choice in treating neonatal seizures.
- d. Patients with immediate seizures post head injury have a 20-25% risk of recurring seizures.
- e. About 20% of children with epilepsy experience one bout of status epilepticus (grand mal).

56. Paediatric abdominal emergencies are relatively common. Which of these answers is correct?

- a. Pyloric stenosis — affects approximately 1:750 male patients.
- b. Intussusception — the most common cause of intestinal obstruction in children under 3 months.
- c. Appendicitis — is excluded if the child presents with diarrhoea.
- d. Incarcerated herniae — incidence is highest in the first year of life.
- e. Pancreatitis in children is most commonly caused by mumps virus.

57. Children with rashes often present diagnostic dilemmas to ED physicians. Which of the following statements is correct?

- a. The exanthem in measles develops about the 14~ day following exposure.

- b. The rash of varicella spreads centripetally.
- c. Exanthema subitum is most common in children aged 5-10.
- d. The rash of erythema nodosum begins with a "herald patch".
- e. "Slapped cheek" rash (erythema infectiosum) is caused by human herpes virus 6.

58. Regarding paediatric airway management.

- a. An infants' larynx is situated at the C5 level of the neck.
- b. The narrowest portion of the paediatric larynx is at the glottis.
- c. A laryngeal mask size 2.0 should be used if needed in an infant weighing 5 — 10kg.
- d. Needle cricothyroidotomy is the preferred surgical airway access technique in the paediatric population.
- e. Cricoid pressure is not indicated in paediatric intubation situations as it makes the cords too hard to see.

59. Children who present with fever represent a large group of patients in Eds. Which of the following statements is correct?

- a. Neonates with a fever (>38) have a 5% risk for bacteraemia.
 - b. Group B streptococci are the most common bacterial pathogens causing neonatal disease.
 - c. Strep pneumoniae infection in children aged 3 months to 3 years carries a 100% risk of complicating serious bacterial illness.
 - d. A documented fever in a neonate warrants full sepsis work up and admission.
 - e. All of the above are true.
- a. Viral croup / peak incidence 3-4 years of age.
 - b. Retropharyngeal abscess / rare > 4 years of age.
 - c. Epiglottitis / "steeple" sign on xray.
 - d. Bacterial tracheitis / drooling = common.
 - e. Peritonsillar abscess / symptoms improve with patient supine.

A 52 year old man presents to the ED via ambulance. His wife reports that he has had severe central chest pain for 6 hours. His ECG shows a large antero-lateral AMI and a sinus rhythm of 110. He is agitated, with SpO2 88% on 15 l/min O2 and a BP of 80/45. Examination reveals severe LVF. Outline your management.

2. A 22 year old man is brought to your department by police. He was found wandering through heavy traffic and abusing drivers. He became increasingly aggressive in the police van and has been handcuffed. He has dilated pupils and is tachycardic. Describe your assessment.

3. Discuss the strategies available in the event of a failed orotracheal intubation.

4. A 2 year old child presents by ambulance with 50% burns to the lower half of the body. Describe your management of this child.

5. A 35 year old man is brought in by ambulance from the local rugby field. He collapsed during a game and was unconscious for 2 minutes.

He is agitated with a GOS of 13, PR of 150 and BP 90/50. His tympanic temperature is 40°C.

- a) Outline your investigations (50%)
- b) Describe your treatment (50%)

6. In response to a high level of sick leave taken by medical staff in your ED, consultant staff decide to look at strategies to reduce the level and impact of sick leave. Describe the issues involved.

7. A 32 year old woman is brought to your department unconscious from the scene of a house fire. She is 34 weeks pregnant.

Paramedics found that her OGS was 3, PR 110, BP 120/80. She was intubated by them without the use of drugs.

Her initial ABG results on 100% O₂ are:

pH 7.05

P ^o O ₂ ⁴⁵	mmHg
PO ₂ 200	mmHg
HCO ₃ ⁻ 8	mmol/L
BE -15.	
COHb 40%.	(<5%)

- a) Outline your ongoing management. (50%)
- b) Discuss the role of hyperbaric O₂ therapy in the treatment of this woman. (50%)

8. A 5 year old boy is a pedestrian hit by a car. He has a mid-shaft fracture of the femur found on Xray. There are no other injuries.

Discuss the options for analgesia in this patient.

The positive likelihood ratio of a test can be calculated by:

- a) True positive rate/True negative rate
-
-
- b) True positive rate/False positive rate
- c) True positive rate/True negative rate
- d) False positive rate/True positive rate
- e) True negative rate/True positive rate

2. Regarding the diagnosis of appendicitis

- a) Accurate pre-operative diagnosis is now readily available~
- b) The diagnosis of appendicitis is either false positive or false negative about as often as it is correct ~
- c) Ultrasound is generally the preferred test in adults and non pregnant women win-
- d) Ultrasound is a useful screening (rule out) test ~
- e) CT must be performed with contrast enhancement~f~

3. Regarding the Australasian Triage Scale (ATS) and ACEM policy

- a) The performance indicator for ATS 1 is 90%'
- b) The performance indicator for ATS 3 is 75% A
- c) The performance indicator for ATS 5 is 50% z'
- d) Staff and resources should be deployed so thresholds are achieved progressively from ATS 5 up to ATS 1
- e) It is clinically acceptable to expect some groups of patients to wait >2 hours routinelyk

4. Early access to defibrillation in out of hospital arrest:

- a) Is not internationally accepted as the single most important step

- b) Is not safely administered by lay people
- c) Cannot be considered part of enhanced basic life support
- d) Is not envisaged for hotels/motels
- e) Can be delivered by either manual or "shock advisory" defibrillators

5. Safe interhospital transport of critically ill patients:

- a) Does not require stabilisation of the patient (
- b) Ideally requires the initiating doctor to make just 2 phone calls~
- c) It is not always clear who is responsible for the patient during transfer 4
- d) May involve expert medical assistance (eg a neurosurgeon) in the vehicle
- e) The nature of the illness does not influence vehicle choice .~

6. Which is TRUE regarding the primary responsibility for patients by Emergency Dept doctors:

- a) Ends after telephone consultation with a receiving doctor/unit
- b) Ends after review of the patient by a receiving doctor/unit
- c) Ends once the emergency care process has been completed, the need for admission determined and administratively completed
- d) Ends if the patient is only physically in the ED due to lack of beds~
- e) Continues while the patient is physically in the ED

7. When carrying out conscious sedation in the Emergency Department:

- a) ECG, NIBP, & SpO2 should be monitored throughout the procedures'
- b) ECG need not be monitored during recovery~
- c) One senior member of medical staff and a senior, appropriately trained, nurse is adequate *
- d) Discharge can occur before conscious state has returned to normal if the patient is sent home with a responsible adult \
- e) Resuscitation equipment need not be immediately accessible if it is nearby ~

8. HYPERnatraemia is manifestation of:

- a) Hyperglycaemia
- b) Congestive cardiac failure,
- c) Syndrome of Inappropriate Antidiuretic Hormone (SIADH)-:
- d) Diabetes Insipidus
- e) Nephrotic Syndrome ~-

9. Regarding the Whole-Body Irradiation/Acute Radiation Syndrome:

- a) The haematopoietic system is the first organ system to manifest injury.~
- b) Red cells are the best haematopoietic indicator of the extent of radiation injury ~
- c) Injury to gastrointestinal mucosa results in an inability secrete fluid
- d) Hypotension is usually transient and responsive to fluid boluses v
- e) Alpha radiation is the predominant cause

10. Which of the following does NOT cause a significant wide anion gap metabolic acidosis?

- a) Isoniazid
- b) Iron
- c) Carbon Monoxide
- d) Methaemoglobin
- e) Ethanol

11. The algorithm for cardiopulmonary resuscitation in pregnant patients recommends

- a) Tilt the patient to 45 degrees, left side up~

- b) Preferential use of femoral veins for central access~'
- c) Perimortem caesarean section within 5 minutes of maternal arrest if foetus ~20 weeks
- d) Considering open chest CPR within 8 minutes of maternal arrest)
- e) Modify current ACLS recommendations.~

12. When repairing simple traumatic skin lacerations:

- a) Monofilament nylon & polypropylene sutures have unacceptable mechanical properties & tissue ~ reaction
- b) Subcutaneous or dermal sutures do not potentiate wound infections **k**
- c) For optimal control of the needle holder the index finger must pass through one eyelet ?~'
- d) During knot tying suitable tension is better maintained by instrument ties than hand ties ~
- e) Cyanoacrylate adhesive can be used on wounds up to 5cm long and where edges are up to 5mm separated

13. Regarding primary spontaneous pneumothorax (PSP)

- a) Is more common in people with a low height: weight ratio'
- b) Invariably has hyperresonance on examination **k**
- c) Ultrasound is a highly specific test for PSP
- d) May be treated using a Heimlich valve
- e) Requires video assisted thoracoscopic pleurodesis .~

14. Diagnostic criteria for heatstroke include:

- a) Tympanic temperature $>39^{\circ}\text{C}$ and miliaria rubra
- b) CNS dysfunction and anhidrosis~
- c) Postural hypotension and muscle cramps
- d) Peripheral oedema and lichen tropicus ~'
- e) None of the above

15. Posterior epistaxis

- a) Represents approximately 5% of ED nosebleeds
- b) Is not associated with hypertension~
- c) Usually results in minor bleeding that settles easily.k
- d) Is always easily localised with respect to sides
- e) Requires electrocautery in the ED ~-

16. Digitalis toxicity

- a) Is potentiated by hyperkalaemia Y
- b) Increasing severity of hypokalaemia is associated increasing toxicity~
- c) Chronic toxicity occurs at higher serum levels than acute toxicity~
- d) Plasma levels are accurate at predicting toxicity~
- e) Is potentiated by amiodarone and f3 blockers'

17. Regarding opioids

- a) Pethidine and its metabolite are proconvulsant
- b) Naloxone can be used to reverse tramadol seizures
- c) Tramadol overdose is not associated with agitation and hypertension
- d) In dependent patients the addition of mixed agonist-antagonists (eg buprenorphine) exacerbates opioid effects .r
- e) Relapse after naloxone in significant overdose usually occurs 2-4 hours later K

18. Unimaleolar ankle fractures:

- a) Can be treated symptomatically if the joint is stable<
- b) Are, by definition, stable injuries~
- c) Require plaster immobilisation for 8-12 weeks~
- d) Are unsuitable for a walking cast ~
- e) Usually require open reduction and internal fixation (ORIF)X

Regarding injury to the pinna of the ear:

- a) An auricular haematoma may be left to resolve spontaneously
- b) Adrenaline may be used with local anaesthetic for infiltration
- c) Skin debridement is advisable with larger wounds
- d) Adequate regional anaesthesia requires block of anterior and posterior branches of the great auricular nerve
- e) The anterior wall of the auditory canal is innervated by branches of the vagus nerve

20. Which is NOT a risk factor for subarachnoid haemorrhage?

- a) Neurofibromatosis
- b) 1st degree relative with SAH
- c) Polycystic ovaries.
- d) Smoking
- e) Hypertension

21. Regarding Hyperosmolar Non Ketotic coma:

- a) Ketoacidosis is frequently present
- b) Fluid deficit is usually 3-5 L
- c) Mortality rate is less than 10%
- d) Insulin should be commenced at 0.1U /kg! hr
- e) The degree of hyperglycaemia is not as great as that of diabetic ketoacidosis

22. Which is NOT a cause of ptosis with a constricted pupil?

- a) Aneurysmal compression of the third cranial nerves
- b) Carotid aneurysm
- c) Brainstem infarction
- d) Thyroid malignancy
- e) SOC lung

23. Regarding the treatment of acute otitis media in children over 2 years of age:

- a) Penicillin is the antibiotic of choice
- b) If not treated there is a high chance of chronic glue ear
- c) Antibiotic treatment is the best treatment for associated otalgia
- d) Antibiotics should only be commenced if the child remains febrile or symptomatic at 48 hrs
- e) None of the above

24. Regarding pneumocystis pneumonia in AIDS:

- a) It is acquired when the CD4 count is 200- 500 /mm³
- b) Prophylaxis should be given in all pts with CD4 count <200 /mm³
- c) QXR is characteristically normal
- d) It is uncommon in HIV positive patients
- e) Corticosteroids are contraindicated in hypoxic patients

25. Which organism is most commonly responsible for travellers' diarrhoea?

- a) Enterotoxigenic strain of E coli
- b) Clostridium difficile
- c) Salmonella
- d) Rotavirus
- e) Vibrio cholera

26. A woman in labour has acquired chicken pox. Recommended treatment for the neonate is:

- a) IV acyclovir
- b) Varicella Zoster Immunoglobulin (VZIG) by IM route
- c) VZIG by IV route
- d) Oral valaciclovir
- e) Expectant only

27. Regarding arrhythmias secondary to overdose (OD)
- NaHCO_3 is the drug of choice for arrhythmias caused by calcium channel antagonists
 - In arrhythmias from digoxin OD, cardioversion is recommended
 - Tricyclic antidepressants prolong the QT interval
 - Phenytoin possesses class 2 antiarrhythmic effects
 - Torsades de pointes is induced by hypercalcaemia
28. Regarding the fluid and its content, which is INCORRECT?
- Normal Saline — 154 mmol Na/L
 - Hartmann's — 131 mmol Na/L
 - Hartmann's — 131 mmol Cl/L
 - 5% Dextrose - 50g glucose/L
 - Hartmann's - 5 mmol K/L
29. What RBC count constitutes a positive diagnostic peritoneal lavage?
- $>30\,000/\text{cm}^3$
 - $>60\,000/\text{cm}^3$
 - $>100\,000/\text{cm}^3$
 - $>200\,000/\text{cm}^3$
 - $>500\,000/\text{cm}^3$
30. Which four major criteria must be present to make the diagnosis of pelvic inflammatory disease?
- Temp $>38^\circ\text{C}$, abdominal pain, vaginal discharge, adnexal tenderness
 - Temp $>38^\circ\text{C}$, abdominal pain, cervical excitation, raised CRP
 - Abdominal pain, adnexal tenderness, raised CRP, vaginal discharge
 - Adnexal tenderness, vaginal discharge and increased CRP, lower abdominal tenderness
 - Abdominal pain, cervical excitation and adnexal tenderness, lower abdominal tenderness
31. Which is NOT a feature of scarlet fever?
- It is caused by group A beta haemolytic strep
 - The rash appears within 2 hours of the onset of fever, vomiting, headache and abdo pain
 - Koplik spots
 - Strawberry tongue
 - Circumoral pallor
32. Which of the following clinical signs is NOT clinically useful enough to raise the indication for surgery in patients with suspected appendicitis?
- Pain located in RLQ
 - Pain migration from the periumbilical area to the RLQ
 - Rigidity
 - Pain before vomiting
 - Anorexia
33. According to the "Sad Persons" Scale used to assess suicide risk, which of the following features scores 2 points?
- Loss of rational thinking
 - Excessive drug use
 - Single, separated or divorced
 - Male gender
 - Severe personality disorder
34. Regarding Red back spider envenomation:
- Most patients are bitten in the winter months
 - Only the male spider is capable of envenoming humans
 - Antivenom is routinely given intravenously
 - The bite from the spider is typically very painful

e) Untreated, most cases resolve over hours to days —

35. A patient's arterial blood gas results are the following, on room air, at sea level:

pH 7.30
pCO₂ 29
pO₂ 80
HCO₃ 20

- a) Bartter's syndrome is a possible cause ~ (
- b) The A-a gradient is 20 (
- c) If the anion gap is 12, the likeliest cause is lactic acidosis'
- d) The corresponding venous pH would be 7.25 —
- e) The serum [K~] would be raised by about 1 mmol/L~--

36. Regarding external cardiac compression (massage):

- a) The lower sternum should be depressed 2-3 cm in an adult. ~
- b) It produces about 50% of pre-arrest cardiac output. k
- c) Coronary perfusion occurs primarily during the systolic (compression) phase.
- d) Blood is directed mostly to the lower extremities A
- e) Blood flow to the myocardium is reduced 20-50% of normal. '~

37. An X-ray of a child's elbow reveals ossification of the capitulum and radial head. The child's age is likely to be

- a) 1-2 years
- b) 4-5 years C
- c) 6-7 years
- d) 10-11 years
- e) None of the above

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Haemodialysis would increase the excretion of:

- a) Tricyclics
- b) Benzodiazepines
- c) Digoxin
- d) Lithium
- e) Calcium channel blockers

39. A 38 yo man presents with unusual behaviour. Which of the following features most likely suggests a *non-organic* (psychiatric) aetiology?

- a) Disorientation to time and places
- b) AGCS of IO~
- c) Temperature of 39deg C'. .
- d) Slow onset
- e) Disorganised delusions N

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40. It is quoted that a D-Dimer assay for thromboembolic disease has a negative predictive value of 98%.

This means that

- a) If disease is present, D-Dimer will be positive 98% of the time
- b) If disease is absent, D-Dimer will be negative 98% of the time
- c) 2% of positive tests will be falsely positive
- d) 98% of negative tests will be truly negative~
- e) D-Dimer assay is useful only when the result is positive,,,~

41. Regarding acute myocardial infarction, which is FALSE:
- a) Painless' AMI has an incidence of —70 % in patients over 85yo ~
 - b) 20 % of AMIs occur in the age group less than 40 yo.4-
 - c) 25-50 % of patients with an AMI have a normal initial ECG'~
 - d) Troponin I levels at 24 hr approach 100% sensitivity for AMI V
 - e) Variant (Prinzmetal) angina can lead to ventricular dysrhythmia and sudden death ~

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42. Acute angle closure glaucoma:
- a) Results from an acute impairment of vitreous from the Canal of Schlemm
 - b) Is characterised by an intraocular pressure of 15 to 20 mmHg>'
 - c) Is treated with a topical mydriatic agent ~
 - d) Presents with a unilateral painless complete loss of vision9.
 - e) Causes corneal epithelial oedema.
43. An adult presents with a GCS of 13, BP of 80/40 and respiratory rate of 24, following a car accident. His Revised Trauma Score is:
- a) 12
 - b) 11
 - c) 10
 - d) 9
 - e) 8
44. Regarding the diagnosis of pulmonary embolism (PE), which is FALSE:
- a) The CXR is reportedly abnormal in up to 80% of patients wftIYPE%'
 - b) A normal perfusion scan excludes PE
 - c) 40% of patients with diagnosed DVT have asymptomatic PE
 - d) 30% of patients with a PE will have a clot in the proximal leg veins'%'
 - e) Patients with a low probability VQ scan have a 15-30 % chance of having a PE
45. Regarding myocarditis, which is FALSE:
- a) Myocarditis mostly occurs in the child and young adult
 - b) Viral infection is the commonest cause
 - c) Echocardiography is diagnostic~.
 - d) The CXR may show cardiomegaly and the changes of congestive cardiac failure'
 - e) A normal radio labelled antimyosin Fab nuclear scan makes myocarditis unlikely
46. In adult epiglottitis:
- a) The mortality rate is lower for adults compared to child renK
 - b) Haemophilis influenzae is the commonest causative organismZ
 - c) Indirect laryngoscopy is contraindicated as it may precipitate airway obstruction"~—
 - d) Stridoy is present in most cases
 - e) Penicillin is the first line antibiotic of choice for treatmen~,
47. Features of a community acquired pneumonia associated with increased morbidity and mortality include the following EXCEPT:
- a) Age greater than 65 years'
 - b) C Reactive Protein greater than 40 —

- c) Serum urea greater than 7 mmol / L
- d) Multilobar involvement on CXR
- e) Bacteraemia

48. With respect to the assessment of haemoptysis, which is FALSE:

- a) In approx. 30% of cases no cause is found~'
- b) 20-30 % have a normal CXR --
- c) Bronchoscopy should be performed early in massive haemoptysis
- d) All patients should be admitted for investigation —
- e) In massive haemoptysis, the Trendelenburg position aids drainage of blood from the thorax

49. In Infective endocarditis, which is FALSE: .1

- a) Peripheral manifestations occur in 20% of cases
- b) Staph aureus is the most common pathogen in IV drug users -
- c) Fever and malaise are the 2 commonest presenting features—
- d) Neurological manifestations are present in 30-40 % of patients—'
- e) Blood cultures are positive in 95-100% of patients not previously treated with antibiotics —

50. In a patient with an abdominal aortic aneurysm (AAA), which is FALSE:

- a) The aorta is considered to be aneurysmal if it's diameter is greater than 3 cm -./
- b) A first degree relative with an AAA is considered a risk factor/
- c) Retroperitoneal is more common than intraabdominal ruptureV
- d) The risk of rupture rises if the aortic diameter is greater than 4 cm -
- e) The renal arteries are involved 25% of the time

51. In a patient presenting with aortic dissection, which is FALSE:

- a) The mortality rate is 1% per hr in the first 48 hr if untreated ~
- b) A Stanford type B lesion is more likely than a Stanford type A lesion~..
- c) Up to 15% are pain free and present with neurological impairment or sudden death
- d) Acute aortic incompetence is a common finding in proximal dissection-
- e) The combination of neurological deficit and chest pain suggests aortic dissection/

52. In a patient with suspected isolated cyanide ingestion, which investigation would be the LEAST useful in aiding diagnosis:

- a) Serum cyanide level
- b) Serum lactate level
- c) Methaemoglobin level v-
- d) ArterialpH,
- e) Arterial oxygen ~.

53. Currently, there is NO antivenom for envenomation by which creature?

- a) Tiger Snake /
- b) Red Back Spider'
- c) Box Jellyfish
- d) Stonefish
- e) Blue-ringed Octopusi

54. Sudden Infant Death Syndrome is associated with, or more prevalent in:

- a) Sleeping in the supine position 4
- b) An Apparent Life Threatening Event~—
- c) Warmer climate~
- d) Female, compared to male babies~,
- e) Older mothers ~

55. The following are features of valid consent EXCEPT

- a) Consent must be written —
- b) Consent must be informed
- c) Consent must be specific

- d) Consent must be freely given
- e) Consent must cover that which is actually done

Which of the following is an indication for reduction in a supracondylar fracture?

- a) Backward tilting of distal fragment by 20 degrees
- b) 45% of bony contact
- c) Medial tilting of 15 degrees
- d) Lateral tilting of 15 degrees
- e) All of the above

57. Which is FALSE regarding the diagnosis of acute testicular torsion?

- a) It is most common in adolescence (12-18yo)
- b) Severe sudden onset pain is diagnostic —~
- c) It may occur in a testicle that has been previously fixed
- d) Irritative voiding symptoms rarely occur
- e) An associated mild fever may be present

58. Urinary diagnostic indices of acute renal failure (ARF) due to prerenal causes includes:

- a) Blood Urea Creatinine ratio > 100:1
- b) Specific gravity < 1.013
- c) Urine Na > 10 mmol/L,,
- d) Urine osmolality ~ 350
- e) Urine: Plasma osmolar ratio < 1.2, ~.

59. In diagnosing Urinary Tract Infections (UTI), which are TRUE:

- a) Most patients have pyuria of > 10 leucocytes mm³.
- b) The presence of nitrites is 85% sensitive
- c) Haematuria is non specific -
- d) Proteinuria is common but non specific
- e) A bacteria count > 10⁵ is usually diagnostic,

/

60. In septic arthritis, which is NOT a typical synovial fluid finding:

- a) Yellow colour --
- b) Predominance of polymorphonuclear leucocytes V
- c) 5 — 1000 leucocytes per microlitre —
- d) Turbidity! — I
- e) Bacteria on Gram stain ~/