

## Random MCQs 1

1. In patients with abdominal pain, which of the following statements is MOST USEFUL in supporting a diagnosis of pancreatitis

- A. An USS showing cholelithiasis
- B. Calculating a Ranson score of greater than 2
- C. A history of colicky abdominal pain radiating to the back
- D. The finding of a Cullen sign on examination
- E. A chest X-ray showing a left sided pleural effusion

2. With respect to herniae, which of the following is CORRECT

- A An incarcerated hernia should be reduced as soon as possible
- B All patients with reduced inguinal herniae are safe to be discharged with surgical follow-up within 2 weeks
- C Inguinoscrotal herniae should transilluminate
- D The most common form of inguinal hernia in men is direct
- E Femoral herniae frequently incarcerate

3. In metabolic alkalosis, which of the following is TRUE

- A. Urinary chloride greater than 10 mmol/L is considered chloride responsive
- B. May result in hyperkalaemia
- C. Can be caused by Addison's disease
- D. The pCO<sub>2</sub> should rise 1.3 mmHg for every 1 mmol/L rise in HCO<sub>3</sub>
- E. Can be caused by chewing tobacco

4. With respect to anorectal pathology, which of the following statements is FALSE

- A. Second degree haemorrhoids commonly need reduction in the Emergency Department
- B. Diabetics are more prone to perianal abscesses
- C. Thrombosed external haemorrhoids should be surgically de-roofed and evacuated
- D. Chronic perianal abscesses should be referred for colonoscopy
- E. Acute anal fissures should be treated conservatively

5. With regard to acute myocardial infarction which of the following statements is TRUE

- A. ST segment elevation is present on initial ECG in ED in greater than 80% of patients
- B. In the presence of underlying RBBB (right bundle branch block), AMI can not be diagnosed by standard ST segment criteria
- C. In the presence of pre-existing LBBB (left bundle branch block), concordant ST elevation of >1mm is strongly suggestive of AMI
- D. In patients presenting with AMI, availability of Tnl or TnT assays renders CK/CK isoenzyme testing redundant.
- E. Mobitz type II 2<sup>nd</sup> degree heart block in the setting of inferior AMI is definite indication for placement of a temporary pacing wire.

6. With regard to the management of acute myocardial infarction which of the following statements is TRUE
- A. Patients presenting within the first hour of pain should be thrombolysed if PTCA is not available within 1 hour of presentation
  - B. Clopidogrel should be avoided in patients receiving fibrinolysis due to increased risk of haemorrhage
  - C. For patients presenting after 3 hours of pain, transfer for primary angioplasty is a reasonable option if time to PTCA will not exceed 90 minutes.
  - D. Failed reperfusion after thrombolysis is suggested by failure of ST segment elevation to resolve within 60-90 minutes after therapy
  - E. Risk of intracranial haemorrhage after TPA thrombolysis is in the region of 1 in 1000 patients treated
7. Regarding infective endocarditis which of the following statements is FALSE
- A. The sensitivity of trans-thoracic echo is 60-70%
  - B. Blood cultures are positive in approximately 90-95% of patients who have not received antibiotics
  - C. *Staphylococcus aureus* is the commonest pathogen causing native valve endocarditis in the non-IVDU population
  - D. Embolic phenomena occur in more than 50% of patients
  - E. Fever is seen in approximately 90% of patients
8. Following avulsion of a tooth, which of the following statements is FALSE
- A. Avulsed primary anterior teeth in those younger than 5 yrs of age are not replaced
  - B. Replanted primary teeth may be associated with subsequent facial deformity
  - C. Permanent teeth should be replaced regardless of duration of avulsion
  - D. Socket blood clot may prevent replantation
  - E. Milk is an appropriate transport medium
9. With respect to Toxic Epidermal Necrolysis (TEN), which of the following statements is TRUE
- A. Nikolsky's sign is pathognomonic
  - B. An underlying cause can be usually found
  - C. The emergency management includes the use of corticosteroids
  - D. TEN shows no gender predilection
  - E. The mortality is up to 15%
10. Which of the following statements is TRUE concerning disasters and disaster management
- A. Victoria has the highest disaster hazard risk of all the states in Australia
  - B. With earthquakes, the ration of injuries to deaths is usually 5:1
  - C. Chemical incidents are the most common cause of localised disasters
  - D. A level I disaster requires a regional response
  - E. A patient triaged as P1 or Red in a disaster should receive expectant management only
11. In patients who present with epistaxis, which of the following statements is TRUE
- A. All patients should have bloods collected for INR and cross-matching
  - B. Cocaine is a first-line treatment when simple measures fail
  - C. Silver nitrate is useful at cauterising vessels with active bleeding
  - D. All patients in whom bleeding stops with simple measures can be discharged
  - E. Oestrogen cream can be used to prevent further episodes of epistaxis in patients with hereditary haemorrhagic telangiectasia

12. With respect to diseases of the salivary glands, which of the following statements is TRUE

- A. In sialolithiasis 50% of the stones form in the parotid gland or its duct
- B. IV contrast does not effect the parotid gland
- C. Hodgkins lymphoma can involve the parotid
- D. Most salivary gland tumors are pleomorphic adenomas
- E. Management of sialolithiasis involved a clear fluid diet

13. With regard to meningococcaemia, which of the following statements is TRUE

- A. *N. meningitidis* is an aerobic, gram positive diplococcus
- B. 15% will have classical signs of meningococcal infection
- C. More than 50% will have a rash
- D. The most common complication is ARDS
- E. Waterhouse – Friderich syndrome occurs in 40%

14. With regard to soft tissue infections, which one of the following is TRUE

- A. Perianal abscesses originate in the anal crypts
- B. Cellulitis occurs only in areas where the skin has been breached
- C. Erysipelas occurs most commonly in the face
- D. *Pasteurella sp.* and *Staphylococcus aureus* are the predominant bacteria in infection secondary to human bites
- E. The absence of gas in the tissues excludes necrotizing fasciitis

15. With regard to calcium metabolism, which of the following statements is FALSE

- A. Hypercalcaemia potentiates digoxin toxicity
- B. Hypocalcaemia leads to hyperreflexia
- C. Hypercalcaemia causes hypertonia
- D. Hypercalcaemia shortens QT interval on ECG
- E. Hypocalcaemia prolongs the QT interval on ECG

16. Which of the following statements is TRUE regarding neonatal resuscitation

- A. 15% of neonates require resuscitation post delivery
- B. The Apgar score at 1 minute correlates with neurologic outcome
- C. IPPV is indicated if the heart rate is below 100 beats per minute
- D. If indicated, IPPV should be at a rate of 50-60 breaths per minute
- E. Atropine should be given if the heart rate drops below 80 beats per minute

17. With regards to brain abscesses, which of the following statements is TRUE

- A. 35% of cases occur in children under 15 years of age
- B. Organisms reach the brain by the haematogenous route in 50% of cases
- C. Gram negative rods, especially *Bacteroides sp.* are the usual pathogens in sinogenic and odontogenic brain abscesses.
- D. Otogenic brain abscesses are typically single and located in the temporal lobe or cerebellum
- E. Fever and neck stiffness is present in approximately two thirds of cases

18. With regards to Cervical Spine Injuries, which of the following is TRUE

- A. Approximately 20% of patients with facial injuries have cervical spine injuries
- B. Fractures of the posterior arch of C1 are usually very unstable
- C. Uncinate Process fractures are usually a result of lateral flexion
- D. Anterior vertebral subluxation of 25% or more suggests bilateral facet joint dislocation
- E. Jefferson Fractures are usually diagnosed on the Lateral Cervical Xray

19. With regards to Hip joint dislocations, which of the following statements is TRUE

- A. Anterior Dislocations are usually associated with falls
- B. Neurovascular compromise in anterior dislocations is uncommon
- C. Sciatic Nerve injuries occur in up to 70% of patients with posterior dislocations
- D. Abduction of the hip suggests posterior dislocation
- E. Delayed reduction is reasonable in anterior dislocations

20. With regards to Musculotendinous Injuries, which of the following statements is TRUE

- A. Complete ruptures of the proximal biceps tendon are frequently managed conservatively
- B. Active plantar flexion is absent in rupture of the tendo-achilles
- C. Most Acute Rotator Cuff tears are associated with limited adduction and internal rotation
- D. Ruptures of the Quadriceps Tendon usually occur in younger patients
- E. Hamstring ruptures are usually treated surgically

21. In a patient presenting with suspected Compartment Syndrome, which of the following statements is TRUE

- A. Tenseness and swelling is always noted on palpation
- B. Anterior Compartment Syndrome of the leg may be associated with hypoaesthesia of the 1<sup>st</sup> web space
- C. Pressures greater than 15 mmHg are diagnostic in the upper limb
- D. Compartment Syndrome does not occur in the hand
- E. Hypoaesthesia appears before muscle weakness

22. Which of the following statements is TRUE regarding Air Medical Transport

- A. A size 'C' oxygen cylinder at a flow rate of 10 L/min will last approximately 49 minutes
- B. According to the National Association of EMS Physicians, indications for helicopter scene transport include a GCS <12
- C. Fixed wing aircraft are preferred to helicopters for the transport of patients with spinal injuries as they have decreased vibration
- D. Most retrieval aircraft are able to be pressurised to 1 atmosphere
- E. Spinal injuries are an indication for flying at the lowest cabin altitude possible

23. With regard to schizophrenia, which of the following statements is FALSE

- A. Auditory hallucinations are one of the DSM-IV diagnostic criteria
- B. It affects 1% of the population
- C. Genetic factors play a role
- D. Negative symptoms are one of the DSM-IV diagnostic criteria
- E. Symptoms must be present for 3 months to diagnose using DSM-IV

24. A principle psychiatric diagnosis is more likely than an organic diagnosis in the presence of which ONE of the following

- A. A clear sensorium
- B. Age over 40 at first presentation
- C. Visual hallucinations
- D. Poor cognition
- E. Fluctuating consciousness

25. With respect to patients who present to Emergency Departments with Acute Renal Failure (ARF), which of the following is CORRECT

- A. Patients with ascites have a 40% rate of ARF over 5 years
- B. Anorexia, fatigue, pruritus and confusion are sensitive for diagnosing patients with ARF

- C. Ureteric obstruction by tumour is a common cause of ARF in patients with known neoplastic disease
- D. Hypotension during cardiopulmonary resuscitation commonly leads to ARF
- E. Low dose dopamine can improve recovery in Acute Tubular Necrosis

26. Regarding bronchiolitis which ONE of the following statements is TRUE

- A. Peak age of occurrence is between 12-18 months of age
- B. Incidence of secondary bacterial infection in patients admitted to hospital approaches 50%
- C. Saturations below 94% indicate a need for admission
- D. Ability of child to sleep is most useful historical indicator of severity.
- E. Children admitted to hospital should receive oral or intravenous steroids

27. Regarding acute asthma in children, which ONE of the following statements is FALSE

- A. Severe asthma is indicated by peak expiratory flow of less than 40% predicted
- B. 6-12 puffs of Salbutamol via a spacer every 20 minutes for 1 hour is appropriate for a child with moderately severe acute asthma
- C. Ipratropium Bromide is indicated for mild to moderate asthma in children
- D. Systemic steroids are indicated for moderate or severe attacks of asthma in children
- E. The majority of asthma deaths occur in patients with persistent asthma

28. Regarding community acquired pneumonia in adults, which of the following statements is TRUE

- A. Cavitation is common in pneumonia due to *Mycoplasma pneumoniae* and *Haemophilus influenzae*
- B. *Legionella* is the commonest cause of 'atypical pneumonia'
- C. Hypothermia is the clinical feature most closely associated with mortality
- D. Pneumonia severity score (PSI) class I requires respiratory rate to be less than 40
- E. IV Azithromycin and Ceftriaxone is appropriate empiric therapy for severe community acquired pneumonia throughout Australia

29. Regarding patients with Chronic Obstructive Airways Disease (COAD), which of the following statements is TRUE

- A. 25% of episodes of acute respiratory failure are precipitated by heart failure
- B. Reduction in FVC is a better predictor of severity than reduction in FEV<sub>1</sub>
- C. Non-invasive ventilation should not be used when arterial pH is less than 7.20
- D. In acute exacerbations anticholinergic agents such as Ipratropium Bromide provide have no proven additional benefit to nebulised  $\beta$ -agonists
- E. In patients with acute hypercapnic respiratory failure, non-invasive ventilation reduces the need for intubation but has no proven effect on mortality

30. Regarding spontaneous pneumothorax in adults which of the following statements is TRUE

- A. Acute pleuritic pain is seen in 95%
- B. Sensitivity of PA chest x-ray is greater than 97%
- C. Ultrasonography has a sensitivity of approximately 60%
- D. ST and T-wave changes are not seen in isolated pneumothorax
- E. Aspiration of greater than 1000 ml of air suggests that simple aspiration will fail

31. In relation to smoke inhalation, which of the following statements is TRUE

- A. Signs of pulmonary injury do not present after 12 hours
- B. Patients are asymptomatic until carboxyhaemoglobin levels are around 30%
- C. Chest X-rays are usually abnormal early
- D. Pulmonary oedema does not occur
- E. Toxic gas exposure may include hydrogen chloride and phosgene

32. In patients who present with mastitis, which of the following statements is TRUE
- A. Untreated most will develop abscesses
  - B. Warm compresses and breast support are of little value in the treatment
  - C. Abscesses rarely need surgical drainage if breast feeding is continued
  - D. Clindamycin is the antibiotic of choice in patients with penicillin hypersensitivity
  - E. Breast feeding should be stopped and a breast pump used in all patients with mastiti
33. With respect to Reiter's Syndrome, which of the following statements is FALSE
- A. There is an association with HIV
  - B. Foot pain is caused by plantar fasciitis
  - C. The conjunctivitis always occurs in both eyes
  - D. Heel pain confers a worse prognosis
  - E. Up to 50% of patients can suffer recurrent disease
34. With regards to post-traumatic tracheobronchial injuries, which of the following is FALSE
- A. Approximately 10% of patients may be asymptomatic
  - B. Most injuries occur near the carina or the origin of the lobar bronchi
  - C. May be a result of rapid deceleration
  - D. Presence of deep cervical emphysema is diagnostic
  - E. Mediastinitis is a potential complication
35. On examining a patient following blunt facial trauma, the following statements is TRUE
- A. Telecanthus suggests involvement of the lateral canthal ligament
  - B. Cerebrospinal fluid rhinorrhoea does not occur in Le Fort type 2 fractures
  - C. Enophthalmos does not occur in medial orbital wall fractures
  - D. In mandibular fractures, symphysis fractures are less common than molar fractures
  - E. Paralysis of the lower lip may be associated with mandibular fractures
36. With regards to traumatic thoracic aortic injuries, which of the following statements is TRUE
- A. Upper extremity hypotension is present
  - B. The patient may have a harsh diastolic murmur over the interscapular area
  - C. The most frequent radiologic finding is displacement of the left mainstem bronchus
  - D. Anuria is not a feature
  - E. Superior Vena Caval Syndrome may occur
37. In relation to a patient presenting with an oesophageal foreign body, which of the following statements is TRUE
- A. The oesophageal narrowing at the level of the Aortic Arch (T4) is the most common site of trapping
  - B. Removal of lodged button batteries may be delayed if there is no airway compromise
  - C. As many as 85% of children with coins lodged in their oesophagus will be asymptomatic
  - D. The majority of adult impactions arise in the distal oesophagus
  - E. All food Impaction requires removal within 4 hours
38. With regards to priapism in the paediatric population, which of the following statements is CORRECT
- A. High-flow priapism is more frequent than the low-flow type
  - B. Long term complications of high-flow priapism are common and include corporal fibrosis and erectile dysfunction
  - C. A common cause of low-flow priapism includes a groin or straddle injury
  - D. In low-flow priapism the entire penis is partially rigid and painless
  - E. Management is the same in both high flow and low flow priapism

39. With respect to Lateral Sinus Thrombosis (LST) and Otitis Media (OM), which of the following statements is TRUE

- A. Clinical findings of LST are easy to distinguish from the clinical findings that occur in other complications of OM
- B. In the diagnosis of LST, CT is equivalent to MRI in sensitivity and specificity
- C. Bacteria are can often be isolated from the sinus
- D. IV nerve palsy is a common presentation
- E. Initial treatment is antibiotics and many patients go on to require surgical intervention

40. With respect to electrical injuries, which of the following statements is FALSE

- A. Voltages less than 50V have not proven to be hazardous
- B. The threshold for ventricular fibrillation is 100mA
- C. Direct current is much more lethal than alternating current
- D. Transthoracic current carries a 60% mortality
- E. Patients with cardiac arrhythmias require admission to hospital until arrhythmia resolves

41. Which of the following statements with respect to hypothermia is TRUE

- A. J waves are best seen in leads III and aVF
- B. Atrial fibrillation is the commonest arrhythmia seen below 32°C
- C. Ventricular fibrillation should not be defibrillated
- D. A paradoxical drop in core temperature after rewarming carries the highest risk
- E. Insulin should be commenced to manage hyperglycaemia in hypothermia

42. With respect to snake bites which of the following statements is FALSE

- A. The dose of antivenom for children and adults is the same
- B. All patients who receive antivenom should receive a short course of oral steroids
- C. Prophylactic adrenalin has been shown to reduce the incidence of allergic reactions to antivenom
- D. Urine is preferred to serum for use of VDK for detection of snake venom
- E. Antivenom is given as an infusion over 30mins, unless in an arrest situation

43. Which of the following drugs are NOT associated with serotonin syndrome

- A. Sertraline
- B. Lithium
- C. LSD
- D. Imipramine
- E. Chlorpromazine

44. Regarding therapeutic hypothermia post cardiac arrest, which of the following statements is TRUE

- A. Survival outcomes were improved for all classes of arrest
- B. Overall survival was not improved but neurologically intact outcome was.
- C. Should be applied to all out of hospital VT/VF arrest patients who survive to hospital
- D. Fluid loading with 30 ml/kg of 4 degree C Normal saline is effective at rapidly reducing core temperature.
- E. The target temperature needs to be achieved within the first hour of hospitalisation for an outcome benefit to be anticipated.

45. Regarding the ARC guidelines for paediatric cardiorespiratory arrest which ONE of the following is FALSE
- A. 3 stacked shocks are given if the arrest is witnessed
  - B. The dose for adrenaline given via an ETT is 100 mcg/kg
  - C. Guidelines suggest that if there has been no ROSC after 20-30 minutes in a child that it is reasonable to cease resuscitation
  - D. CPR should be initiated for heart rates below 80/min in children
  - E. The chest should be compressed by 1/3 of its depth during compressions
46. Regarding local anaesthetics which of the following statements is TRUE
- A. 50 ml of 0.5% prilocaine exceeds the recommended dose for a 50 kg female receiving a Bier's block
  - B. Intercostal blocks commonly require higher doses of local anaesthetic due to high rate of systemic absorption
  - C. Bupivacaine may be used for intravenous regional anaesthesia at doses of up to 2 mg/kg
  - D. A 70 kg male could safely receive peripheral infiltration of a maximum dose of 30 mls of 1 % lignocaine with adrenaline
  - E. Seizures increase the cardiotoxicity of local anaesthetics
47. Regarding airway management in children which of the following statements is TRUE
- A. The larynx is more anterior and inferior
  - B. Suxamethonium should be avoided in children under 2 because of bradycardia
  - C. Cricothyrotomy should be avoided in children under the age of 6
  - D. Pre-treatment with atropine 0.02 mg/kg is recommended for children under 5 years
  - E. Desaturation occurs faster than in adults
48. Seizure is a feature of all of the following drugs in overdose EXCEPT
- A. Amphetamines
  - B. Amitriptyline
  - C. Cocaine
  - D. Tramadol
  - E. Clonidine
49. The cholinergic syndrome has all the following features EXCEPT
- A. Confusion
  - B. Miosis
  - C. Constipation
  - D. Urinary retention
  - E. Blurred vision
50. Which one of the following conditions is NOT a common reversible precipitant of Hepatic Encephalopathy?
- A. Alcohol
  - B. Large steak meal
  - C. Constipation
  - D. Oral hypnotic
  - E. IV fluids

51. Which of the following drugs is NOT commonly used in either first or second line treatment of Helicobacter infection?

- A. Omeprazole 20mg bd for 7 days'
- B. Amoxicillin 1gm bd for 7 days
- C. Clarithromycin 500 mg bd for 7 days
- D. Colloidal bismuth subcitrate 120 mg qid for 7 days
- E. Bactrim DS 800 / 160 mgs bd for 7 days

52. A 68 year old man is brought to hospital by ambulance 90 minutes after suffering a left sided stroke with right sided weakness. Which of the following does NOT support the diagnosis of a medial medullary syndrome?

- A. Paralysis of the right side of the tongue
- B. Occlusion of the left vertebral artery
- C. Paralysis of the right leg and arm
- D. Impaired sensation of right side of the body
- E. Lysis should be considered

53. A 55 year old man presents to the Emergency Department in shock. Addison's disease is considered in his differential diagnosis. Which of the following statements in relation to Addison's disease is FALSE?

- A. Asthenia is a cardinal symptom
- B. Hydrocortisone is preferred over Dexamethasone as treatment as it does not interfere with steroid assays
- C. Sepsis can precipitate Addison's Disease
- D. A short tetracosactrin ("synacthen") test should be done in ED to confirm or exclude the diagnosis of Addison's disease
- E. A high  $K^+$  and a low  $Na^+$  supports the diagnosis of Addison's Disease

54. A 34 year old woman is found to have a microcytic anaemia on a routine blood tests. Which of the following conditions would NOT be in your differential diagnosis

- A. Sideroblastic anaemia
- B. Dysfunctional bleeding
- C. Beta thalassemia
- D. Vegetarian
- E. Large scalp laceration with approximately 800 mls blood loss

55. A 22 year old man with a history of a level 2 melanoma excised at the age of 17 presents complaining of anorexia and feeling unwell. Which of the following organs is NOT a common site for metastases?

- A. Cerebral hemispheres
- B. Stomach
- C. Lung
- D. Liver
- E. Femur

56. Regarding Guillain-Barre syndrome, which ONE of the following is TRUE

- A. There is a significant association with preceding E.coli gastroenteritis
- B. Loss of distal sensation is the usual initial sign on examination
- C. Brisk reflexes in the presence of significant weakness is the typical finding on examination
- D. Cranial nerve involvement may occur in the absence of peripheral weakness
- E. CSF analysis typically shows elevated protein and low glucose

57. Regarding seizures, which ONE of the following is FALSE

- A. Febrile convulsions affect approximately 3% of children
- B. A loading dose of Phenytoin of 1 g is adequate for the majority of adults in status epilepticus
- C. In children with an apparent febrile convulsion an LP should be performed when there is a clinical suspicion of meningitis.
- D. Phenobarbitone is an appropriate 2nd line drug in paediatric status epilepticus in a dose of approximately 10-15mg/kg over 30 minutes.
- E. Ease of termination of status epilepticus is more closely related to duration of status than underlying cause.

58. In a patient with thyroid storm, which ONE of the following statements is TRUE

- A. Hypoglycaemia is usual
- B. IV steroids should be given
- C. GI symptoms are rare
- D. Laboratory tests give definitive diagnosis
- E. Methimazole is the mainstay of therapy

59. Focused Abdominal Sonogram in Trauma (FAST) assesses for blood in all of the following regions EXCEPT

- A. Pericardial sac
- B. Splenorenal pouch
- C. Pelvis
- D. Hepatorenal pouch
- E. Retroperitoneum

60. Which of the following statements regarding spontaneous pneumothorax is TRUE

- A. The recurrence rate following a single episode is 10 % over the ensuing five years
- B. Pulmonary infection is the most commonly associated condition in secondary spontaneous pneumothorax
- C. Hamman's sign is a pathognomonic finding
- D. In the absence of any further air leak, a 20 % pneumothorax would be expected to reabsorb over approximately 16 days\*
- E. Re-expansion pulmonary oedema is usually bilateral

## ANSWERS

1. In patients with abdominal pain, which of the following statements is MOST USEFUL in supporting a diagnosis of pancreatitis

- A. An USS showing cholelithiasis
- B. Calculating a Ranson score of greater than 2
- C. A history of colicky abdominal pain radiating to the back
- D. The finding of a Cullen sign on examination
- E. A chest X-ray showing a left sided pleural effusion

Answer: D, Tintinelli p.573-5

- A Incorrect – this is useful, but not the most useful of these statements in supporting the diagnosis
- B Incorrect – no acute use, used after the diagnosis made
- C Incorrect – this suggests another pathology

- D *Correct – this is highly suggestive of haemorrhagic pancreatitis, therefore the most useful statement in confirming a diagnosis*
- E *Incorrect – this may be common, but there are many other common causes of pleural effusion*

2. With respect to herniae, which of the following is CORRECT

- A An incarcerated hernia should be reduced as soon as possible
- B All patients with reduced inguinal herniae are safe to be discharged with surgical follow-up within 2 weeks
- C Inguinoscrotal herniae should transilluminate
- D The most common form of inguinal hernia in men is direct
- E Femoral herniae frequently incarcerate

*Answer: E*

- A *Incorrect – the duration of incarceration is important*
- B *Incorrect – infants need repair within days*
- C *Incorrect – they should not*
- D *Incorrect – Tintinelli p.528*
- E *Correct*

3. In metabolic alkalosis, which of the following is TRUE

- A. Urinary chloride greater than 10 mmol/L is considered chloride responsive
- B. May result in hyperkalaemia
- C. Can be caused by Addison's disease
- D. The pCO<sub>2</sub> should rise 1.3 mmHg for every 1 mmol/L rise in HCO<sub>3</sub>
- E. Can be caused by chewing tobacco

*Answer: E*

- A *<10*
- B *Hypokalaemia*
- C *Caused by steroids*
- D *0.7*
- E *True*

*Rosen's 6<sup>th</sup> edition, pages 1930 – 1931*

*Tintinalli 6<sup>th</sup> edition, pages 156 – 157*

*Cameron 2<sup>nd</sup> edition, page 479*

4. With respect to anorectal pathology, which of the following statements is FALSE

- A. Second degree haemorrhoids commonly need reduction in the Emergency Department
- B. Diabetics are more prone to perianal abscesses
- C. Thrombosed external haemorrhoids should be surgically de-roofed and evacuated
- D. Chronic perianal abscesses should be referred for colonoscopy
- E. Acute anal fissures should be treated conservatively

*Answer: A, ref Dunn p.260*

5. With regard to acute myocardial infarction which of the following statements is TRUE

- A. ST segment elevation is present on initial ECG in ED in greater than 80% of patients
- B. In the presence of underlying RBBB (right bundle branch block), AMI can not be diagnosed by standard ST segment criteria

- C. In the presence of pre-existing LBBB (left bundle branch block), concordant ST elevation of >1mm is strongly suggestive of AMI
- D. In patients presenting with AMI, availability of Tnl or TnT assays renders CK/CK isoenzyme testing redundant.
- E. Mobitz type II 2<sup>nd</sup> degree heart block in the setting of inferior AMI is definite indication for placement of a temporary pacing wire.

Answer: C

- a) *False, present in 50% of initial ECG's. Tintinalli p 345*
- b) *False, ST segment elevation can be interpreted in the presence of RBBB*
- c) *True, concordant STE of >=1mm or discordant STE of >= 5mm or ST depression of >= 1mm is strongly suggestive of AMI. Tintinalli p 346*
- d) *False, serial CK-MB testing is useful to diagnose reinfarction as levels peak and fall more rapidly than troponins. Tintinalli p 347*
- e) *False, although 2<sup>nd</sup> degree heart block in the setting of inferior MI may degenerate into complete heart block it is usually temporary and rarely requires placement of pacing wire. Tintinalli p 348)*

6. With regard to the management of acute myocardial infarction which of the following statements is TRUE

- A. Patients presenting within the first hour of pain should be thrombolysed if PTCA is not available within 1 hour of presentation
- B. Clopidogrel should be avoided in patients receiving fibrinolysis due to increased risk of haemorrhage
- C. For patients presenting after 3 hours of pain, transfer for primary angioplasty is a reasonable option if time to PTCA will not exceed 90 minutes.
- D. Failed reperfusion after thrombolysis is suggested by failure of ST segment elevation to resolve within 60-90 minutes after therapy
- E. Risk of intracranial haemorrhage after TPA thrombolysis is in the region of 1 in 1000 patients treated

Answer: A

- a) *True. In patients presenting early, time to reperfusion is particularly important. Fibrinolysis is highly effective and benefit of PTCA is minimal if any. Delays of 90 minutes are inappropriate in this group. Australian heart association guidelines 2006*
- b) *False. Clopidogrel is recommended for all patients receiving reperfusion unless there are contraindications. Australian heart association guidelines 2006*
- c) *False. Acceptable transfer time to PTCA is 2 hours. Australian heart association guidelines 2006*
- d) *False. Failed thrombolysis suggested by ongoing pain, hemodynamic or electrical instability, failure of segments to resolve by 50% at 60-90 minutes. Australian heart association guidelines 2006*
- e) *False. Incidence of ICH with TPA is in the region of 0.5-1%. 1 in 100-200 patients*

7. Regarding infective endocarditis which of the following statements is FALSE

- A. The sensitivity of trans-thoracic echo is 60-70%
- B. Blood cultures are positive in approximately 90-95% of patients who have not received antibiotics
- C. *Staphylococcus aureus* is the commonest pathogen causing native valve endocarditis in the non-IVDU population
- D. Embolic phenomena occur in more than 50% of patients
- E. Fever is seen in approximately 90% of patients

Answer: C

- a) *True. Rosen p1302*
- b) *True. Rosen 1302*

- c) *False. Streptococcus causes > 50%. Tintinalli 938*
- d) *True. Tintinalli 939*
- e) *True. Tintinalli 939*

8. Following avulsion of a tooth, which of the following statements is FALSE

- A. Avulsed primary anterior teeth in those younger than 5 yrs of age are not replaced
- B. Replanted primary teeth may be associated with subsequent facial deformity
- C. Permanent teeth should be replaced regardless of duration of avulsion
- D. Socket blood clot may prevent replantation
- E. Milk is an appropriate transport medium

*Answer: C*

9. With respect to Toxic Epidermal Necrolysis (TEN), which of the following statements is TRUE

- A. Nikolsky's sign is pathognomonic
- B. An underlying cause can be usually found
- C. The emergency management includes the use of corticosteroids
- D. TEN shows no gender predilection
- E. The mortality is up to 15%

*Answer: D*

- A *Incorrect – also in Bullous diseases*
- B *Incorrect – many causes, most common is ideopathic*
- C *Controversial – Tintinelli says yes, Cameron says no*
- D *Correct*
- E *Incorrect – 25-30% mortality, Tintinelli p. 1515*

10. Which of the following statements is TRUE concerning disasters and disaster management

- A. Victoria has the highest disaster hazard risk of all the states in Australia
- B. With earthquakes, the ration of injuries to deaths is usually 5:1
- C. Chemical incidents are the most common cause of localised disasters
- D. A level I disaster requires a regional response
- E. A patient triaged as P1 or Red in a disaster should receive expectant management only

*ANSWER: C*

*REFERENCE*

*Dunn, R - The Emergency Medicine Manual 3<sup>rd</sup> Ed; pp 7-10, C p8*

11. In patients who present with epistaxis, which of the following statements is TRUE

- A. All patients should have bloods collected for INR and cross-matching
- B. Cocaine is a first-line treatment when simple measures fail
- C. Silver nitrate is useful at cauterising vessels with active bleeding
- D. All patients in whom bleeding stops with simple measures can be discharged
- E. Oestrogen cream can be used to prevent further episodes of epistaxis in patients with hereditary haemorrhagic telangiectasia

*Answer: E*

- A *Only selected patients need Ix*
- B *Second line treatment after Lignocaine and Adrenaline*
- C *Ineffective if active bleeding*
- D *Need to consider medical and social issues in everyone!*
- E *Correct*

12. With respect to diseases of the salivary glands, which of the following statements is TRUE

- A. In sialolithiasis 50% of the stones form in the parotid gland or its duct
- B. IV contrast does not effect the parotid gland
- C. Hodgkins lymphoma can involve the parotid
- D. Most salivary gland tumors are pleomorphic adenomas
- E. Management of sialolithiasis involved a clear fluid diet

Answer: D

- A 15% of stones are parotid, 85% submandibular
- B IV contrast can cause parotid tenderness
- C NHL involves the parotid
- D Correct
- E Management involves stimulation of saliva production, bimanual palpation, analgesia, antibiotics, duct dilation and/or incision

13. With regard to meningococcaemia, which of the following statements is TRUE

- A. *N. meningitidis* is an aerobic, gram positive diplococcus
- B. 15% will have classical signs of meningococcal infection
- C. More than 50% will have a rash
- D. The most common complication is ARDS
- E. Waterhouse – Friderich syndrome occurs in 40%

Answer: C

- A G -ve
- B 60%
- C T
- D myocarditis- R
- E 10 – 20%

Rosen 6<sup>th</sup> edition – pages 2020 – 2024

Tintinalli 6<sup>th</sup> edition 1518 – 1519

14. With regard to soft tissue infections, which one of the following is TRUE

- A. Perianal abscesses originate in the anal crypts
- B. Cellulitis occurs only in areas where the skin has been breached
- C. Erysipelas occurs most commonly in the face
- D. *Pasteurella sp.* and *Staphylococcus aureus* are the predominant bacteria in infection secondary to human bites
- E. The absence of gas in the tissues excludes necrotizing fasciitis

Answer: A

- A True
- B ?
- C Lower limbs
- D *Eikenella* & *S aureus*
- E ?

Rosen 6<sup>th</sup> edition pages 2195 – 2209

Tintinalli 6<sup>th</sup> edition, pages 979 – 986

Cameron 2<sup>nd</sup> edition 405 - 407

15. With regard to calcium metabolism, which of the following statements is FALSE

- A. Hypercalcaemia potentiates digoxin toxicity

- B. Hypocalcaemia leads to hyperreflexia
- C. Hypercalcaemia causes hypertonia
- D. Hypercalcaemia shortens QT interval on ECG
- E. Hypocalcaemia prolongs the QT interval on ECG

Answer: C

Rosen 6<sup>th</sup> edition, pages 1943 – 1945

Cameron 2<sup>nd</sup> edition, pages

16. Which of the following statements is TRUE regarding neonatal resuscitation

- A. 15% of neonates require resuscitation post delivery
- B. The Apgar score at 1 minute correlates with neurologic outcome
- C. IPPV is indicated if the heart rate is below 100 beats per minute
- D. If indicated, IPPV should be at a rate of 50-60 breaths per minute
- E. Atropine should be given if the heart rate drops below 80 beats per minute

ANSWER: C

REFERENCE

Dunn, R - *The Emergency Medicine Manual 3<sup>rd</sup> Ed*; pp 564

17. With regards to brain abscesses, which of the following statements is TRUE

- A. 35% of cases occur in children under 15 years of age
- B. Organisms reach the brain by the haematogenous route in 50% of cases
- C. Gram negative rods, especially *Bacteroides sp.* are the usual pathogens in sinogenic and odontogenic brain abscesses.
- D. Otogenic brain abscesses are typically single and located in the temporal lobe or cerebellum
- E. Fever and neck stiffness is present in approximately two thirds of cases

ANSWER: D

REFERENCE

Tintinalli 6<sup>th</sup> Edition – pp 1436

18. With regards to Cervical Spine Injuries, which of the following is TRUE

- A. Approximately 20% of patients with facial injuries have cervical spine injuries
- B. Fractures of the posterior arch of C1 are usually very unstable
- C. Uncinate Process fractures are usually a result of lateral flexion
- D. Anterior vertebral subluxation of 25% or more suggests bilateral facet joint dislocation
- E. Jefferson Fractures are usually diagnosed on the Lateral Cervical Xray

Answer: C

19. With regards to Hip joint dislocations, which of the following statements is TRUE

- A. Anterior Dislocations are usually associated with falls
- B. Neurovascular compromise in anterior dislocations is uncommon
- C. Sciatic Nerve injuries occur in up to 70% of patients with posterior dislocations
- D. Abduction of the hip suggests posterior dislocation
- E. Delayed reduction is reasonable in anterior dislocations

Answer: B

20. With regards to Musculotendinous Injuries, which of the following statements is TRUE

- A. Complete ruptures of the proximal biceps tendon are frequently managed conservatively
- B. Active plantar flexion is absent in rupture of the tendo-achilles
- C. Most Acute Rotator Cuff tears are associated with limited adduction and internal rotation
- D. Ruptures of the Quadriceps Tendon usually occur in younger patients
- E. Hamstring ruptures are usually treated surgically

Answer: A

21. In a patient presenting with suspected Compartment Syndrome, which of the following statements is TRUE

- A. Tenseness and swelling is always noted on palpation
- B. Anterior Compartment Syndrome of the leg may be associated with hypoaesthesia of the 1<sup>st</sup> web space
- C. Pressures greater than 15 mmHg are diagnostic in the upper limb
- D. Compartment Syndrome does not occur in the hand
- E. Hypoaesthesia appears before muscle weakness

Answer: B

22. Which of the following statements is TRUE regarding Air Medical Transport

- A. A size 'C' oxygen cylinder at a flow rate of 10 L/min will last approximately 49 minutes
- B. According to the National Association of EMS Physicians, indications for helicopter scene transport include a GCS <12
- C. Fixed wing aircraft are preferred to helicopters for the transport of patients with spinal injuries as they have decreased vibration
- D. Most retrieval aircraft are able to be pressurised to 1 atmosphere
- E. Spinal injuries are an indication for flying at the lowest cabin altitude possible

ANSWER: A

REFERENCE

Dunn, R - *The Emergency Medicine Manual 3<sup>rd</sup> Ed*; pp 574-577 – A p 577

23. With regard to schizophrenia, which of the following statements is FALSE

- A. Auditory hallucinations are one of the DSM-IV diagnostic criteria
- B. It affects 1% of the population
- C. Genetic factors play a role
- D. Negative symptoms are one of the DSM-IV diagnostic criteria
- E. Symptoms must be present for 3 months to diagnose using DSM-IV

Answer: E

Require 6 months of symptoms

Tintinalli 6<sup>th</sup> edition page 1809

Rosen 6<sup>th</sup> edition, pages 1726 – 1728 – table pg1727

24. A principle psychiatric diagnosis is more likely than an organic diagnosis in the presence of which ONE of the following

- A. A clear sensorium
- B. Age over 40 at first presentation
- C. Visual hallucinations
- D. Poor cognition
- E. Fluctuating consciousness

Answer: A

25. With respect to patients who present to Emergency Departments with Acute Renal Failure (ARF), which of the following is CORRECT

- A. Patients with ascites have a 40% rate of ARF over 5 years
- B. Anorexia, fatigue, pruritus and confusion are sensitive for diagnosing patients with ARF
- C. Ureteric obstruction by tumour is a common cause of ARF in patients with known neoplastic disease
- D. Hypotension during cardiopulmonary resuscitation commonly leads to ARF
- E. Low dose dopamine can improve recovery in Acute Tubular Necrosis

Answer: A

- A *Correct, ref Cameron p.*
- B *Incorrect – common symptoms, but insensitive, Cameron p.447*
- C *Incorrect – most common causes in cancer pt's are pre-renal and nephrotoxic drugs, Cameron p.446*
- D *Incorrect – hypoperfusion during CPR alone rarely leads to ARF, it's the other problems that are going on with the patient that lead to CPR*
- E *Incorrect – Cameron p.449*

26. Regarding bronchiolitis which ONE of the following statements is TRUE

- A. Peak age of occurrence is between 12-18 months of age
- B. Incidence of secondary bacterial infection in patients admitted to hospital approaches 50%
- C. Saturations below 94% indicate a need for admission
- D. Ability of child to sleep is most useful historical indicator of severity.
- E. Children admitted to hospital should receive oral or intravenous steroids

Answer:C

- A *False. Peak 2-8 months. Cameron p 154*
- B *False. Incidence of concomitant bacterial infection is low. Cameron p 154*
- C *True. Cameron p 155*
- D *False. Feeding difficulty is of most use. Cameron p 154*
- E *Use is controversial. Benefit if present is marginal. Cameron p 156*

27. Regarding acute asthma in children, which ONE of the following statements is FALSE

- A. Severe asthma is indicated by peak expiratory flow of less than 40% predicted
- B. 6-12 puffs of Salbutamol via a spacer every 20 minutes for 1 hour is appropriate for a child with moderately severe acute asthma
- C. Ipratropium Bromide is indicated for mild to moderate asthma in children
- D. Systemic steroids are indicated for moderate or severe attacks of asthma in children
- E. The majority of asthma deaths occur in patients with persistent asthma

Answer: C

- A *True. NAC. Paediatric Cameron p143*
- B *True. Cameron p 146*
- C *False. Indicated in severe/life-threatening but probably overused in mild – moderate asthma. Cameron p146*
- D *True. Also indicated in mild attacks if episodes persisted for several days or patient on prophylaxis. Cameron p 144*
- E *True. Cameron p143*

28. Regarding community acquired pneumonia in adults, which of the following statements is TRUE

- A. Cavitation is common in pneumonia due to *Mycoplasma pneumoniae* and *Haemophilus influenzae*

- B. *Legionella* is the commonest cause of 'atypical pneumonia'
- C. Hypothermia is the clinical feature most closely associated with mortality
- D. Pneumonia severity score (PSI) class I requires respiratory rate to be less than 40
- E. IV Azithromycin and Ceftriaxone is appropriate empiric therapy for severe community acquired pneumonia throughout Australia

Answer:C

- A *False. Cameron p 283*
- B *False. Mycoplasma is. Cameron p277*
- C *True. Cameron p 278*
- D *False. Rate < 30. Antibiotic guidelines.*
- E *False. Need to cover B.pseudomallei/ A. baumannii in tropical Australia with meropenem or imipenem + azithromycin. Antibiotic Guidelines*

29. Regarding patients with Chronic Obstructive Airways Disease (COAD), which of the following statements is TRUE

- A. 25% of episodes of acute respiratory failure are precipitated by heart failure
- B. Reduction in FVC is a better predictor of severity than reduction in FEV<sub>1</sub>
- C. Non-invasive ventilation should not be used when arterial pH is less than 7.20
- D. In acute exacerbations anticholinergic agents such as Ipratropium Bromide provide have no proven additional benefit to nebulised β-agonists
- E. In patients with acute hypercapnic respiratory failure, non-invasive ventilation reduces the need for intubation but has no proven effect on mortality

Answer:A

- A *True. T Oh p298. 50% infection, 25% heart failure 25% other*
- B *False. T Oh p299*
- C *False. Common indications include pH < 7.30 and elevated pCO<sub>2</sub>.*
- D *False. Ipratropium has similar or greater bronchodilator effect than b-agonists in COPD. Combination therapy has been shown to be more effective than either agent alone. T Oh p301*
- E *False. NIV reduces mortality , complications, need for intubation, length of hospital stay. T Oh p303*

30. Regarding spontaneous pneumothorax in adults which of the following statements is TRUE

- A. Acute pleuritic pain is seen in 95%
- B. Sensitivity of PA chest x-ray is greater than 97%
- C. Ultrasonography has a sensitivity of approximately 60%
- D. ST and T-wave changes are not seen in isolated pneumothorax
- E. Aspiration of greater than 1000 ml of air suggests that simple aspiration will fail

Answer:A

- A *True. Tintinalli p463*
- B *False. Sensitivity 83% Tintinalli p463*
- C *False. Quoted sensitivities well above 90%. Tintinalli p463*
- D *False. Tintinalli p463*
- E *False. Volumes of 2.5 to 4 litres have been suggested as likely volumes above which simple aspiration will fail. Tintinalli p464*

31. In relation to smoke inhalation, which of the following statements is TRUE

- A. Signs of pulmonary injury do not present after 12 hours
- B. Patients are asymptomatic until carboxyhaemoglobin levels are around 30%
- C. Chest X-rays are usually abnormal early
- D. Pulmonary oedema does not occur
- E. Toxic gas exposure may include hydrogen chloride and phosgene

Answer: E

32. In patients who present with mastitis, which of the following statements is TRUE

- A. Untreated most will develop abscesses
- B. Warm compresses and breast support are of little value in the treatment
- C. Abscesses rarely need surgical drainage if breast feeding is continued
- D. Clindamycin is the antibiotic of choice in patients with penicillin hypersensitivity
- E. Breast feeding should be stopped and a breast pump used in all patients with mastitis

Answers: D, Cameron p.408, *Therapeutic Guidelines: Antibiotic*

- A Only 11% develop abscesses if untreated
- B Warm compresses, breast support analgesia and nipple moisturizers are all important parts of the treatment
- C Babies suck the life out of you, not the pus out of abscesses
- D Correct – *Therapeutic Guidelines: Antibiotic*
- E Incorrect – only in severe cases, in fact breast pumps are a risk for mastitis (ref *Nursing Mothers Association*)

33. With respect to Reiter's Syndrome, which of the following statements is FALSE

- A. There is an association with HIV
- B. Foot pain is caused by plantar fasciitis
- C. The conjunctivitis always occurs in both eyes
- D. Heel pain confers a worse prognosis
- E. Up to 50% of patients can suffer recurrent disease

Answer: C, Cameron p 522

- (a) Correct
- (b) Correct
- (c) Incorrect – can occur in one eye only
- (d) Correct – caused by involvement of the Achilles tendon
- (e) Correct – 15-50% have recurrent disease

34. With regards to post-traumatic tracheobronchial injuries, which of the following is FALSE

- A. Approximately 10% of patients may be asymptomatic
- B. Most injuries occur near the carina or the origin of the lobar bronchi
- C. May be a result of rapid deceleration
- D. Presence of deep cervical emphysema is diagnostic
- E. Mediastinitis is a potential complication

Answer: D

35. On examining a patient following blunt facial trauma, the following statements is TRUE

- A. Telecanthus suggests involvement of the lateral canthal ligament
- B. Cerebrospinal fluid rhinorrhoea does not occur in Le Fort type 2 fractures
- C. Enophthalmos does not occur in medial orbital wall fractures
- D. In mandibular fractures, symphysis fractures are less common than molar fractures
- E. Paralysis of the lower lip may be associated with mandibular fractures

Answer: D

36. With regards to traumatic thoracic aortic injuries, which of the following statements is TRUE

- A. Upper extremity hypotension is present
- B. The patient may have a harsh diastolic murmur over the interscapular area
- C. The most frequent radiologic finding is displacement of the left mainstem bronchus
- D. Anuria is not a feature
- E. Superior Vena Caval Syndrome may occur

Answer: E

37. In relation to a patient presenting with an oesophageal foreign body, which of the following statements is TRUE

- A. The oesophageal narrowing at the level of the Aortic Arch (T4) is the most common site of trapping
- B. Removal of lodged button batteries may be delayed if there is no airway compromise
- C. As many as 85% of children with coins lodged in their oesophagus will be asymptomatic
- D. The majority of adult impactions arise in the distal oesophagus
- E. All food Impaction requires removal within 4 hours

Answer: D

38. With regards to priapism in the paediatric population, which of the following statements is CORRECT

- A. High-flow priapism is more frequent than the low-flow type
- B. Long term complications of high-flow priapism are common and include corporal fibrosis and erectile dysfunction
- C. A common cause of low-flow priapism includes a groin or straddle injury
- D. In low-flow priapism the entire penis is partially rigid and painless
- E. Management is the same in both high flow and low flow priapism

ANSWER: E

REFERENCE

Tintinalli 6<sup>th</sup> ed pp902-903

39. With respect to Lateral Sinus Thrombosis (LST) and Otitis Media (OM), which of the following statements is TRUE

- A. Clinical findings of LST are easy to distinguish from the clinical findings that occur in other complications of OM
- B. In the diagnosis of LST, CT is equivalent to MRI in sensitivity and specificity
- C. Bacteria can often be isolated from the sinus
- D. IV nerve palsy is a common presentation
- E. Initial treatment is antibiotics and many patients go on to require surgical intervention

Answer: E

- A. Presentation non-specific
- B. MRI much better
- C. Bacteria rarely to never isolated
- D. VI
- E. Correct

40. With respect to electrical injuries, which of the following statements is FALSE

- A. Voltages less than 50V have not proven to be hazardous

- B. The threshold for ventricular fibrillation is 100mA
- C. Direct current is much more lethal than alternating current
- D. Transthoracic current carries a 60% mortality
- E. Patients with cardiac arrhythmias require admission to hospital until arrhythmia resolves

Answer: C

41. Which of the following statements with respect to hypothermia is TRUE

- A. J waves are best seen in leads III and aVF
- B. Atrial fibrillation is the commonest arrhythmia seen below 32°C
- C. Ventricular fibrillation should not be defibrillated
- D. A paradoxical drop in core temperature after rewarming carries the highest risk
- E. Insulin should be commenced to manage hyperglycaemia in hypothermia

Answer: B

42. With respect to snake bites which of the following statements is FALSE

- A. The dose of antivenom for children and adults is the same
- B. All patients who receive antivenom should receive a short course of oral steroids
- C. Prophylactic adrenalin has been shown to reduce the incidence of allergic reactions to antivenom
- D. Urine is preferred to serum for use of VDK for detection of snake venom
- E. Antivenom is given as an infusion over 30mins, unless in an arrest situation

Answer B

43. Which of the following drugs are NOT associated with serotonin syndrome

- A. Sertraline
- B. Lithium
- C. LSD
- D. Imipramine
- E. Chlorpromazine

Answer E

44. Regarding therapeutic hypothermia post cardiac arrest, which of the following statements is TRUE

- A. Survival outcomes were improved for all classes of arrest
- B. Overall survival was not improved but neurologically intact outcome was.
- C. Should be applied to all out of hospital VT/VF arrest patients who survive to hospital
- D. Fluid loading with 30 ml/kg of 4 degree C Normal saline is effective at rapidly reducing core temperature. (but has not been shown to improve outcome – remove)
- E. The target temperature needs to be achieved within the first hour of hospitalisation for an outcome benefit to be anticipated.

Answer: D

- a) False. Out of hospital VF and VT arrest
- b) False. Survival overall + neurologically intact survival improved significantly
- c) False. Applied to patients who have not returned to consciousness/ are comatose
- d) True. It is effective and studies suggest that it is safe. The only studies to show improved outcome used external cooling only

e) *False. Studies aimed to achieve target temperature in 2 hours, median time was 2-8 hours, benefit still seen*

45. Regarding the ARC guidelines for paediatric cardiorespiratory arrest which ONE of the following is FALSE

- A. 3 stacked shocks are given if the arrest is witnessed
- B. The dose for adrenaline given via an ETT is 100 mcg/kg
- C. Guidelines suggest that if there has been no ROSC after 20-30 minutes in a child that it is reasonable to cease resuscitation
- D. CPR should be initiated for heart rates below 80/min in children
- E. The chest should be compressed by 1/3 of its depth during compressions

*Answer:*

*D – False. Initiate CPR if HR < 60 in infant < 1 year, < 40 in a child*

46. Regarding local anaesthetics which of the following statements is TRUE

- A. 50 ml of 0.5% prilocaine exceeds the recommended dose for a 50 kg female receiving a Bier's block
- B. Intercostal blocks commonly require higher doses of local anaesthetic due to high rate of systemic absorption
- C. Bupivacaine may be used for intravenous regional anaesthesia at doses of up to 2 mg/kg
- D. A 70 kg male could safely receive peripheral infiltration of a maximum dose of 30 mls of 1 % lignocaine with adrenaline
- E. Seizures increase the cardiotoxicity of local anaesthetics

*Answer: E*

- A. *False. 3-5 mg/kg recommended, should not exceed 6 mg/kg*
- B. *False. Systemic absorption is maximal in intercostal blocks and doses should be reduced to minimise toxicit. Tintinalli suggests reduce by factor of 10*
- C. *False. Contraindicated fro IVRA due to cardiotoxicity*
- D. *False. Based on 7 mg/kg could receive 49 mls. Tintinalli p265*
- E. *True. Acidosis, hypoxia and hypercarbia all increase toxicity of LA,. Thus seizure may lead to cardiovascular collapse. Tintinalli p266*

47. Regarding airway management in children which of the following statements is TRUE

- A. The larynx is more anterior and inferior
- B. Suxamethonium should be avoided in children under 2 because of bradycardia
- C. Cricothyroidotomy should be avoided in children under the age of 6
- D. Pre-treatment with atropine 0.02 mg/kg is recommended for children under 5 years
- E. Desaturation occurs faster than in adults

*Answer: E*

- A. *False. Anterior and superior*
- B. *False. Should not be avoided in anyone. Should pretreat with atropine*
- C. *False. Avoid under age approx 10*
- D. *False. Dose is 0.15-0.2mg/kg*
- E. *True. Due to higher metabolic rate and lower relative lung volume*

48. Seizure is a feature of all of the following drugs in overdose EXCEPT

- A. Amphetamines
- B. Amitriptyline
- C. Cocaine

- D. Tramadol
- E. Clonidine

*Answer E*

49. The cholinergic syndrome has all the following features EXCEPT

- A. Confusion
- B. Miosis
- C. Constipation
- D. Urinary retention
- E. Blurred vision

*Answer B*

50. Which one of the following conditions is NOT a common reversible precipitant of Hepatic Encephalopathy?

- A. Alcohol
- B. Large steak meal
- C. Constipation
- D. Oral hypnotic
- E. IV fluids

*Answer – e) IV fluids*

*References – Harrison's Edition 13 – table 268.3 page 1493*

51. Which of the following drugs is NOT commonly used in either first or second line treatment of Helicobacter infection?

- A. Omeprazole 20mg bd for 7 days'
- B. Amoxicillin 1gm bd for 7 days
- C. Clarithromycin 500 mg bd for 7 days
- D. Colloidal bismuth subcitrate 120 mg qid for 7 days
- E. Bactrim DS 800 / 160 mgs bd for 7 days

*Answer – e) Bactrim DS*

*References – Therapeutic Guidelines – Gastroenterology 2006*

52. A 68 year old man is brought to hospital by ambulance 90 minutes after suffering a left sided stroke with right sided weakness. Which of the following does NOT support the diagnosis of a medial medullary syndrome?

- A. Paralysis of the right side of the tongue
- B. Occlusion of the left vertebral artery
- C. Paralysis of the right leg and arm
- D. Impaired sensation of right side of the body
- E. Lysis should be considered

*Answer – a) paralysis of the right side of the tongue – it is an ipsilateral 12 nerve lesion*

*References – Harrison's Edition 13 – figure 386.7 page 2244*

53. A 55 year old man presents to the Emergency Department in shock. Addison's disease is considered in his differential diagnosis. Which of the following statements in relation to Addison's disease is FALSE?

- A. Asthenia is a cardinal symptom
- B. Hydrocortisone is preferred over Dexamethasone as treatment as it does not interfere with steroid assays
- C. Sepsis can precipitate Addison's Disease

- D. A short tetracosactrin ("synacthen") test should be done in ED to confirm or exclude the diagnosis of Addison's disease
- E. A high  $K^+$  and a low  $Na^+$  supports the diagnosis of Addison's Disease

*Answer – b) Hydrocortisone – Dexamethasone should be used as it does not interfere with the diagnostic test, dosing controversial – high dose (4mg) limits SST due to long half life, physiological dose more appropriate (0.5-1mg)..*

*References – Harrison's Edition 13 – pgs 1970-1972*

*Clinical Chemistry 2nd Ed, Marshall 1992 (p 129 Disorders of the Adrenal Cortex*

54. A 34 year old woman is found to have a microcytic anaemia on a routine blood tests. Which of the following conditions would NOT be in your differential diagnosis
- A. Sideroblastic anaemia
  - B. Dysfunctional bleeding
  - C. Beta thalassemia
  - D. Vegetarian
  - E. Large scalp laceration with approximately 800 mls blood loss

*Answer – e) Large scalp laceration*

*References – Harrison's Edition 13 – table 56.2 page 314 and text page 315*

55. A 22 year old man with a history of a level 2 melanoma excised at the age of 17 presents complaining of anorexia and feeling unwell. Which of the following organs is NOT a common site for metastases?
- A. Cerebral hemispheres
  - B. Stomach
  - C. Lung
  - D. Liver
  - E. Femur

*Answer – b) Stomach*

*References – Harrison's Edition 13 –page 1870*

56. Regarding Guillain-Barre syndrome, which ONE of the following is TRUE
- A. There is a significant association with preceding E.coli gastroenteritis
  - B. Loss of distal sensation is the usual initial sign on examination
  - C. Brisk reflexes in the presence of significant weakness is the typical finding on examination
  - D. Cranial nerve involvement may occur in the absence of peripheral weakness
  - E. CSF analysis typically shows elevated protein and low glucose

*Answer: D*

57. Regarding seizures, which ONE of the following is FALSE
- A. Febrile convulsions affect approximately 3% of children
  - B. A loading dose of Phenytoin of 1 g is adequate for the majority of adults in status epilepticus
  - C. In children with an apparent febrile convulsion an LP should be performed when there is a clinical suspicion of meningitis.
  - D. Phenobarbitone is an appropriate 2nd line drug in paediatric status epilepticus in a dose of approximately 10-15mg/kg over 30 minutes.
  - E. Ease of termination of status epilepticus is more closely related to duration of status than underlying cause.

*Answer: B*

58. In a patient with thyroid storm, which ONE of the following statements is TRUE

- A. Hypoglycaemia is usual
- B. IV steroids should be given
- C. GI symptoms are rare
- D. Laboratory tests give definitive diagnosis
- E. Methimazole is the mainstay of therapy

*Answer: B*

59. Focused Abdominal Sonogram in Trauma (FAST) assesses for blood in all of the following regions EXCEPT

- A. Pericardial sac
- B. Splenorenal pouch
- C. Pelvis
- D. Hepatorenal pouch
- E. Retroperitoneum

*Answer: E*

60. Which of the following statements regarding spontaneous pneumothorax is TRUE

- A. The recurrence rate following a single episode is 10 % over the ensuing five years
- B. Pulmonary infection is the most commonly associated condition in secondary spontaneous pneumothorax
- C. Hamman's sign is a pathognomonic finding
- D. In the absence of any further air leak, a 20 % pneumothorax would be expected to reabsorb over approximately 16 days\*
- E. Re-expansion pulmonary oedema is usually bilateral

*Answer: D*