

Random MCQs 12

- Appropriate analgesia for a 70kg male with a fractured shaft of femur is:
 - Femoral nerve block
 - Morphine 10mg ivi
 - Pethidine 50mg imi
 - Pethidine 100mg ivi
 - Morphine 10mg imi
- Which of the following is not a cause of hypocalcaemia
 - Hypoparathyroidism
 - Vitamin D deficiency
 - Renal Failure
 - Hypomagnesaemia
 - Hypophosphataemia
- Intramuscular ketorolac can be used with
 - Haemophilia
 - Warfarin therapy
 - Lactation
 - Patient in pain and suspected drug seeking behaviour
 - Renal failure
- A child presents shortly after delivery. The child is blue and pale, heart rate 95/min with slow irregular respiration, grimace, some reflex irritability and some flexion of the limbs. The Apgar score is:
 - 2
 - 3
 - 4
 - 5
 - 6
- The major determinant of resources used in the Emergency Department is
 - Diagnosis
 - Patient age
 - Time spent in the Emergency Department
 - Whether the patient is admitted or not
 - Urgency
- Stonefish venom is
 - cardiotoxic
 - procoagulopathic
 - Can cause respiratory paralysis by tetrodotoxin
 - Generally have a painless sting
 - Are found in fresh water streams and estuaries
- Which of the following is NOT a feature of severe aortic stenosis
 - S4
 - Soft S2
 - Widened splitting of S2
 - Thrill
 - A pressure gradient across the valve of >50mmHg

8. In the management of patients who present with spontaneous or recurrent venous thrombosis
 - a. Lupus antibody is not normally found in the blood except during pregnancy
 - b. Warfarin interefes with the laboratory assessment of bleeding but heparin does not
 - c. Protein C & S deficiency is diagnosed by decreased bleeding time
 - d. Warfarin can cause skin necrosis
 - e. Anti thrombin III deficiency is excluded by normal APTT and INR

9. Which of the following is not a feature of lateral medullary syndrome
 - a. Horner's syndrome
 - b. Loss of pain and temperature sensation on the contralateral side of the body
 - c. Altered sensation on the ipsilateral side of the face
 - d. Ipsilateral IX and X cranial nerve palsies
 - e. Vertigo

10. Which of the following is a clinically insignificant complication of the delivery of intravenous fluids or drugs in paediatric patients via the interosseous route
 - a. Fat emboli
 - b. Tibial fracture
 - c. Compartment syndrome
 - d. Cellulitis at the puncture site
 - e. Extravasation of the fluid at the puncture site

11. At an oxygen flow rate of 10L/min which of the following is correct
 - a. A C size cylinder will be exhausted in approximately 30 minutes
 - b. A C size cylinder will be exhausted in approximately 45 minutes
 - c. A D size cylinder will be exhausted in approximately 90 minutes
 - d. A D size cylinder will be exhausted in approximately 2 hours
 - e. An E size cylinder will be exhausted in approximately 5 hours

12. In the management of disasters which of the following is correct
 - a. The National Triage Scale should be used on site
 - b. All priority 1 patients should be taken to the nearest trauma center
 - c. Dead bodies are a health hazard and should be removed from the scene as soon as possible
 - d. Hospitals should plan for disasters that may affect the hospital
 - e. In Australia the Army provides the primary scene medical response

13. The dose of intravenous naloxone for a new born infant with respiratory depression whose mother received pethidine shortly before the delivery is
 - a. 10mg/kg
 - b. 0.1mg/kg
 - c. 1 ampoule
 - d. 0.01mg/kg
 - e. 1mg/kg

14. Infectious mononucleosis
 - a. Is cause by a paramyxovirus
 - b. Has an incubation period of 7-10 days
 - c. Causes splenomegaly in >50% of cases
 - d. Commonly relapses
 - e. Can be transmitted by blood transfusion

15. In the management of tibial fractures
 - a. Up to 50% lateral displacement of the distal tibia is satisfactory
 - b. 15% varus deformity at the fracture site will result in significant functional impairment
 - c. 15% valgus deformity at the fracture site will result in significant functional impairment
 - d. valgus and varus deformities are not as significant as antero-posterior deformity
 - e. rotational displacement can be checked on x-ray

16. Which of the following is not helpful in the diagnosis of torsion of the testicle
- Elevated right testicle
 - Cremasteric reflex
 - The epididymis is lying in front of the testicle
 - The testicle is lying sideways and higher than the other testicle
 - Pain in the testicle is decreased by elevation
17. In lithium toxicity
- Serum levels are the best guide to toxicity
 - Arrhythmias are uncommon even in severe toxicity
 - Haemodialysis should be performed if the serum level is $> 2.5\text{mg/mL}$
 - Should be given activated charcoal
 - Polystyrene sulfonate is of proven benefit in the treatment of acute toxicity
18. Triage in the Emergency Department involves
- Telling patients what the waiting time will be
 - Telling people where to go in the department
 - Assigning an order for treatment with regard to available resources
 - Collecting demographic data for epidemiological studies
 - Taking a detailed history and performing observations to work out the urgency of the patients clinical condition
19. Which of the following indicates a poor prognosis in the initial presentation of acute pancreatitis
- Amylase > 3500 IU
 - Hypoglycaemia
 - Neutropaenia
 - Age > 55
 - Hypocalcaemia
20. Which of the following is not useful in the diagnosis of pulmonary embolism
- Sinus tachycardia
 - Patchy consolidation of the chest x-ray
 - Increased A-a gradient
 - Nonspecific ST-T wave changes on the ECG
 - Ventilation perfusion mismatches on lung scan
21. Adenosine
- Has no known contraindications
 - Increases conduction in the AV node
 - Causes a tachycardia
 - Actions are enhanced by theophylline
 - Causes chest pain which is not cardiac in origin
22. A Jefferson fracture
- Is associated with axial compressive forces
 - Is a fracture through the pedicles of C2
 - Is best diagnosed on the cervical spine AP view
 - Seldom causes pain on palpation of the cervical spine
 - Is associated with hyperextension of the cervical spine
23. Regarding Advanced Life Support
- VF should be treated with an initial DC shock of 100J
 - The treatment of pulseless VT should be a synchronised DC shock
 - Asystole should be initially treated with one shock
 - Sequential shocks increase transthoracic impedance
 - The time to the initiation of CPR is the most important factor in predicting outcome

24. Infantile botulism
- Causes constipation
 - Causes pinpoint pupils
 - Is less common in breast fed babies
 - Causes skeletal muscle paralysis without autonomic dysfunction
 - Immediate treatment with botulinum immunoglobulin and antibiotics may be life saving
25. With regard to posterior dislocation of the shoulder which is incorrect?
- It is uncommon
 - It infrequently causes neurovascular damage
 - It is difficult to diagnose on clinical and radiological grounds
 - The arm is held internally rotated and abducted
 - It is commonly caused by electrocution and seizures
26. Regarding external haemorrhoids which one of the following is true?
- Are easily distinguished from internal haemorrhoids
 - Should be treated by incision and drainage under local anaesthesia
 - Should be treated by incision, removal of an overlying ellipse of skin and evacuation of the clot
 - Take a long time to resolve without prompt treatment
 - Are always single
27. Regarding ankle sprains
- The lateral ligament complex is the most commonly injured
 - The calcaneo-fibular ligament is the commonest part of the lateral ligament that is injured
 - Is usually caused by an external rotational injury
 - A rupture of the lateral ligament alone will not give a positive anterior draw test
 - The subtalar joint is commonly involved
28. Regarding the treatment of congestive heart failure which of the following is correct?
- Furosemide acts initially by its diuretic actions
 - Morphine acts only by preload reduction
 - Dobutamine is the inotrope of choice when the patient's systolic blood pressure is less than 80mmHg
 - CPAP always increases the respiratory rate
 - Vasodilators should not be used until you have used morphine, oxygen and Furosemide
29. With respect to fluid and electrolytes in children, which one of the following is TRUE?
- Weighing is the most accurate method of determining the degree of dehydration
 - Intravenous normal saline is contraindicated in neonates because of the risk of hypernatremia
 - A neonate's daily water requirement is approximately equal to its milk requirement
 - Vomiting is a contraindication to oral rehydration
 - Hypoglycaemia should be treated with an intravenous bolus of 1mg/kg of 10% dextrose
30. Septic arthritis in a 6 year old
- Is usually treated with intravenous antibiotics and operative drainage
 - Is usually caused by extension from adjacent osteomyelitis of the metaphysis
 - Blood cultures are usually negative
 - Haemophilus is a common cause
 - Can be treated with intra-articular antibiotics

31. A 28 year old lady at 30 weeks gestation presents with abdominal pain and a small amount of PV blood loss. Her systolic blood pressure is 90mmHg and no foetal heart beat is detectable. Which of the following is correct?
- Blood loss is likely to be less than 1L
 - A PV examination should be performed
 - Placenta praevia is unlikely
 - The incidence of DIC as a complication is about 40%
 - ATN is a common association
32. Regarding local anaesthetic toxicity
- Lignocaine and bupivacaine can be combined without a cumulative risk of toxicity
 - Bupivacaine is used in the same dose with or without adrenaline
 - The maximum dose of lignocaine used on mucous membranes is 5mg/kg
 - Adrenaline added to lignocaine will lead to an increase in serum potassium
 - Lignocaine is the local anaesthetic of choice in a patient with a past history of malignant hyperthermia
33. Contraindications to pertussis vaccination include
- A simple febrile convulsion one week following the last dose
 - Cerebral palsy secondary to neonatal meningitis
 - Progressive neurological illness
 - Idiopathic epilepsy on treatment
 - The development of a temperature > 38.5 degrees two days following the last vaccination
34. The causes of priapism include all of the following except
- Phenothiazines
 - Celibacy
 - Leukaemia
 - Sickle cell anaemia
 - High spinal cord lesions
35. With regard to cerebral palsy
- A chest infection is the commonest reason for presenting to the Emergency Department
 - Bronchospasm commonly occurs secondary to aspiration
 - Treatment with bronchodilators is unnecessary as bronchospasm is rare
 - Patients are less likely to have a urinary tract infection than the general population
 - Chest infections can generally be treated as an outpatient
36. With regard to topical medications which of the following is incorrect?
- Timolol can precipitate congestive cardiac failure
 - Nebulised atrovent can cause acute glaucoma
 - Physostigmine can precipitate acute glaucoma
 - Beta agonists can precipitate acute glaucoma
 - Timolol can cause bronchospasm
37. Sumatriptan in migraine
- Is a serotonin agonist
 - Is a serotonin antagonist and causes sedation
 - Is a dopaminergic antagonist similar to Metoclopramide with a specific efficacy in migraine treatment
 - Causes chest pain in 3-5% of patients which is thought to be non-cardiac in origin
 - Can be co-administered with ergotamine

38. A four year old child is brought to the Emergency Department after ingesting an unknown amount of eucalyptus oil. Appropriate management of the child includes
- Inducing emesis with syrup of Ipecac
 - Inducing emesis and then passing an NG tube
 - Intubation, gastric lavage and then administration of activated charcoal
 - Observing the child and intervening should the child deteriorate
 - Give charcoal via a nasogastric tube
39. Which of the following drugs is not safe for use in pregnancy?
- Tetracyclines
 - Chloramphenicol
 - Erythromycin
 - Ceftriaxone
 - Penicillin
40. A patient with acne vulgaris develops a blistering rash on the face suggestive of photosensitivity. Which of the following can be a cause?
- Doxycycline
 - Sunburn
 - Acute acne vulgaris
 - Etretinate
 - Chloroquine
41. Legg-Calve-Perthes disease is
- Common in girls < 5 years of age
 - Common in girls < 9 years of age
 - Common in boys < 5 years of age
 - Common in boys 5-9 years of age
 - Common in boys > 9 years of age
42. The differential diagnosis of drug induced dystonia includes the following except
- Tetanus
 - Strychnine
 - Focal fitting
 - Hypocalcaemia
 - Conversion reaction
43. The weight of a six year old child is approximately
- 10kg
 - 20kg
 - 25kg
 - 30kg
 - 40kg
44. Corner metaphyseal fractures of the humerus in a 5 year old child are likely to be the result of
- Fall onto the elbow
 - Fall onto the outstretched upper limb
 - Pulled elbow
 - Non accidental injury
 - Rickets
45. Iron overdose is associated with
- Delayed hypercalcaemia
 - Delayed pancreatitis
 - Delayed metabolic alkalosis
 - Delayed bowel obstruction

46. Antivenoms are available for the all the following envenomations except
- Stone fish
 - Blue ringed octopus
 - Red back spider
 - Box jellyfish
 - Funnel web spider
47. Which of the following drugs are not shown to be useful in the Emergency Department treatment of migraines?
- Metoclopramide
 - Sumatriptan
 - Atenolol
 - Ketorolac
 - Chlorpromazine
48. Drugs useful in the treatment of peripheral vertigo include the following except?
- Prochlorperazine
 - Diazepam
 - Atropine
 - Salicylates
 - Promethazine
49. Guillain Barre Syndrome
- Is rarely associated with facial paralysis
 - Is associated with a positive Babinski response in the early part of the disease
 - Rarely causes incontinence
 - In 90% of cases is associated with a viral infection in the preceeding two months
 - Is rarely associated with sensory changes
50. Haemodialysis is useful in the treatment of severe overdose from
- Lithium
 - Theophylline
 - Carbamazepine
 - Digoxin
 - Ethanol
51. The following indicate a poor prognosis in severe pancreatitis except
- Age >55
 - Elevated liver function tests on admission
 - A base deficit of >4
 - Hypoglycaemia
 - Hypocalcaemia
52. Physiological changes of pregnancy include
- Increase in the circulating blood volume by 10%
 - Tidal volume decreases by 40% with an increase in respiratory rate
 - Leucocytosis of 14000
 - Abnormalities of PT, APTT and total clotting time
 - An average PCO₂ of 30mmHg
53. Acute cerebellar ataxia
- Usually occurs in children < 6 years of age
 - Occurs two weeks after a viral infection
 - Is a prodromal symptom for demyelinating illness
 - Only involves gait
 - Resolves spontaneously after two months

54. Regarding lateral X-rays of the cervical spine
- In children the predental space can be up to 5mm
 - In adults the predental space is at least 3mm
 - The width of the prevertebral soft tissue shadow at C4 is 20mm
 - The width of the prevertebral soft tissue shadow at C6 is 10mm
 - The width of the prevertebral soft tissue shadow at C6 is 5mm
55. With regard to ureteric calculi
- More than 90% of symptomatic calculi will pass spontaneously
 - Absence of haematuria excludes the diagnosis of ureteric calculi
 - Staghorn calculi are usually asymptomatic
 - Tachycardia and hypertension suggest another diagnosis
 - A KUB film is the same as a plain abdominal X-ray
56. Which type of ureteric calculi benefit from urinary alkalinisation?
- Calcium oxalate stones
 - Calcium phosphate stones
 - Hydroxyapatite stones
 - Cystine stones
 - Uric acid stones
57. In Patterson's SADPERSONS scale which has the highest rating?
- Previous attempts at suicide
 - Age <19 or >55
 - Organised suicide attempt
 - Male sex
 - No social supports
58. With regard to hangings which is true?
- Judicial hangings attempt to produce a complete fracture of the neck
 - Neck fractures are uncommon in accidental hangings
 - Accidental hangings usually produce death from cerebral hypoxia secondary to airway compression
 - Accidental hangings usually produce death from compression of carotid vessels in the neck
 - Neck fractures are uncommon in hangings where the victim falls < 2m
59. With regard to urological disorders which of the following is not true?
- Intraperitoneal rupture of the bladder is associated with lower abdominal trauma when the bladder is distended
 - Disruption of the posterior membranous urethra is likely to be associated with fractures of the pelvis
 - Rupture of the penis during intercourse is likely to be associated with a cracking sound
 - Ureters are rarely injured except in cases of penetrating trauma
 - Penetrating wounds of the kidneys are always associated with haematuria
60. In pulmonary embolus which of the following is true
- Pulmonary embolus is associated with a prominent "v" wave
 - All patients with suspected pulmonary emboli should undergo contrast venography of the lower limbs
 - Pulmonary embolus is associated with ECG signs of left ventricular strain
 - Chest pain is the most common presenting symptom of pulmonary embolus
 - A low probability V/Q scan is associated with pulmonary emboli in 30% of cases.

Answers:

1. A. Ref Dunn et al 2nd Edition p This question is of course controversial.
2. E Dunn et al 2nd Ed. P 274
3. D MIMS for the contraindications
4. B Probably, given slow irregular respiration scores 1. Tintinalli p 50
5. C Richardson DB. Total daily patient care time as a measure of emergency department overcrowding [abstract]. *Acad Emerg Med* 2003; 10: 526.
6. A CSL Antivenom handbook, Dunn 2nd Ed p155/6
7. C Dunn 2nd Ed p68
8. D Dunn p207, especially in Protein C and S deficiency
9. C Dunn p293
10. A Dunn p384
11. B BOC gases Australian Cylinder sizes chart
12. D Dunn p18
13. B Controversial. D is the normal answer. B comes from Shann
14. E Tintinalli, http://www.hc-sc.gc.ca/pphb-dgspsp/hcai-iamss/tti-t/risks_e.html#tab2
- 15.
16. C Possibly E as well. Internet search. Data not in books
17. B Dunn
18. E is ore correct than C "Triage is a measurement of urgency, not necessarily seriousness
19. D Ranson's criteria
20. B A silly question, with poor responses. Tintinalli p 396
21. E MIMS
22. A Table 264-3/ p1797 Tintinalli
23. B Cameron p8
24. A <http://www.ferne.org/Lectures/Weakness1002.htm>
25. D Roberts and Hedges p827
26. A Tintinalli p 559
27. A Tintinalli p1829
28. C Debateable, however all other options are definitely false
29. A ACEM sample question
30. A Children's Hospital Handbook
31. D Difficult to reference. Most are clearly untrue. Tintinalli + web
32. E Tintinalli p259, MIMS
33. A MIMS
34. B Table 91-1, Tintinalli
35. A Tintinalli p925
36. C MIMS
37. A MIMS
38. E Olsen, Poisoning and Drug Overdose
39. A MIMS
40. A MIMS
41. D Tintinalli, if "common" = 1 in 1200 to 1 in 12500
42. C Most Probably, all others cause dystonia. Tintinalli
43. B 2(age+4)
44. D Emergency Medicine 8x8
45. D Olsen Poisoning and Drug Overdose
46. B CSL Antivenom Handbook
47. D Cameron p273
48. D Tintinalli p 1461
49. C Probably, although diff reference, D should read 60% to be T
50. A Olsen Poisoning and Drug Overdose p 206
51. D Ranson's Criteria
52. E Cameron p97
53. B Internet google search
54. D Up to 22mm, Tintinalli
55. C Internet search

- 56. D Google search kidneystones.org
- 57. A Previous Serious attempts are the best indicator, also Age (extremes) and alcohol addiction which increases risk 50x
- 58. All are true, Tintinalli
- 59. E Only in 90% is there haematuria
- 60. D Cameron