

MCQ 00 FACEM Exam 1996

1) Regarding **Phaeochromocytoma**

- a) It causes persistent elevation of blood pressure
- b) It is best treated with high dose beta blockers
- c) It is familial
- d) It is associated with a state of relative hypervolaemia
- e) Initial screening test of choice is a CT scan

2) A **fracture** through the epiphysis of the tibial condyle associated with a chip of the metaphysis is a **Salter Harris** type

- a. I
- b. II
- c. III
- d. IV
- e. V

3) **Varicella**

- a. Is characterized by a high neutrophilia
- b. Is no longer infectious when the lesions have dried
- c. Acyclovir produces rapid clinical improvement
- d. Should be confirmed by serological studies
- e. Is associated with a carrier state

4) Which of the following is associated with **a normal CSF**

- a. [Glucose] >40mg/dl
- b. [Protein] >50mg/dl
- c. Total protein level consisting of 50% IgG
- d. 10 lymphocytes/mm³
- e. Ratio of red blood cells to white cells 2000:1

5) A 9 year old boy is stung by a bee. His mother has removed the sting but he has a swollen bite site, is dyspnoeic with generalized rhonchi and is sweating. He weighs 30kg. Optimal treatment includes the following

- a. Adrenaline 1:10000 0.3ml IV
- b. Adrenaline 1:10000 1ml IV
- c. Adrenaline 1:10000 3ml IV
- d. Adrenaline 1:10000 6ml IV
- e. Adrenaline 1:10000 9ml IV

- 6) A woman in the third trimester of **pregnancy is fitting**. Which of the following is true
- Eclampsia is unlikely in the absence of oedema and proteinuria
 - Magnesium is the drug of choice
 - Diazepam is contraindicated in view of imminent delivery
 - Delivery should be delayed
 - IV rehydration is the most important
- 7) With respect to ingestion of **hydrochloric acid**
- It causes coagulative necrosis
 - It should be treated immediately with sodium bicarbonate
 - Steroids are indicated in all cases as they decrease the incidence of gastric outlet obstruction and oesophageal stricture
 - Patients should receive activated charcoal
 - Prophylactic antibiotics are indicated
- 8) With respect to treatment with **SSD**
- It can lead to early neutropaenia
 - It is contraindicated for facial burns due to skin pigmentation from the oxidation of silver when exposed to the atmosphere
 - Renal impairment is associated with silver toxicity
 - It contains silver sulphadiazine 5%
 - It causes anaemia commonly seen in burns due to direct marrow suppression
- 9) With respect to **abdominal aortic aneurysms**, what is the most common presentation
- Incidental finding on abdominal examination
 - Acute rupture and hypotension
 - Associated with a chronic contained rupture with severe lumbar pain and a non-tender aneurysm
 - Haematemesis and melaena due to an aorto-caval fistula
 - Bilateral lumbar pain radiating to the inguinal region
- 10) All the following are associated with **profuse diarrhoea and large numbers of leucocytes** in the stool EXCEPT
- Campylobacter jejuni
 - Shigella
 - Cholera
 - Enteroinvasive E coli
 - Clostridium difficile
- 11) With respect to **arterial aneurysms** all of the following are true EXCEPT
- Congenital aneurysms are more likely to rupture between 20 and 30 years of age

- b. Superior mesenteric artery aneurysms are associated with atherosclerosis
- c. Subclavian artery aneurysms are associated with trauma
- d. Renal artery aneurysms require urgent operative intervention
- e. Hepatic artery aneurysms commonly present with GIT bleeding and jaundice

12) All the following statements are true regarding **axillary vein thrombosis** EXCEPT

- a. Primary thrombosis occurs most commonly in young healthy males
- b. Primary thrombosis commonly occurs in the limb of the dominant hand
- c. Pitting oedema can occur in association with cervical ribs
- d. Non-pitting oedema commonly occurs in the dominant limb
- e. It is not associated with radiotherapy or malignancy

13) Regarding the unilateral **acute painful tender testicle** which of the following is TRUE

- a. Occurs more commonly in tall thin males
- b. Mumps orchitis is rarely unilateral
- c. Parotitis always precedes mumps orchitis by 4-5 days
- d. If it transilluminates then torsion can be excluded
- e. Mumps orchitis occurs in 10% of adult males

14) In the treatment of **pneumonia**, antibiotics are chosen based on all of the following EXCEPT

- a. Sputum gram stain
- b. Clinical collection of data
- c. Physical findings of chest examination
- d. Previous infection
- e. Nosocomial versus community acquired

15) Which of the following is not an **afterload reducing** agent

- a. GTN
- b. Glucagon
- c. Nitroprusside
- d. Phenoxy Benzamine
- e. Chlorpromazine

16) Features of **child abuse** include the following EXCEPT

- a. Spiral fracture of the tibia
- b. Retinal haemorrhage
- c. 'Immersion' burns
- d. Skull fractures
- e. Fractured ribs

17) The half life of 5% normal serum albumin is

- a. 20 minutes
- b. 60 minutes
- c. 2 hours
- d. 2 days
- e. 5 days

- 18) All of the following are features of **Kawasaki syndrome** EXCEPT
- Fever
 - Conjunctivitis
 - Pharyngeal erythema
 - Desquamation of the palms of the hand and soles of the feet
 - Polymorphous rash
- 19) 24 hours following a total body **radiation exposure** of 300 rads you would expect to see
- Nothing
 - Nausea
 - Nausea and vomiting
 - Diarrhoea
 - Nausea, vomiting and diarrhoea
- 20) Which of the following is most likely to exacerbate **PID**
- Pregnancy
 - Menstruation
 - Ovulation
 - UTI
 - Diarrhoea
- 21) Regarding **organic causes of violence**, all of the following are characteristic EXCEPT
- Gradual onset
 - Sweating
 - Incontinence
 - Recent hospitalization
 - Onset in patient older than 40 years with no past psychiatric history
- 22) Which of the following is associated with **anorexia nervosa**
- Increased deep tendon reflexes
 - Hyperkalaemia
 - Diabetes insipidus
 - Menorrhagia
 - Rapid gastric emptying
- 23) Which of the following should NOT be given a national **triage** score of 2
- Acute severe asthma
 - Major trauma
 - Pyelonephritis
 - Acute myocardial infarction
 - Diabetic ketoacidosis

- 24) A 24 year old male presents after receiving **flash burns** to the left sides of head, neck, arm and leg. The percentage area burned is
- 20%
 - 26%
 - 30%
 - 36%
 - None of the above
- 25) Signs of **spinal cord damage** following a C7-T1 dislocation include which of the following
- Respiratory failure
 - Loss of biceps reflex
 - Hypertension and sweating
 - Horner's syndrome
 - Elevated shoulders
- 26) An 18 year old male presents 24 hours after a diving accident in a pond. He is complaining of neck pain and stiffness with tingling in his left thumb. What is the first thing that you would do
- Apply high flow oxygen via face mask
 - Palpate the cervical spine for localizing tenderness
 - Arrange an urgent CT of the cervical spine
 - Arrange an urgent lateral c-spine XR
 - Immobilise the cervical spine
- 27) **Atopic dermatitis** differs from seborrheic dermatitis in
- Onset is after 3 months of age
 - It resolves completely after 4 weeks of treatment
 - It decreases in severity after puberty
 - Located over the flexural surfaces of the cubital fossa
 - It is associated with negative skin antigen testing
- 28) In the assessment of the **multi-trauma patient**
- A 12 lead ECG is a priority in the unstable patient
 - Hypotensive patients should receive crystalloid fluid resuscitation until group compatible blood is available
 - Cervical spine, chest and abdominal XR are a priority
 - Hypoxia is a major cause of preventable death
 - Elderly hypotensive patients should receive aggressive fluid resuscitation
- 29) **Amyotrophic lateral sclerosis** is associated with all of the following EXCEPT
- Bilateral up going plantar response
 - Brisk jaw reflex
 - Fasciculation
 - Reversal of supinator jerk
 - Weakness of the ocular muscles

- 30) A 30 year old male presents with an **acutely painful knee** and no history of trauma. The most likely diagnosis is
- Reiters syndrome
 - Gout
 - Septic arthritis
 - Haemarthrosis
 - Non-gonococcal arthritis without a preceding history of urethritis
- 31) A previously well 2 year old male infant presents with vesicular eruption involving the palms of the hands, soles, feet and peri-oral region. Which of the following statements is TRUE
- Most likely diagnosis is Kawasaki syndrome
 - Most likely diagnosis is herpes
 - Most likely diagnosis is varicella
 - Most likely diagnosis is acute eczematous dermatitis
 - Appropriate management includes IV fluids and maintaining child's hydration status
- 32) Regarding **anal fissures** which of the following is TRUE
- They are a complication of hemorrhoids
 - They are a complication of perianal abscesses
 - They are commonly posterior in males and anterior in post partum females
 - They are a complication of ulcerative colitis
 - Local anaesthetics are NOT useful in their treatment
- 33) A 50 year old male presents with Haematemesis. His coagulation studies show PT of 50 seconds, APTT 80 seconds. This is consistent with
- Warfarin toxicity
 - Liver failure
 - Factor VII deficiency
 - Haemophilia
 - DIC
- 34) Bleeding from the nipple in the absence of a palpable breast lump is commonly due to
- An intraductal papilloma
 - Non-infiltrating intraductal carcinoma
 - Adenocarcinoma of the breast
 - Paget's disease of the nipple
 - Cracked nipple
- 35) Which of the following is NOT TRUE in regards to intoxication with **LSD**
- Recovery is usually complete within 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 attack, diazepam is the drug of choice

- 36) Occlusion of the **left middle cerebral artery** results in
- a. Left hemiplegia with leg affected more than the arm
 - b. Nystagmus
 - c. Fixed conjugate gaze to the left
 - d. Dysphagia
 - e. Dysarthria

- 37) Which of the following **is not** associated with changes in the **lens**
- a. Hypoparathyroidism
 - b. Diabetes
 - c. Corticosteroids
 - d. Myotonic dystrophy
 - e. Downs syndrome

- 38) Which of the following is not associated with a **lupus syndrome**
- a. Phenytoin
 - b. Quinidine
 - c. Procainamide
 - d. Sulphonamides
 - e. Frusemide

- 39) Regarding **lightening strike**
- a. Associated with massive burns
 - b. Respiratory arrest secondary to cardiac arrest
 - c. Diuretics are useful in management
 - d. Reversal of normal triage principles in multi-victim incidents
 - e. Mortality of 70%

- 40) Regarding **Giardiasis**
- a. Affects the distal ileum
 - b. Associated with explosive, watery or foul smelling diarrhoea
 - c. Associated with increased mucosal folds
 - d. Is best treated with ciprofloxacin
 - e. Is excluded by negative stool microscopy

- 41) **Cystic fibrosis** can be associated with all of the following EXCEPT
- a. Haematemesis

- b. Hyponatraemic dehydration
- c. Lobar collapse
- d. Infertility
- e. Steatorrhea

42) Which of the following is associated with a **carrier state**

- a. Histoplasmosis
- b. Hepatitis A
- c. Rubella
- d. Varicella
- e. Measles

43) At a core temperature of 28 degrees, which of the following occurs

- a. Severe shivering
- b. Pinpoint fixed pupils
- c. Hypokalaemia
- d. Hyperglycaemia
- e. Thrombocytosis

44) **COMA** is defined as

- a. GCS of <10
- b. GCS of <9
- c. GCS of <8
- d. GCS of <7
- e. GCS of <7

45) With regards to **hypercalcaemia** which of the following is TRUE

- a. Symptoms only occur when serum level >3.5mmol/l
- b. Most common cause is bone metastatic deposits
- c. Thiazides may be useful in treatment
- d. Is associated with Conns syndrome
- e. Is associated with prolonged QTc

46) With regards to a **Hangman's fracture**, which of the following is TRUE

- a. It is relatively unstable
- b. Is a fracture of the odontoid peg
- c. Is a fracture of the pedicles of C2
- d. Is usually associated with profound neurological deficit
- e. Can occur with hyperextension/flexion injuries or compression injuries of the cervical spine

- 47) With regard to **WPW**
- SVT can be confused with VT
 - In the presence of AF, digoxin is the drug of choice
 - In the presence of AF, cardioversion is treatment of choice
 - Amiodorone is effective because it inhibits anterograde conduction through the AV node
 - It is always associated with a delta wave on the ECG
- 48) **Superior mesenteric artery thrombosis** can be associated with
- Decreased haematocrit
 - Positive abdominal paracentesis
 - AXR with a paucity of bowel gas
 - Raised serum amylase
 - Decreased serum phosphate
- 49) With regard to blunt abdominal **trauma in the third trimester of pregnancy**, which of the following is FALSE
- Post mortem caesarean section is only indicated if foetal heart sounds are present
 - If the patient is Hypotensive a pillow should be placed under the left hip
 - Coagulation abnormalities suggest placental injury
 - CTG is indicated even in relatively minor trauma
 - Consideration should be given to the administration of anti-D
- 50) With regards to **drug administration in pregnancy**, which of the following statements is TRUE
- Warfarin can cause a foetal syndrome if administered in the second trimester of pregnancy
 - Monitoring of maternal gentamicin levels improves the safety of the foetus
 - Pregnancy following failure of the morning after pill is associated with increased incidence of urogenital abnormalities in the foetus
 - Quinolones are safe to use in pregnancy
 - Sulphonamides should be avoided in the third trimester of pregnancy
- 51) All of the following statements regarding envenomation with a **red-back spider** are correct EXCEPT
- It is painful
 - It causes local piloerection and sweating
 - Requires treatment with IV antivenom
 - A compressive bandage is not necessary as part of first aid treatment
 - Venom contains several toxins, the most potent being latrotoxin

- 52) Anti-prostaglandin agents are more likely to cause renal damage in the presence of all of the following EXCEPT
- Hyponatremia
 - Hypotension
 - In the elderly
 - Pre-existing renal disease
 - In the post-operative period
- 53) **Metabolic alkalosis** secondary to a low urine concentration of chloride is associated with which of the following conditions
- Conn's syndrome
 - Barter's syndromes
 - Vomiting
 - Diuretics
 - Severe Hypokalaemia
- 54) **Traumatic asphyxia** (ecchymotic mask) is caused by
- Tracheal obstruction
 - Air embolism
 - Obstruction of extrathoracic veins
 - Obstruction of the SVC
 - Crush injury to the chest
- 55) Early characteristics of **senile dementia** may include all of the following EXCEPT
- Demonstrable cortical atrophy
 - Paranoid delusions
 - Onset after 65 years of age
 - Loss of long term memory
 - Loss of short term memory
- 56) Clinically significant **fat emboli** are associated with all of the following EXCEPT
- Pyrexia
 - Snow storm appearance on the CXR
 - Petechiae
 - Intraosseous infusions
 - Massive burns
- 57) Which of the following is used in the **injury severity score**
- GCS
 - Anatomical region injured
 - Heart rate
 - Blood pressure
 - Respiratory rate
- 58) In comparing the area of **burns** sustained in adults and children, which is always true

- a. The head in children is proportionately twice the area of adults
- b. Legs in children each occupy 14%
- c. Neck in children is proportionately the same as in adults
- d. The arms in children are proportionately less than in adults
- e. The palmar surface of the hand is 1% of the total BSA

59) Thyrotoxic storm

- a. IV steroids are contraindicated as part of treatment
- b. Hypertension is essential to make the diagnosis
- c. Hyperthermia is essential to make the diagnosis
- d. Levels of T3 and T4 correlate well with severity
- e. Propranolol is useful to reduce ocular manifestations

60) The following can cause syncope EXCEPT

- a. Addison's disease
- b. Hyperventilation
- c. Primary pulmonary hypertension
- d. Infective endocarditis
- e. GIT haemorrhage

MCQ 1996 Answers

1	A	31	B
2	D	32	C > D > B
3	B	33	B and E
4	A	34	E
5	A	35	D
6	B	36	C
7	A	37	All correct
8	B and A	38	E
9	A	39	D
10	C	40	B
11	D	41	A
12	E or C	42	A
13	A or E	43	D
14	C	44	C
15	B	45	B
16	A	46	C
17	E	47	A
18	D	48	D
19	C	49	B
20	B	50	E
21	A	51	C
22	C	52	A
23	C or E	53	C
24	A	54	E
25	D or E	55	D
26	E	56	?
27	D	57	B
28	D	58	E
29	E	59	C
30	C	60	D

MCQ 00 FACEM Exam 1996 Answers

- 1) Pheochromocytoma
 - a. 60-90% have elevated BP persistently
 - b. Treated with alpha then Beta blockers
 - c. Familial in 5% of cases (AD)
 - i. Majority associated with familial syndromes like MEN 2a (Sipple) and MEN 2b
 - ii. 90% occur sporadically
 - d. Relative HYPOvolaemia (decreased Hct)
 - e. Initial screening is VMA analysis

- 2) See Diagram at end

- 3) Varicella
 - a. No neutrophilia (possible eosinophilia)
 - b. No longer infectious when the lesions have dried or crusted over
 - c. Acyclovir can shorten duration of illness if used in the first 72 hours, by a couple of days, but does not affect the severity of Sx
 - d. CAN be confirmed with serial serological studies
 - e. Varicella may lay dormant in dorsal root ganglia and be reactivated as shingles, but no CARRIER state is encountered

- 4) CSF normal**
 - a. Glucose 2.5-3.5 mmol/L
 - i. 50-80 mg/dl
 - ii. 2/3 of plasma glucose
 - b. Protein 0.18-0.45 g/L
 - c. IgG 3-12% of total protein
 - d. Lymphocytes <3/mm³
 - e. RCC:WCC 800-1000:1

- 5) Anaphylaxis treatment**
 - a. Nebuliser
 - i. 0.5ml/kg of 1:1000 max 6ml
 - b. IM injection
 - i. 0.01ml/kg of 1:1000 max 0.3ml (0.3mg)
 - c. IV injection
 - i. 1mcg/kg or 0.01mg/kg
 - ii. 0.1ml/kg of 1:100,000 adrenaline
 - iii. 30 kg child needs 3ml 1:100,000 or 0.3ml of 1:10,000

6) Eclampsia

- a. Eclampsia most often occurs in the advanced stages of PET and has proteinuria and oedema, but NOT always
- b. Magnesium is first line drug, best form of seizure prophylaxis with reduction in cerebral vasospasm
- c. ALSO advocates diazepam as second line agent only after magnesium to help control seizures, risk is respiratory depression of mother
- d. Delivery is best form of treatment
- e. IV fluids should be tempered to allow CVP <8 and to try to maintain UO > 0.5ml/kg/hr, risk is APO

7) Hydrochloric acid ingestion

- a. Acid is coagulative and alkali liquefactive
- b. NO, causes exothermic reaction
- c. Steroids not used in first degree burns, cause rupture in 3rd degree burns, can be useful in 2nd degree burns
- d. Charcoal does NOT bind corrosives and should only be given for co-ingestants
- e. Antibiotics are indicated

8) SSD treatment for burns

- a. Can lead to early neutropenia (may be associated with burns)
 - i. Associated with methemoglobinuria
 - ii. Associated with HA in G6PD
- b. Associated with silver deposits on face may lead to cosmetic complications and tattooing
- c. Caution in renal and liver disease, does not cause ARF
- d. Silver sulphadiazine 1% NOT 5%
- e. Can cause anaemia, but due haemolysis in G6PD and not thought to be due to marrow suppression
- f. Contraindicated in face, first trimester pregnancy © and in early life due to the formation of kernicterus

9) AAA (No definitive reference)

- a. Incidental on abdominal examination (Most common)
- b. Rupture and HoT (Common)
- c. Chronic contained (RARE)
- d. Aorto-caval fistula (Very RARE)
- e. Bilateral lumbar pain radiating to groin (Uncommon)

10) Diarrhoea, profuse, large leucocytes (H and N p806)

- a. Profuse diarrhoea
 - i. Non-invasive: Enteric viruses
 - ii. Campylobacter, Vibrio cholera, Shigella, E coli
 - iii. Salmonella
- b. Leucocytes (implies bacterial intestinal wall invasion)
 - i. Polymorphonuclear WCC (Wrights test)
 - 1. Salmonella, Yersinia, campylobacter
 - 2. Shigella
 - 3. Clostridium difficile, Entamoeba histolytica
 - 4. E Coli 0157
- c. NO focal leucocytes in Vibrio cholera

11) Arterial aneurysms

- a. Congenital more likely to rupture age 20-30
- b. SMA aneurysm associated with atherosclerosis
- c. Subclavian A aneurysm associated with trauma
- d. * Renal artery aneurysm DO NOT require urgent surgical intervention
- e. Hepatic A associated with GI bleeding and Jaundice

12) Axillary vein thrombosis

- a. Question is about axillary vein thrombosis, but most information available on subclavian thrombosis, both are mainly associated with
 - i. Effort thrombosis (Paget-Schrotter disease)
 - ii. IV cannulation (IV drug abuse and iatrogenic)
 - iii. Coagulation deficits
 - iv. Can be associated with cervical rib
- b. PRIMARY thrombosis is usually associated with
 - i. Young healthy male athletes
 - ii. Dominant hand
 - iii. Normally well with non-pitting oedema to dominant hand and arm
 - iv. Can be associated with trauma (especially if cervical rib)
- c. SECONDARY
 - i. Associated with malignancy, radiotherapy
- d. Unsure if cervical rib causes pitting or non-pitting oedema
- e. A, B, D are true

13) Acute painful testicle

- a. Mumps orchitis
 - i. 30% may be bilateral (so commonly Unilateral)
 - ii. 15-20% of post pubertal males develop orchitis (NOT 10%)
 - iii. 30% with mumps orchitis DO NOT have parotitis
 - 1. If following parotitis, occurs in 3-7 days
- b. Reactive hydrocele may develop so if it transilluminates, then torsion CANNOT be excluded

- c. Either A (common in tall thin males) or E (Orchitis in 10% of adult males as quoted levels from 10-20%)

14) Pneumonia

- a. Probably C, physical findings on chest examination

15) NOT Afterload reducing agent

- a. GTN (Nitrates generally smooth muscle relaxing agents)
 - i. Increased peripheral venous capacitance to **reduce preload** with large vein dilatation, in the absence of CHF reduces cardiac output and causes reflex tachycardia
 - ii. Arterioles dilate with larger doses with **reduced afterload**
- b. Glucagon
 - i. CVS effect similar to adrenaline with Beta stimulation and positive inotropic and chronotropic activity
 - ii. NO reduction in afterload
- c. Nitroprusside
 - i. Powerful vasodilator
 - ii. Spontaneous breakdown to NO
 - iii. Acts equally on arteries and veins
- d. Phenoxybenzamine
 - i. Non-selective irreversible alpha blocker
 - ii. Used in Pheochromocytoma treatment
- e. Chlorpromazine
 - i. Alpha blocker with vasodilator properties
 - ii. Associated with postural hypotension

16) Child abuse features

- a. Spiral fracture of tibia (Toddlers fracture) not associated with child abuse screen
- b. Fractured ribs, skull common findings in abuse
- c. Retinal haemorrhages and immersion burns associated with abuse

17) 5% Normal serum albumin T $\frac{1}{2}$

- a. 5 days
- b. However the initial half life is 16 hours, there is a dual half life of NSA depending on tissue absorption and the kinetics are complex

18) Kawasaki (Dx with fever and 4 of 5 cardinal signs)

- a. Fever of at least 5 days duration
- b. Bilateral non-purulent conjunctival infection
- c. Inflammatory changes of lips and oral mucosa (pharyngeal erythema)
- d. Erythema or swelling of hands and feet
 - i. Desquamation is 10-14 days after onset of illness
- e. Non-vesicular, diffuse, maculopapular, polymorphous primarily truncal rash
- f. Cervical lymphadenopathy, usually unilateral, node diameter at least 1.5cm

g. Early desquamation in first 3-4 days occurs in perineal region and is useful marker

19) 24 hours post 300rad exposure

- a. Onset of ARS is dependent on dose of radiation (100-600rad)
- b. Within the first few days of exposure to 300rad, should develop acute radiation sickness prodrome
 - i. Nausea, vomiting and **occasionally** diarrhoea
 - ii. Answer probably C

20) PID exacerbation

- a. PID risk increases to a maximum during or shortly after the menses

21) Organic causes of violence

- a. Sudden onset more likely to be associated with organic causes of violence, most functional or non-organic psychiatric conditions are gradual in onset with escalating symptoms
- b. Sweating may be associated with anxiety and panic disorders, but also with medical conditions such as thyrotoxicosis and sepsis, generally perceived to be organic in nature
- c. Incontinence is usually of organic nature
- d. Recent hospitalisation may be associated with repression of feelings and exacerbate bipolar disorders, but is generally associated with infection and changes in medication for organic causes
- e. Sudden onset in patient over 40 with no past psychiatric history is often associated with organic and correctable process
 - i. Previous psychiatric history weighs against organic causes

22) Anorexia nervosa

- a. Diminished deep tendon reflexes
- b. HYPOkalaemia, HYPOcalcaemia, magnasaemia, phosphataemia
- c. Decreased ADH secretion with Diabetes Insipidus
- d. Amenorrhea
- e. Delayed gastric emptying and gastric distension
- f. Other
 - i. Normochromic, normocytic anaemia
 - ii. Starvation ketosis and hypoglycaemia
 - iii. Low insulin and high glucagon levels
 - iv. Poor oral hygiene with caries and gingivitis
 - v. Parotid and submandibular enlargement
 - vi. Melanosis coli
 - vii. Peripheral neuropathy and osteoporosis
 - viii. Arrhythmias and prolonged QTc

23) NOT to be given a NTS of 2

- i. Imminently life-threatening, or deteriorating
- ii. Potential for time critical treatment (thrombolysis)

- iii. Very severe pain
- b. 2: Asthma acute severe (NTS 1 if RR<10 or impending respiratory arrest, otherwise NTS 2)
- c. 2: Major trauma (NTS 2 by criteria, but can be 1 depending on vitals)
- d. 3: Pyelonephritis (NTS 3)
- e. 2: AMI (NTS for acute severe chest pain NTS 2, unless BP <80 then NTS 1)
- f. 3: DKA (NTS 3 if BSL >16, unless decreased LOC)

24) Flash burns

- a. Half of head 3.5, half of neck 0.5, half of arm 5, half of upper leg 4.75, half of lower leg 3.5 and foot 1.75: total 20%

25) Spinal cord damage

- a. Respiratory failure lesion above C4
- b. Loss of biceps reflex lesion above C5
- c. C&-T1 lesion is usually associated with spinal neurogenic shock and associated relative hypotension with sudden loss of sympathetic tone below level of lesion; Warm, dry skin, paradoxical bradycardia and hypotension
- d. Disruption of the oculosympathetic pathway at C7-T1 (page370 Tally OC) can lead to Horner's syndrome
- e. Trapezius raises the shoulders and retracts scapula (C1-5 spinal accessory nerve) Unopposed action leads to shoulder elevation

26) Neck injury 18 year old initial Mx

- a. Immobilise the cervical spine

27) Atopic (AD) versus seborrheic dermatitis (SD)

- a. Atopic usually evolves in the first few months of life but can occur in very young <3/12, while SD often occurs in newborns, but also prevalent in post puberty (stress) and in HIV patients
- b. It is often difficult to treat and does not resolve after 4 weeks of Rx, prognosis of SD is better than AD, Rx lasting 1-2 weeks with remission for months
- c. Often more chronic and localised in adults and does not decrease in severity
- d. Often arises in children on face, scalp and nappy area, but when chronic it localises to flexural surface of cubital fossae and popliteal fossae, SD however is scalp, face, infra-mammary and very occasionally generalised...NOT in ACF flexural surface
- e. Being associated with atopy and familial traits there is often positive skin antigen testing

28) Multi-trauma patient

- a. 12 lead is part of secondary survey AFTER vital signs
- b. Crystalloids are readily available, but non-type specific blood can be used as well in the unstable hypotensive patient
- c. C-spine, CXR and PELVIS XR are taken
- d. Hypoxia and Hypotension are the commonest causes of preventable death
- e. Elderly patients should be resuscitated with caution

29) Amyotrophic lateral sclerosis (ALS)

- i. Rapidly progressing muscle wasting and weakness associated with the degeneration of UMN and LMN
 - ii. Associated with spasticity, hyperreflexia and muscle paralysis
 - iii. No cure and progressive respiratory involvement
 - iv. Corticospinal tracts involved with UMN and LMN X
 - v. Associated with bulbar palsy and spinal muscle fasciculation and wasting
- b. Plantars upgoing (UMNX)
 - c. Brisk jaw reflex (associated with pseudobulbar palsy with lesion of IX, X, XII), absent or normal in bulbar palsy
 - d. Fasciculation (LMNX)
 - e. Reversal of supinator jerk (Finger flexion only response when wrist is tapped)(Absent biceps and exaggerated triceps response) (Combination of LMN lesion at C5-6 and UMN lesion below this level) (Either from trauma, syringomyelia, or ALS)
 - f. Weakness of ocular muscles

30) Acutely painful knee, no trauma, young bloke

- a. Reactive arthritis of Reiter's associated with Atraumatic knee pain, but with rash, uveitis, and conjunctivitis: Usually a disease of young males. Increased risk of Reiter's in teen and early adult years, More commonly presents as a oligoarthritis with a rash and Hx of sexual contact
- b. Gout increased risk in middle age: Commonest cause of inflammatory knee problem in men over 40
- c. Septic arthritis important in infants and children (Staph, gonococcus and streptococcus in adults) (Gonococcus is COMMONEST cause of septic arthritis in young adults)
- d. Haemarthrosis associated with trauma or haemophilia with minimal history of trauma
- e. Non-gonococcal arthritis is less common than gonococcal

31) 2 year old with palm and sole vesicular eruption

- a. Kawasaki associated with erythema and swelling of palms and hands and 5 days of fever
- b. Herpes can present in any way, has vesicles
- c. Varicella usually presents with vesicles truncally
- d. Unlikely without preceding history at this age, usually vesicles secondary to bacterial infection and advanced disease
- e. IV fluids not necessary, try oral hydration first
- f. MOST likely diagnosis is hand foot and mouth associated with coxsackie virus infection

32) Anal fissures

- a. Fissures are associated with passage of hard stool in >90% of cases and are **not** a complication of haemorrhoids, though the overgrowth of tissue surrounding the chronic fissure may look like an external haemorrhoid
- b. They **can be** complications of anorectal and perianal abscesses
- c. 90% of fissures are midline posteriorly, of the 10% which are anterior the majority (>90% are in women)
- d. They can be a complication of chronic ulcerative colitis
- e. Local anaesthetics are useful in management for symptomatic relief

33) Haematemesis, PT 50 APTT 80

- i. This is consistent with low factors I II V X
- ii. DIC
- iii. Advanced liver failure
- iv. Full warfarin and heparin treatment
- v. Vitamin K deficiency
- b. Warfarin toxicity associated with raised PT only (Very unlikely to cause raised APTT) (Although high dose heparin therapy can affect PT and APTT)
- c. Advanced liver disease associated with Raised PT and APTT
- d. Haemophilia will give raised APTT NOT PT
- e. Isolated factor VII deficiency will give raised PT and normal APTT
- f. DIC can also give raised PT and APTT

34) Nipple bleed, no breast lump (Majority of patients with bloody discharge and mass have carcinoma (60%) and only 6% with bleeding and no mass have carcinoma)

- a. Intraductal papilloma commonest cause of unilateral, uniductal nipple bleeding discharge (but is associated with a palpable mass)
- b. Non-infiltrating intraductal carcinoma (Bleeding and mass)
- c. Adenocarcinoma is associated with palpable breast mass
- d. Paget's disease of the nipple is an uncommon neoplastic disease of nipple invading intraductal carcinoma, usually unilateral, eczematous nipple skin changes with clear or bloody discharge, itch and mass in 50% of cases
- e. Cracked nipples bleed and are not associated with breast lumps

35) LSD

- a. Recovery complete in 8-12 hours (T_{1/2} 3 hrs)
- b. Pupil dilation (Mydriasis associated with sympathetic overdrive)
- c. HT, racing pulse, increased temperature all sympathomimetic effects commonly found
- d. Salivation and lacrimation NOT found (they are associated with miosis and cholinimimetic syndromes (DUMBELLS))
- e. Diazepam is treatment of choice for 'bad trip'

36) Left MCA occlusion (Dominant hemisphere)

- a. Right hemiplegia with face and arm affected more than the leg
- b. No nystagmus (effect of posterior circulation stroke)
- c. Conjugate gaze to the side of lesion (left)
- d. No dysphagia

- e. Aphasia occurs with dominant hemisphere lesion, (dysarthria with non-dominant hemisphere)

37) Diseases causing changes in the lens

- a. Hypoparathyroid associated with hypocalcaemia and lenticular cataracts
- b. DM also associated with glaucoma and cataracts
- c. Steroids associated with cataracts
- d. Myotonic dystrophy and neurofibromatosis associated with cataracts
- e. Downs syndrome associated with congenital cataracts
- f. Hypocalcaemia and electrical injury and radiation therapy also associated cataracts

38) Drugs associated with lupus syndrome

- i. Phenytoin, sulphonamides, quinidine
- ii. Barbiturates
- iii. Cephalosporins
- iv. Hydralazine
- v. Procainamide, Isoniasid
- b. Frusemide NOT associated with lupus syndrome

39) Lightning strike

- a. Usually flash over burns so escaping deeper dermal injury (Lichtenberg figures (feathering of burns))
- b. Cardiac arrest is usually the first insult followed by respiratory arrest, however central pons can be affected and cause immediate temporary apnoea, which has time to reverse if patient ventilated
- c. Fluid resuscitation is appropriate, APO is usually secondary to neurological insult, diuretics are not usually useful
- d. Reverse triage (Care for the apparently dead first) is appropriate in cases of multiple victim incidents
 - i. Victims not in cardiac arrest usually survive
 - ii. Victims in cardiac or respiratory arrest have chance to survive if ventilated
- e. Mortality 30%

40) Giardiasis (most common parasitic infection world wide)

- a. Disseminates in proximal small bowel (can be tested fro using duodenal aspirate)
- b. Either asymptomatic or present with upper GI symptoms of bloating, abdominal pain and explosive watery diarrrohea
- c. Usually associated with no intestinal changes, but in chronic disease states the villi flatten and looks like tropical sprue with loss of mucosal folds
- d. Metronidazole is drug of choice
- e. Multiple stool samples are often required for giardiasis and other protozoa to exclude infection
 - i. It is not invasive and there are no leucocytes in stool

41) Cystic fibrosis

- a. Haematemesis (Not an obvious association)
- b. Hyponatraemic dehydration (SIADH and chloride with water loss)
- c. Lobar collapse (Increased aspiration risk and decreased mucous clearance)
- d. Infertility (Yes associated with CF)
- e. Steatorrhea (CF is associated with malabsorption syndrome)
 - i. Biliary cirrhosis
 - ii. Acute and chronic pancreatitis
 - iii. SIADH
 - iv. Reduced chloride in serum and reduced extravascular volume
 - v. Salivary gland enlargement
 - vi. Conjugated hyperbilirubinemia
 - vii. Secondary pneumothorax (Commonest cause is COPD)
 - viii. Increased risk of heat illness with reduced sweating ability

42) Carrier state

- a. Histoplasmosis is like TB and primary infection may lay dormant in alveoli or calcify in lung as histoplasmoma, can therefore be passed on from asymptomatic patient

43) Hypothermia

- a. Reduction in shivering
- b. Pupils may be fixed but usually dilated at 28 degrees
- c. Increased risk of rhabdomyolysis and hyperkalaemia
- d. Insulin becomes ineffective and hyperglycaemia is common
- e. Blood viscosity increases, haemoconcentration and resultant increase in thrombosis: cold inhibits platelet function and there is no thrombocytosis

44) COMA

- a. Coma is defined as an eye closed state with inappropriate response to external stimuli; or a state of unconsciousness from which a patient cannot be aroused even with powerful external stimuli
- b. Maximum by definition E1 V2/3 M3/4
- c. Coma defined as less than 8 in some texts and <9 in some texts, but most texts do not use GCS as a way of defining coma
- d. Overall probably GCS 8 (E1 V3 M3)

45) HYPERcalcemia

- a. ?
- b. >90% secondary to malignant bone deposition and hyperparathyroidism
- c. Thiazides may worsen condition, and frusemide is controversial
- d. Excess mineralocorticoids associated with Conn's syndrome associated with HYPOcalcaemia
- e. Prolonged QTc associated with HYPOcalcaemia

46) Hangman's fracture

- a. Unstable fracture of pedicles of C2, more stable than Jefferson and Dens fractures
- b. Fractures of the odontoid peg are axis fractures Types I, II, III
- c. Hangman's fracture is a fracture of the pedicles of C2
- d. Not usually associated with profound neurological deficit
- e. Associated with hyperextension injury of the cervical spine
 - i. Jefferson associated with vertical compression injury
 - ii. Hangman's associated with hyperextension
 - iii. Teardrop and wedge fractures associated with hyperflexion injury
 - iv. Unilateral locked facets associated with flexion-rotation injury
 - v. Transverse processes associated with lateral flexion injury

47) WPW

- a. Re-entrant SVT in WPW can be confused with VT in DEM and if the QRS is widened and regular is treated as VT
- b. In the presence of HD stable AF, amiodarone is the drug of choice; digoxin is contraindicated as it shortens the refractory period and enhances conduction by the bypass tract
- c. In the presence of AF with haemodynamic compromise or rapid ventricular response, then cardioversion is a viable option
- d. Amiodarone slows anterograde conduction through AV node to inhibit accessory pathway and retrograde conduction
- e. Delta waves are characteristic of WPW types A and B, but are not always present

48) SMA thrombosis

- a. ?
- b. Abdominal paracentesis should be normal
- c. Early signs of mesenteric ischaemia and intestinal ischaemia mimic bowel obstruction, but as vascular occlusion progresses the bowel wall becomes oedematous and necrotic with severe thickening
- d. Serum amylase levels
 - i. Raised in pancreatitis, small bowel perforation, pancreatic cancer, salivary gland disease, impaired renal function, CBD obstruction AND ischaemic bowel
 - ii. Decreased amylase levels associated with PET, chronic pancreatitis, cirrhosis, hepatitis
- e. Bowel infarction is associated with SMA occlusion and is associated with HYPERphosphataemia
 - i. Associated with atherosclerosis and low CO states

49) Trauma in pregnancy

- a. Post mortem CS is only indicated if foetal heart sounds are present
- b. Pillow or wedge placed under the right hip to take pressure off the IVC

- c. Coagulation abnormalities suggest placental injury
- d. CTG is indicated even in minor trauma when foetal age is viable (over 24 weeks) for a minimum of 4-6 hours
- e. Consideration should be given to administer anti-D if maternal Rhesus negative

50) Drugs in pregnancy

- a. Warfarin is class D in pregnancy
 - i. In first trimester (weeks 6-9) can cause specific embryopathy syndrome
 - ii. In last few weeks can cause perinatal and intracerebral CNS bleeding and should be avoided in latter pregnancy
- b. Gentamicin is completely contraindicated in pregnancy (class D) and cause ototoxic and nephrotoxicity, monitoring levels will not help
- c. Pregnancy after MAP is unaffected
- d. Quinolones are category B3
- e. Sulphonamides are class C drugs and can cause jaundice and haemolytic anaemia in the newborn and should be avoided in third trimester

51) RBS envenomation (which is false)

- a. Painful
- b. Local piloerection and sweating characteristic
- c. Requires treatment with IM antivenom, but IV can be used
- d. Compressive bandage is not required as part of first aid treatment
- e. Venom contains a few toxins, the most potent of which is Latrotoxin

52) Anti-PG agents increased ARF risk

- a. HYPERnatraemia
- b. Hypotension
- c. Elderly
- d. Pre-existing renal disease
- e. Post-operative period

53) Metabolic acidosis with low urinary chloride concentration

- a. Associated with vomiting and excessive loss of GIT acid and chloride with resultant low urinary chloride

54) Traumatic asphyxia (Caused by crushing chest injury with abrupt sustained rise in superior vena caval pressure and concurrent closure of airway after deep inspiration)

- a. Crush injury to the chest is probably the correct response
- b. It is not true SVC obstruction, but a sustained increase in SVC pressure

55) Senile dementia (early)

- a. Often have demonstrable cortical atrophy (prolonged progressive insidious process with late presentation)

- b. Paranoid delusions and psychosis are not a manifest part of senile dementia but may be present
- c. Onset is usually after 65 years of age
- d. Long term memory is usually well preserved
- e. Short term memory is one of the first signs of dementia and associated with wandering

56) Fat emboli (occur after most long bone fractures in young, and hip or long bone fractures in elderly and usually asymptomatic) (syndrome associated with fat emboli occurs in first few days(not hours) after break and can be life-threatening with rapid cardiopulmonary and neurological consequences)

- a. Pyrexia, possibly
- b. CXR show diffuse interstitial infiltrates (snow storm)
- c. Petechiae on chest, axillae, neck, fundi, conjunctiva
- d. Intraosseus infusions are being investigated as a source of fat emboli and no definitive link has been established yet
- e. Massive burns can be associated with fat emboli, especially associated with blast injury

57)ISS

ISS ANATOMICAL

Most widely used anatomical scale in the world

Use 3 highest AIS scores and take the sum of the squares

Score >15 associated with significant mortality

Does not account for

- Multiple injuries to the same site

- Age

- Co-morbidities

AIS ANATOMICAL

Assess injury to anatomical areas

Graded 0-6 (non-survivable)

Does not account for multiple injuries to same body area

Time consuming as each individual must be looked up in decision manual

- a. So ISS accounts for anatomical region injured

58) Comparison of adults and children

- a. Head area changes with age and is not a constant proportion of adults
- b. Legs change with age (14% equates to <10 year old, then 18% as per adults) (Lund and Browder charts accurately express burn % area compared to rule of 9 charts)
- c. Neck is proportionately same as adults (1%)

- d. Arms are proportionately same as adults
- e. Back of hand roughly equates to 1% TBSA (not palm)

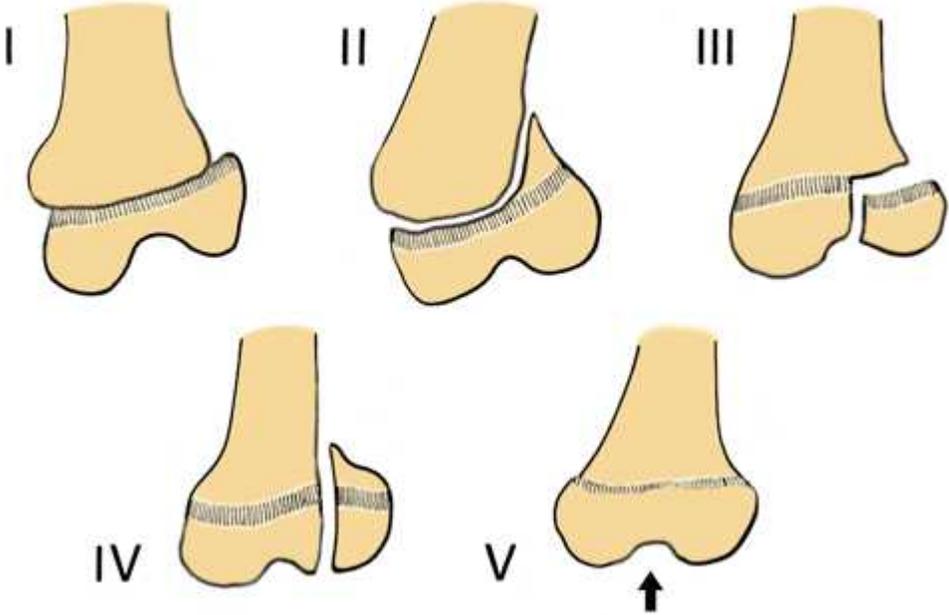
59) Thyrotoxic storm

- a. IV steroids may be considered as part of treatment to treat potential adrenal insufficiency and are not contraindicated
- b. Hypertension not essential to make diagnosis
 - Fever
 - Tachycardia
 - Dysrhythmia
 - Congestive heart failure
 - Central nervous system dysfunction
 - Agitation
 - Confusion
 - Delirium
 - Stupor
 - Coma
 - Seizure
 - Volume depletion
- c. Hyperthermia is part of Burch's point scale for the aid to diagnosing thyroid storm and is essential to diagnosis (most patients however are pyrexial)
- d. Levels of T3 and T4 do not correlate with the presentation of thyroid storm
- e. Propranolol is useful to inhibit adrenergic excess of storm and has benefit of inhibiting peripheral conversion of T4 to T3

60) Syncope

- a. Adrenal insufficiency with Addison's is commonly associated with postural hypotension and syncope
- b. Severe hypocapnia can cause syncope
- c. Pulmonary hypertension and PE associated with syncope
- d. No evidence found for Infective endocarditis
- e. GIT haemorrhage with pain, blood loss and hypovolaemia can cause syncope

Salter Classification of Epiphyseal Plate Injuries



61)