

EMQ Theme: Headache

<p>45 yo F with band-like frontal headache + recent personal and job stressors. No neuro deficits.</p>	<p>Paracetamol + advice on lifestyle modification Aspirin 600mg + Largactil Titrated doses of IV fentanyl + neurosurgery consult Gabapentin and neurology consult Clexane Heparin infusion Dexamethsone 8mg IV Prednisolone 50mg PO Acetazolamide 500mg PO High flow oxygen</p>
<p>65 yo F with subacute occipital headache, worse in the morning, associated with mild nausea. No neuro deficits.</p>	
<p>40 yo F with retro-orbital headache and weakness of all EOM.</p>	
<p>25 yo M drinking alcohol last night. Now has unilateral headache + painful red eye + miosis + tearing.</p>	

EMQ Theme: Pregnancy

<p>A woman who has just delivered a healthy infant has large volume PPH. What is your first most important step.</p>	<p>CTG Speculum examination Left lateral tilt Abdominal palpation Ultrasound examination Placental traction Oxytocin infusion Fundal massage</p>
<p>A term woman in labour presents to ED. What procedure will you perform prior to transfer to the delivery suite.</p>	
<p>A woman presents to your rural ED in premature labour. How will you assess if she is safe for retrieval.</p>	
<p>A woman presents in labour. How will you determine fetal heart rate and lie.</p>	

EMQ Theme: Abdominal pain

<p>Elderly patient in AF with severe pain but minimal abdominal findings.</p>	<p>Appendicitis Cholangitis Pyelonephritis Diverticulitis Diverticular disease Renal colic Leaking AAA Mesenteric ischaemia Bowel obstruction Volvulus Ovarian torsion Ovarian cyst accident PID</p>
<p>Elderly man from nursing home with constipation for 2 weeks + acute abdominal pain + distension.</p>	
<p>65 yo F with acute severe abdominal pain + back pain + hypotension.</p>	
<p>Patient with RUQ pain + jaundice + bilirubin in urine.</p>	
<p>25 yo F with right loin to groin pain, urinary frequency but no dysuria, nausea and vomiting, microscopic haematuria + nitrites.</p>	
<p>45 yo F who is perimenopausal presents with constipation and LLQ pain, low grade fever and tachycardia.</p>	

EMQ Theme: Vertigo

Young person returned from diving with vertigo. Normal ear examination.	Perilymphatic fistula Vestibular neuronitis Labyrinthitis
A woman with onset of vertigo after rolling over in bed + fatiguable horizontal nystagmus	Cerebellar-pontine angle tumour BPPV Meniere's disease
Older man with subacute history of hearing loss + episodic attacks of vertigo lasting up to 6 hours	Cerebellar CVA
A woman with a preceding viral infection	

EMQ Theme: Unsteady gait

Wide-based gait + dysarthria	Peripheral nerve lesion Charcot-Marie-Tooth
Wide-based gait + confusion	Myasthenia gravis MS
Ataxia...	Cerebellar stroke Wernicke's encephalopathy

EMQ Theme: Snakebite

Haematuria only	Brown Black
Rapid onset of VICC + neuro toxicity	Tiger Taipan Sea snake

EMQ Theme: Arthritis

Picture of hand #1	Psoriatic arthritis Rheumatoid arthritis
Picture of hand #2	Osteoarthritis

EMQ Theme: Arrhythmias

6 yo with normal BP + conscious state. Picture of ECG [SVT]	Valsalva Adenosine Metoprolol
75 yo with normal BP + conscious state. Picture of ECG [rapid AFlutter]	Amiodarone Cardioversion Defibrillation

EMQ Theme: Paediatric neck masses

Stem #1	Suppurative lymphangitis Sialadenitis
Stem #2	Thyroglossal cyst Brachial cleft

1. 3 year old boy with femoral fracture, you need to provide analgesia/sedation to apply skin traction.
 - a. Ketamine 1.5mg/kg IV
 - b. Nitrous oxide
 - c. Oral paracetamol + oxycodone
 - d. Fentanyl

2. 18 month old child who is unvaccinated and attends childcare presents with 8 days of cough + coryza, and two days of paroxysms of coughing followed by post tussive vomits. Which is the best management option:
 - a. azithromycin 10mg/kg PO
 - b. paracetamol 15mg/kg PO PRN
 - c.

3. Which of the following is the most common carpal bone fracture:
 - a. hamate
 - b. pisiform
 - c. triquetral

4. Which of the following is true of laryngoscopes:
 - a. the straight blade is used to pick up the floppy and anterior epiglottis
 - b. the straight blade is placed in the vallecula
 - c. the curved blade is superior to the straight blade in depressing the tongue

5. Which of the following is true of bimanual laryngoscopy:
 - a. the operator holds the laryngoscope in their left hand whilst manipulating the cricoid with their right hand
 - b. the operator holds the laryngoscope in their left hand whilst manipulating the thyroid cartilage with their right hand

6. When performing emergency cricothyroidotomy, what is the landmark for scalpel incision:
 - a. just inferior to the thyroid cartilage
 - b. just superior to the thyroid cartilage
 - c. just inferior to the cricoid cartilage

7. A toddler is brought in 2 hours after an unwitnessed ingestion of oil of wintergreen (salicylate). He is asymptomatic. How should he be managed:
 - a. discharge home
 - b. haemodialysis
 - c. gastric lavage
 - d. charcoal

8. A child is brought in after a witnessed ingestion of iron tablets. He is known to have ingested 20mg/kg and is asymptomatic. How should he be managed:
 - a. discharge home
 - b. charcoal
 - c. whole bowel irrigation
 - d. desferoxamine

9. Young post with prolonged gastro-like illness. Image of XR [demonstrated dilated horizontal loop of bowel]. What is the diagnosis:

- a. Ileus
- b. Toxic megacolon

10. A 3 year old Aboriginal boy is brought to ED by his 18 year old mother. They have recently moved from the country to the city. He has had 3 days of vomiting and diarrhoea. He is not tolerating oral fluids at home or in the waiting room in ED. Most appropriate management:

- a. Discharge home with advice on oral hydration
- b. Place peripheral IVC and start IV fluids
- c. Admit to observation ward for supervised trial of oral fluids and early placement of NGT is oral rehydration is unsuccessful

11. Two year old child with gastroenteritis. Child weighs 15kg and is estimated 10% dehydrated but is not shocked. You want to rehydrate the child over 12 hours using IV fluids. Choose a fluid strategy:

- a. Normal saline + 5% glucose at 110mls/hr
- b. Normal saline + 2.5% glucose at 50mls/hr
- c. 1/2 Normal saline + 5% glucose at 110mls/hr
- d. 1/2 Normal saline + 2.5% glucose at 50mls/hr

12. Which of the following ECG changes would you expect to see in a patient with hypokalaemia:

- a. ST depression
- b. Short PR interval
- c. Short QT interval

13. Elderly patient with 4 days of burning unilateral torso pain + vesicular rash that started at the same time as the pain. Choose a management option:

- a. Oral antivirals
- b. Topical steroids
- c. Oral steroids
- d. Oral analgesia

14. Otitis media in a healthy, well appearing 12 month old child. Choose a management plan:

- a. Reassure parents and provide script to start amoxicillin if child not better in 72 hours
- b. Organise a review of the child within 24 hours

15. An 8 year old child presents with abdominal pain a day after he fell off his pushbike, striking his upper abdomen against the handlebar. He has a tender rigid abdomen and bruising over the LUQ. Which structure is most likely to be injured:

- a. Pancreas
- b. Small bowel
- c. Large bowel
- d. (Spleen was NOT an option)

16. Ultrasound image of lung (2D + M-mode). What does it demonstrate:

- a. Normal lung
- b. Pneumothorax
- c. Effusion

17. Supracondylar fracture with posterior displacement and peripheral nerve injury. Which clinical sign are you most likely to find:
- Failure to make OK sign and flex PIPJ + DIPJ
 - Wrist drop
18. Penetrating injury to the neck below the level of the cricoid. Patient is well with no hard or soft signs. How will you investigate:
- CTA
 - CXR + laryngoscopy + oesphagoscopy
 - Laryngoscopy + bronchoscopy
19. Woman with subacute progressive lower limb weakness and fecal incontinence. What is the diagnosis:
- Guillain Barre
 - Multiple sclerosis
20. Alcoholic man with cough + sputum that is blood-stained and jelly-like. Your antibiotic choice should cover which organism:
- Klebsiella
 - Pseudomonas
 - Staph aureus
21. Neonatal resuscitation. At which stage should you consider intubation:
- Stimulate, warm + dry infant, PPV for 1 minute and HR <100
 - Stimulate, warm + dry infant, PPV for 2 minutes and HR <60
 - Stimulate, warm + dry infant for 2 minutes and child is still cyanosed and flat
22. A man presents with a stroke. He is right handed and has a right hemiplegia. Which other clinical sign is he most likely to have:
- Expressive dysphasia
 - Spatial neglect
 - Dressing apraxia
23. A patient is diagnosed with PICA syndrome. Which of the following signs is the patient most likely to have:
- Contralateral limb ataxia
 - Gaze away from the side of the lesion
23. Patient with SCC of the lung and a paraneoplastic syndrome. Which is the most likely finding:
- Hypercalcaemia
 - Hyperkalaemia
 - Hypokalaemia
24. An Aboriginal man with petechiae and painful lesions in his fingernails. Which is the most likely diagnosis:
- Bacterial endocarditis
25. Which of the following clinical features is most consistent with a diagnosis of major depression:
- Symptoms present for at least 2 weeks

b. Hypothyroidism

26. Which of the following clinical features is most consistent with a diagnosis of delusional disorder:

27. Which of the following features is most consistent with a diagnosis of dementia:

a. Progressive loss of complex motor skills

b. Isolated short term memory loss

28. Which of the following is true of trauma teams:

a. Single tier vs two-tiered results in over-triage

29. Which of the following is true of sim medicine:

30. A patient with known myasthenia gravis presents with acute crisis. What investigation should you do:

a. Ice pack test

b. Ephedrium test

c. Serial PEFr

31. Which of the following is the strongest indication for a CT A in a patient with traumatic head and neck injury:

a. Base of skull fracture through the anterior vault

b. Base of skull fracture through the temporal bone

c. C7 fracture

32. A man falls from a pushbike with his neck flexed. Which of the following is the most likely injury he will sustain:

a. Central cord syndrome

b. C3 anterior tear drop fracture

33. A 30 year old female takes an overdose of metformin and gliclazide. Her BGL is 3. Choose a management option:

a. Place a CVC and commence infusion of 50% dextrose

b. Place a CVC and commence infusion of 50% dextrose and octreotide infusion only if metformin is slow release formulation

c. Octreotide infusion

34. A returned traveller is diagnosed with dengue fever. Which clinical manifestation are you most likely to find:

a. Rash

b. Splenomegaly

35. Young man with first episode of shoulder dislocation:

a. Risk of repeat dislocation is 50%

b. Keep in shoulder immobiliser for 4 weeks

c. Recommend early range of motion exercises to avoid joint stiffness

36. Which is true of cardiac echo in the ED:

a. Absence of regional wall motion abnormality excludes coronary ischaemia as a diagnosis

b. Something about assessment of LV contractility

37. A man who has fallen off motorbike with hip in abduction and externally rotated. What is the most likely diagnosis:
- Posterior hip dislocation
 - Anterior hip dislocation
 - Neck of femur fracture
38. Which of the following CSF findings is normal in an adult:
- CSF glucose 55% of serum glucose
 - Protein 0.4
 - 10 lymphocytes
 - Opening pressure 22
39. Giving feedback to a JMO:
- Positive feedback can be given in public
 - Wait till the end of term to give feedback
40. A patient with severe head injury and active scalp bleeding. Clinically patient has haemorrhagic shock. Which is the best neuroprotective strategy:
- Control the scalp bleeding
 - Hyperventilate to pCO₂ 25-30mmHg
 - Intubate with defasciculating dose of muscle relaxant to reduce sympathetic activity
41. [Image of an ECG demonstrating prolonged QT interval]. Which class of drugs is most likely to have caused this ECG:
- Antidepressants
42. How do you obtain the best view for laryngoscopy in an adult:
- Place a pillow under the head
 - Place a pillow under the shoulders
 - Elevate head of bed 30 degrees
 - Place the occiput flat on the bed
43. Which of the following is true of CVC insertion:
- IJ and SC have lower rates of infection than femoral
 - Anticoagulation is an absolute contraindication to SC CVC insertion
 - The trendelenberg position reduces the risk of air embolism
44. A 40 year old man with chronic schizophrenia, history of amphetamine abuse and history of drug induced psychosis. He has not been compliant with his depot injections for 2 months and has been using ice. He is brought in by his family members concerned that he is now confused and agitated. What is the most likely diagnosis:
- Relapse of schizophrenia
 - Drug induced psychosis
 - Subarachnoid haemorrhage
45. A 75 year old woman with urinary retention.
- Insert an IDC and admit for overnight observation to ensure no post obstructive diuresis
 - Perform SPC if multiple failed attempts at IDC insertion because it has a low complication rate
 - Start an alpha-blocker because it is proven to relax bladder neck muscles

46. A 7 year old girl has had a recent bacterial throat infection and now has vulvovaginitis but no bloody discharge. What is the most likely cause:

- a. Pin worm
- b. Foreign body

47. You are managing a patient in a resus cubicle after termination of a generalised tonic clonic seizure. The patient has sats of 73% and obstructed breathing. Choose a management option:

- a. Jaw thrust + hudson mask at 15L/min
- b. Bag valve mask
- c. Oropharyngeal airway

SAQ 3 year old boy drowning

- interpret blood gas
- list prognostic factors
- issues associated with having parents in the resus room and how to handle it

SAQ Wound repair

- young woman with stellate lesion on face
- middle aged man with laceration to calf from rusty nail
- large gaping tongue laceration
- describe how you would repair each of these wounds

SAQ Redback spider bite

- list local and systemic symptoms
- give the findings of RAVE and RAVE 2 studies

SAQ A well appearing, afebrile 8 year old female with a rash

- describe the rash
- list differential diagnosis and the pathophysiology of each diagnosis

SAQ Sedating the agitated patient

- findings of the DORM study

SAQ XR of femoral fracture

- describe the XR
- what are the problems associated with a pelvic binder
- how would you manage compartment syndrome

SAQ Child with croup

- Describe XR

SAQ Angioedema

- list causes
- list treatment options (drugs and doses)

SAQ A firefighter with severe burns, decreased GCS and hypoxia

- list and justify management priorities in the first 10 minutes

SAQ GI bleeding in an elderly patient on dabigatran

- list blood products and non-blood products you might give

SAQ Pelvic fracture

- describe advantages and disadvantages of eFAST in this patient

SAQ Monteggia fracture-dislocation

- describe XR

SAQ Eclamptic seizure in a rural ED

- management
- how would you structure your referral to a retrieval service

SAQ Hyperthermic patient

- differential diagnosis and management

SAQ Status epilepticus
-step wise approach to management

SAQ Missed dialysis in a patient with end stage renal failure
-management of hyperkalaemia and APO

SAQ You witness police approach a JMO at work about a patient from a previous shift, and the JMO gives the police a copy of the patient's file.
-what are the legal and ethical implications
-if the police want a medical record, how should this be handled?

SAQ Image of an eye in a patient with unilateral painless visual loss
-describe the image (?retinal haemorrhage)
-provide a differential diagnosis for any cause of visual loss along with associated clinical features

SAQ Pregnant trauma patient
-interpret this CTG (CTG strip provided)
-list the pregnancy-specific injuries this patient might sustain

SAQ Image of an ECG in an 80 year old female who had chest pain, but now resolved
-describe the ECG (?Wellens)
-management

SAQ Male sex worker with penile discharge
-legal and ethical issues around consent for HIV testing
-empiric antibiotic management

SAQ Neonatal jaundice
-indications for phototherapy
-what questions would you ask when taking the history and justify

SAQ Febrile 3 week old child
-list 5 investigations you would perform and justify

SAQ A junior doctor arrives late for a shift. You overhear the junior doctor boasting to other staff that he had a big night and is still intoxicated. How would you manage.