

A 23 year old man presents alone to A&E department shouting that we have to contact “the famous people in London” because the Earth is in danger from an Alien invasion. If we don’t contact the famous people than he will have to kill his next door neighbour as he is directing the Alien fleet towards Earth. He is very difficult to control and says he has a gun at home with which he can kill the neighbour.

He allows himself to be booked in but the contact numbers he supplies are unavailable or not answering and he is not previously known to the department.

You decided that he needs to be kept in hospital under the mental health act. You try to contact the psychiatrist on call but she cannot answer you as it turns out that she is currently dealing with a violent patient on one of the wards in psychie home who is holding a nurse a hostage. Patient is becoming increasingly anxious and agitated threatening to run off any minute. Under which section of the act could you detain this patient “off your own back” in the department and what do you need to do for the patient to become “eligible”. How long can you keep the patient, who do you need to inform that you have done so? 3 points

Section 5 (2) after you persuaded the patient to get admitted to CDU/SSW (has to be a voluntary pt) for 72 hours, you need to inform the hospital manager – extra ½ point for section 5 (4) and 6 hours

Or section 4 with the use of an approved social worker- pt would not get admitted then for 1 extra point

You manage to calm the patient down and he agrees to wait for a little longer while you try get him some transport to London sorted. After telephone conversation with psychiatrist he says he is coming in because he thinks they need to section him and asks if you can assemble the relevant people. Who would you call and what section will he then be able to apply for? 2 points

Need an approved social worker or a close relative of the patient for section 4& 2 + ideally a doctor who knows the patient for section 2

What are the 4 categories of mental disorder?- 4 points

Mental illness

Severe Mental Impairment

Mental Impairment

Psychopathic disorder

What is the legal definition of Mental Illness? 1 point

There isn't one



this boy 5years had vesicles on the palms with erythema around the lesions. Lesions affect predominantly the palms. He has dysphagia and 2 aphthous-like lesion on the tongue.

What is it?- 1 point

Hand Foot and Mouth disease

A 22 year old man presents to the A&E department complaining of left testicular pain. He is mildly tachycardic and pyrexial at 38.5°C. Yesterday he was started by his GP on antibiotics for a tooth abscess and was planning to see a dentist today but for the testicular pain and swelling.

He denies any unprotected intercourse with strangers and is married, his wife is 20 and 2 months pregnant.

What is the most likely diagnosis? 2 points

How would you treat him?- 2 points

What other important advice would you give him and why?- 2 points

Mumps

Rx with NSAIDs, icepacks and scrotal support

Find out if wife has been immunised but either way isolate from her for at least 8 days- mumps causes spontaneous abortion in 27% of cases in 1st trimester



This 22 year old primary school teacher developed a diffuse symmetric red papular eruption all over her body.

What is it? 1 point

What else is this patient likely to complain of and how would you treat those complaints? 2 points

Erythema infectiosum- Fifth disease

Arthralgia- worsening throughout the day, Rx with NSAIDs

3 year old boy has fallen out of a second floor window and landed on his head on grass floor. He does not have any obvious external injuries, is breathing spontaneously, his heart rate is 150 BPM and BP is 100/65. On further assessment his eyes are closed but he opens them when his mum speaks, he is moving all his limbs from time to time.

GCS- list all the Best Verbal Response criteria- 5 points

Alert, Babbles, coos, words to usual ability
Less than usual words, spontaneous irritable cry
Cries to pain
Moans to pain
No response

As you are putting a cannula in his arm, he becomes less responsive, he tries to withdraw his hand but not very sternly and he only moans when you put the needle in him. You quickly check his vital signs, RR is 25, good air entry, sats 99%, pulse 140, BP 100/70.

According to APLS temporary manoeuvres could you institute in this situation (not necessarily in this patient)?
4 points

Head up to 20°
ventilate to PCO₂ of 3.5-4.0
IV mannitol 0.5-1.0 mg/kg
Colloid infusion if hypotensive

What size ETT would you have ready?- 1 point

4-4.5-5.0 (1/2 point for 4.5)
Or one that fits into a nostril +/- 1/2 size

A 40 year old man presents to the department with severe abdominal pain. It is central and going through to his back. He has been vomiting profusely. He thinks he'd eaten something yesterday at his best friends stag night. His RR is 25, pulse of 120, BP 110/55.

Describe the first 5 steps in the initial treatment of this patient. 2¹/₂ points

O₂, IVA, IV fluids and IV analgesia, NGT

What is the most likely diagnosis and what investigations could you do to diagnose it? 2¹/₂ points

Pancreatitis

Amylase, lipase, ERCP, CT abdomen, USS abdomen on occasions

List the Ranson's criteria which can be used in the A&E. If a patient scores all of them what would be his/her predicted mortality? 6 points

Age > 55

Glucose > 11 mmol

LDH > 350IU/l

AAT > 250U/l

WCC > 16 000/ml

1 point for each of the above

under 3 Predicted mortality about 1%

3-4 Predicted mortality of 15%

5-6 Predicted mortality of 40%

over 6 Predicted mortality of 100%

The others are within 48 h

Packed Cell Volume decrease

Urea increase > 1.8 mmol/l

Calcium < 2 mmol/l

PO₂ < 9kPa

Base deficit > 4 mmol/l

Fluid sequestration > 6l

A 35 year old man comes in to A&E c/o a swollen and painful L wrist. It turns out he had fallen off a horse and landed on the palm of his hand as he tried to save himself from falling.

Name 6 possible bony injuries. 3 points

Colle's #, Scaphoid #, Galleazzi type #, Lunate and Perilunate dislocations, Ulnar styloid #, Ulnar dislocation

What are the next 4 steps in your management of this type injury? 2 points

Analgesia, check neuro-vascular integrity give some form of wrist support, remove rings

Because you are in a DGH and it is now midnight, you are unable to get a X-ray without a warrant from the minister of Health. You therefore decide to put a backslab on the patient and tell him to return in the morning for imaging. The patient turns up 4 hours later in agony, he can't move his fingers now and can't sleep because of the pain. What would you do first? 1 point

Loosen the plaster

Describe your management of the patient afterwards. 4 points

*IV access and analgesia, bloods for K⁺, CK, and pH, order urgent X-ray and call the orthopaedic surgeons .
1 point for surgeons, 1/2 point for the others*