A 54 year old man comes in to the department feeling unwell. He has just come back from "cowboy holidays" in Oklahoma, where he spent 2 weeks cattle rustling and sleeping in tents. He developed flu-like symptoms on the last day of the holidays but did not think much of it. Now, 3 days later, he is complaining ao hedache and temperature but his main concern was a strange rash he noticed this morning (right). What is the main question you would ask him? 1 point



What is the diagnosis? 1 point What is the causative organism? 1 point

Had he been bitten by a tick? Rocky Mountain spotted f ever Ricketsia ricketsii

On examination he has a BP of 95/60, pulse 110, temp of 38.5°C. When you get back to him he appears lethargic and asks you to get his mum, it turns out she has been dead for 5 years. Describe your treatment. 3 points

Give Oxygen,

IV access & Bolus of fluids l N Sal stat

IV antibiotics- Doxycyclin 200mg

What is the likely cause of his confusion? 1 point

List 3 investigations you would perform and how what clinically important abnormalities are they likely to show? 3 points

FBC- anaemia and thrombocytopaenia

*U&E- hyponatraemia & renal f ailure* 

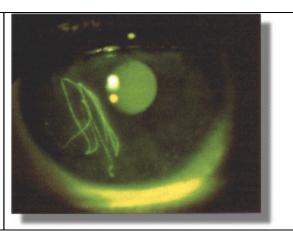
CXr- may show pulmonary oedema

Blood gases- may show lactic acidosis

BM- exclude hypoglycaemia

LFTs are likely to be abnormal but do not alter Rx, BC is very insensitive and f ew labs perf orm it due to biohazard. Serology gets done later.

Pt is complaining of a foreign body sensation in his eye. What is the most likely diagnosis? 1 point



Subtarsal f oreign bodymultiple vertical scratches

A 24 year old woman comes in to A&E c/o painful L eye. Pain gets worse on movement and she thinks she can't see very well out of the eye. Thre is no H/O trauma and slit lamp examination is unremarkable. Fundoscopy shown on the R-what does it show? 1 point List 3 other tests which should be performed in A&E to help reach the diagnosis. 3 points What is the diagnosis and what is the treatment? 2 points



## Optic disc oedema

Visual acuity- of ten reduced, af f erent pupilary def eften present and red desaturation test- usually posistive

Optic neuritis- Rx either with IV steroids or conservative, oral steroids have a worsening outcome (-1/2 f or that)

A 60 year old man is brought in by his daughter. He had been unwell recently and and seems to have lost some weight and has been feeling increasingly tired and his GP has started him on immigrant a couple of weeks ago. Today the pt noticed that he could not see out of his L eye. What is the diagnosis? 1 point

What 2 blood tests would you perform to confirm it? 1 point

How would you treat it? 1 point

Ischaemic optic neuropathy due to Giant Cell Arteritis

ESR and CRP

Steroids- IV hydrocort or methyl pred

Painful red eye, pain worse on light. Name the condition and the treatment. 2 points



Iritis/uveitis, Rx with topical steroid drops

What does the picture show and what is the condition causing it? 1 points
How would you dispose of the pt? 1 point



Hypopyon, bacterial keratitis; ref er f or urgent ophthalmic opinion

Painful L eye.
Name the
condition and 4
drugs which
could be used to
treat this in
A&E.
3 points



Acute angle closure glaucoma- topical b-blockers, topical a-agonists, pilocarpine drops and acetazolamide IV, analgesia, IV mannitol

Very itchy, watering eye for last few hours no other symptoms. Pt noticed this swelling and is concerned. What is it? Which part of PMH would be important? How would you treat this?



Conj unctival oedona/chemosis; ask f or H/O allergies esp hey f ever; antihistamine eye drops

A young man is brought into your department. He had been assaulted and has sustained the following injury

What two important structures are likely to be damaged in this picture? 2 points How would you go about repairing this wound? 1 point



Lacrimal duct and tarsal plate are likely to be damaged Do not repair-wet dressing and ref er plastics/ophthalmology

You suspect he might have sustained damage to his cornea and are concerned about a penetrating injury. How would you investigate investigate that and what must you never do while examining such an eye and why? 2 points

Methods- stain washout: f luorescein gets washed away on examination

Anterior chamber thickness- shine light f rom side if does not illuminate the

whole of iris it suggests a shallow chamber= penetration

You should never press on the eye you might cause more f luid leakage

He keeps complaining of pain around the eye and on examination does not seem to be able to look upwards. You X-rayed the man's face. List 3 abnormalities on this X-ray. 3 points



Fracture R medial orbital wall Fracture R orbital f loor Fluid in the R maxillary sinus ? FB L orbit f or extra mark

List 2 indications for orbital blow out repair. 2points

Persistent diplopia in a f unctional f ield of gaze > 50% f loor involved enophthalmos > 2mm

A 25 year old man presented to the department because of a strange lesion in his groin (upper pic) and sore eyes (bottom picture). He had been unwell for a while with sore joints and mouth and has lost some weight. A couple of weeks ago he had noticed that his shins developed some strange bruises. Describe the top lesion. 1 point List 3 abnormalities in the bottom picture and what is their cause? 3 points

What is the unifying diagnosis and what blood tests would you do to confirm it? 2 points



A single well def ined ulcer in the lef t groin.
Inj ected cornea, uneven pupil, hypophyon= uveitis Behcet's disease
No bloods there are no diagnostic test it is a clinical diagnosis:

## Maj or f eatures

Recurrent aphthous ulceration of the oral mucous membrane Skin lesions - Erythema nodosum-like lesions, subcutaneous thrombophlebitis, f olliculitis (acnelike lesions), cutaneous hypersensitivity Eye lesions - Iridocyclitis, chorioretinitis, retinouveitis, def inite history of chorioretinitis or retinouveitis Genital ulcers

Minor f eatures Arthritis without def ormity and ankylosis Gastrointestinal lesions characterized by ileocecal ulcers Epididymitis Vascular lesions

Central nervous system symptoms

## Diagnosis

Complete - Four maj or f eatures

Incomplete - (1) 3 maj or f eatures, (2) 2 maj or and 2 minor f eatures, or (3) typic ocular symptom and 1 maj or or 2 minor f eatures
Possible - (1) 2 maj or f eatures or (2) 1 maj or and 2 minor f eatures

List 8 other systemic, non traumatic, conditions which can present with a skin ulcer. 4 points

Arterial insuf f iciency
Diabetes Mellitus
Venus insuf f iciency
pyoderma gangrenosum
Syphilis
TB/Leprosy
Trigeminal trophoc syndrome
Leishmaniasis
Drug reactions e.g. methotraxate
Skin secondaries
Calciphylaxis
SLE