

DVT and Polycythaemia

A 48 year old man presents to A&E with a swollen R calf. I had been bothering him for a few days and it got worse this morning. On examination his right calf is 5 cm thicker than the left and his foot appears oedematus. List 4 factors from the Well's criteria which would increase your suspicion of DVT. 4 points

<i>H/O lower limb trauma/surgery or POP</i> <i>Swelling >3cm at 10 cm below tibial tuberosity</i> <i>Pitting oedma</i> <i>H/O malignancy</i> <i>Bed ridden for more than 3 days</i> <i>Entire limb swollen</i> <i>Tenderness along the popliteal or femoral veins AS WELL AS calf tenderness</i> <i>Dilated collateral veins</i> <i>Previous TED</i>
The patient's bloods are as follows Hb 18.5 g/dl PCV 0.57 MCV 89 fl WCC $9 \times 10^9/l$ Neutrophils 92 % Platelets 388 List 4 secondary causes of polycythaemia. – 4 points
<i>PHYSIOLOGIC INCREASE IN ERYTHROPOIETIN</i> <i>Chronic lung disease</i> <i>Cyanotic heart disease</i> <i>High altitude</i> <i>Smoker</i> <i>Familial</i> <i>INAPPROPRIATE INCREASE IN ERYTHROPOIETIN</i> <i>Renal- carcinoma, polycystic kidney, transplant</i> <i>Adrenal tumors</i> <i>Hepatocellular carcinoma</i> <i>Ovarian fibroma</i> <i>Cerebellar haemangioblastoma</i> <i>Erythropoietin abuse by athletes</i>
What abnormalities in the above results would give you a likely diagnosis of primary polycythaemia- 1 point
<i>Raised WCC AND platelets</i>
What other blood tests would you perform before sending this patient for a diagnostic investigation? – 1 point
<i>None</i>

A 20 year old woman, from Armenia, presents to A&E department c/o abdo pains and sore arms and legs. Her English is not very good but from what you gather she has had these pains before. She is otherwise fit and healthy and normally takes colchicines on regular basis but has not taken any last few months since she ran out. She also tells you that she cannot have babies but is unable to tell you why. On examination she is in a lot of pain, has a rigid abdomen with decreased bowel sounds and you note an appendectomy scar. She has severe pains on trying to move her legs and arms.

What is the diagnosis? 1 point

Describe your initial management. 2 point

Familial Mediterranean Fever

IV fluids(N sal large volumes) and opiate analgesia, give colchicine

What investigations would you carry out? 5 points

FBC

U&E

Amylase/lipase

UA

Pregnancy test

What is the most common complication of this condition and what bedside test should you carry out to give you an indication? 2 points

Renal failure

UA for protein

A 20 year old man from Uganda presents to A&E dept. He came over a few days earlier to visit his brother. Today he started feeling unwell with recurrent pains in his jaw and neck which are gradually getting worse. He keeps getting painful spasms of his shoulders and neck muscles and is finding it difficult to breathe.

On examination he has a relatively fresh wound on his shoulder which turns out to have been inflicted a week prior to coming over by a spear during a tribal scuffle.

Describe your initial A&E treatment.- 3 points

What is the diagnosis?- 1 point

What bedside test would confirm the diagnosis? – 1 point

Oxygen, IV analgesia and benzodiazepines, Human Tetanus Immunoglobulin

Tetanus

+ve spatula test- pt bites on the spatula when attempting to elicit gag reflex, negative is a normal gag reflex

A 35 year old woman presents to the department confused and agitated and extremely uncooperative. On examination she is tachycardic, pyrexial and has uncoordinated movements. You also notice that she is drooling at the mouth.

She returned from France 5 days ago where she'd been on holidays but started to feel unwell soon after. She attended the department a couple of days earlier c/o sore throat, headache and temperature. At the time she also mentioned that she'd been bitten by a small bat while camping in France towards the end of her stay there and now the small wound felt odd being both painful and numb. She was discharged home with some NSAIDs and advised to see the GP if things get worse.

What is her diagnosis?- 1 point

What is her prognosis?- 1 point

What treatment should she have received at first presentation?- 1 points

What other issues should you consider? – 2 point

Rabies

Death (100 % mortality once symptomatic)

1st shot rabies vaccine and immunoglobuline

Any 2 of:

Isolation of patient

Rabies prophylaxis for any of the staff exposed

Rabies prophylaxis to any family members

Reportable disease

Legal issues for the doctor who saw her 1st time

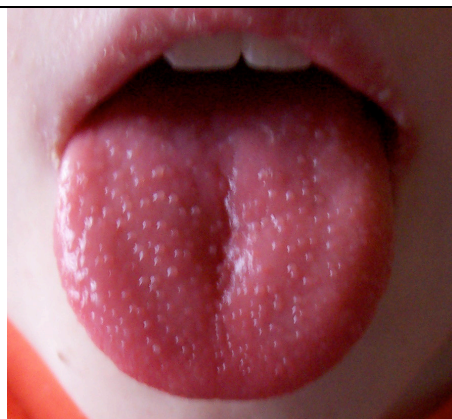
28 year old man had returned from holidays in Central America a month ago. He had suffered multiple insect bites while out there but did not take any notice. However one of the bites is not healing up and, what initially looked like a small abscess now has broken down and ulcerated.

What was the bite caused by? 1 point
 What is the likely diagnosis? 1 point
 What would be your management? 1 point



Sand Flies
Leishmaniasis,
refer to infectious diseases

What is the classical description of this picture? 1 point
 What disease is it typically associated with? 1 point
 What pathogen is it caused by? 1 point



Strawberry tongue
Scarlet Fever
Group A Strep

A 40 year old man presented with a 3 day history of pain and itching of his forearm, following an insect bite.

What is the likely diagnosis? 1 point
 In up to 30% of these there is a silent, potentially serious complication- what is it? 1 point
 What investigation would you order to exclude this? 1 point
 What is the usual treatment for this? 1 point



Superficial Thrombophlebitis
Deep Thrombophlebitis
USS venous system
NSAIDs and anticoagulation

A 15 year old girl presents to your department with abdominal pain and confusion She had been complaining of the pain for a couple of days, it was epigastric and colicky in nature. She had put it down to the fact that she had not opened her bowel for a few days. On examination she has tender, soft abdomen which is not distended, bowel sounds are present, she is crying and uncooperative, she vomited twice prior to arrival. You also notice that she is confused in time and space. She has no past medical history of significance. Describe your initial management. 3 points

*IVA and fluids,
analgesia- morphine
Oxygen if patient tolerates it*

While you are doing all this she suddenly starts screaming that she can't move her legs. On closer inspection she is moving them but appears to have significant weakness in her thighs. Apart from the usual U&Es and FBC, what investigations would you do? 4 What would be your initial treatment? 1 point

*Amylase, LFTs, ABGs, urine porphyrins
10 % dextrose*

While you are waiting for the bloods you notice that the weakness in her legs appears to be worsening and she is less active. What is the likely diagnosis? 1 point What further treatment could you instigate? 1 point

*Acute porphyria- any abdo pain with mental and/or neurological changes
Haem infusion (Haem arginate)*

A 68 year old farmer presents to A&E with a puncture wound to his foot. It turns out he was cleaning the stables when he stepped on a rake.
He has a puncture wound to the sole of his foot.
He is otherwise well and healthy.
Describe your initial treatment. 2 points

*Thorough irrigation and debridement of the wound if necessary.
Give Human Tetanus Immunoglobulin*

The patient is not certain when he last had his tetanus, nor how many he had. Under what circumstances could tetanus vaccine not be given? 2 points

*History of 5 or more vaccines gives life long immunity and no further boosters are necessary even in high risk wounds.
source*

Chief Medical Officer et al. Update on immunisation issues. [PL/CMO/2002/4, PL/CNO/2002/4, PL/CPHO/2002/2]. Department of Health, August 2004.

How could you attempt to determine whether this pt needs a TD booster? 1 point

Call GP

According to the DoH guidelines, what are considered to be tetanus prone wounds? 5 points

Any wound sustained more than 6 hours prior to the wound or burn presenting to the department

Puncture wounds

Wounds contaminated with soil/manure

Heavily devitalised tissue

Clinical signs of sepsis