

## Student Instructions

You are an FY1 working on the Medical Assessment Unit. You have been asked to see a patient who has been referred in by their GP due to pyrexia of unknown origin.

## Patient Instructions

You are a 47-year-old male care worker who is originally from Thailand.

HPC: You went to see your GP about a small lump on your chest. Whilst she was examining the lump (which it turns out is nothing to worry about), she noticed that your skin was quite hot and clammy. She took your temperature and it was 38.6. She wasn't happy sending you home, and instead referred you here.

You feel a little bit hot and bothered and think this has been going on for a few days. You don't think there is a pattern to it. You have also been feeling generally "under the weather" for about the same length of time. You feel a little bit groggy - you've been slightly drowsy, forgetful and clumsy for a couple of days. You do not have a cough, diarrhoea, vomiting, rash, headache or night sweats. You have some generalised abdominal pain and your partner commented on you looking more bloated than usual. You had noticed yourself that your clothes seemed a bit more stretched and tight around your tummy than usual.

You've had no change in bowel habit. If asked specifically, you think you have been passing less urine than usual over the last few days, but you've not had any burning/pain, frequency or urgency. You've not lost any weight recently. You don't have any joint pains or swelling, other than longstanding shoulder pain which has been an issue for several years.

If asked specifically: You haven't travelled anywhere recently, abroad or within the UK. You haven't eaten any different foods/takeaways. You haven't had unprotected sex – you've been with your partner for over 20 years and haven't been with anyone else in that time. You've not been in contact with animals, or anyone who is unwell. You haven't had any recent tattoos/piercings or injuries.

ICE: You are a bit bewildered about being sent to hospital as you don't really feel unwell. You think maybe you just have a virus that will pass in a couple of days, so you're not really concerned. You would like to be sent home as soon as possible because you don't want to take time off work if you don't need to.

PMH: You had Malaria when you were around 16 years old. During routine screening for your job 5 years ago you were found to have Hepatitis C, which was successfully eradicated (you assume that you contracted it while you still lived in Thailand but are not sure how). You now have yearly check-ups with the hepatologist because you have some scarring in your liver. You have needed to have fluid drained off your tummy a few times, but haven't needed that for a while and the liver team have been happy with how things have been recently. You also have glaucoma.

DH: You use eye drops for your glaucoma and take over-the-counter multivitamins. You have no drug allergies.

FH: Your father had a heart attack at 70 but survived. Your mother has early dementia.

SH: You moved to the UK from Thailand 10 years ago. You have been in your job providing care for people in their own homes for 5 years. You live in a small flat with your partner and have 3 grown-up children. Two live locally and one lives in Liverpool. You do not smoke, drink alcohol or take illicit drugs.

## Examiner Instructions

This is a history of a pyrexia of unknown origin, therefore the student's history should be aiming to find the cause of the pyrexia. This should aim to locate a possible source of infection, including travel history/exposure risks. Screening questions for autoimmune disease and malignancy should also be included.

The student should also examine the patient. Given the patient's history of liver disease, ascites and description of abdominal symptoms, an abdominal exam would be appropriate, however as this is a history of pyrexia of unknown origin, a general systemic examination should also be considered.

Ask the student to summarise the history and their findings. They should then explain their differential diagnoses and initial management steps. A competent candidate response may be along the lines of:

“The main differentials for pyrexia of unknown origin would include infection, autoimmune disease and malignancy. In this case, the patient has a history of Hepatitis C, cirrhosis and previous ascites so I would be most concerned about spontaneous bacterial peritonitis or hepatocellular carcinoma. As the history has been acute, only a couple of days, and there are no secondary symptoms suggesting malignancy I suspect SBP is more likely but would want to investigate both.

Initial investigations:

Bedside: Observations, ECG (if tachycardic)

Bloods: FBC, U&E, LFTs, ABG (lactate and Hb if considering sepsis), cultures, ammonia (evidence in history of hepatic encephalopathy)

Imaging: CXR, Abdo USS – further imaging based on results.

Cultures: Blood, urine, ascitic fluid if drainable”

Discussion points

- What is the aetiology of SBP?
- How is it diagnosed?
- In the context of the patient's liver disease, what are his symptoms of drowsiness, forgetfulness and clumsiness suggestive of? How would you manage it?
- What are some other complications of liver cirrhosis?