

## Student Instructions

You are a F1 Doctor working on the Acute Medical Admissions Unit. Please take a history from Vera Cava, a 36 year old gentleman who has presented with fever. After your brief clinical assessment, you will be asked to present the case to an examiner.

## Patient Instructions

### HPC

You've haven't felt right for the last 6 days. It's been hot, cold, hot, cold. At one point, your friend who came to help out said that you felt like a boiled kettle! At first you thought it was just a cold bug, but now you are not so sure. The fever hasn't had any strange patterns, it is simply getting worse. Night-time is by far the worst, but it's throughout the day too.

Speaking of night-time, last night you also began experiencing continuous an achy chest pain, radiating to no particular place. The pain was made a bit better by paracetamol, but you have not noticed anything that make it better. This morning, you noticed some blood in your urine (this has never happened before) and this was really because your grandad died of bladder cancer and his first symptom was blood in the urine.

You have not noticed any rashes in the hands or feet. You also haven't noticed any dark streaks in the nailbeds either. You have experienced no visual changes, pins and needles, numbness, weakness or paralysis.

You have not travelled abroad in the last 2 years, neither have you been sexually active in the last 3 years (following a breakup with your partner. That was a particularly messy break up and you don't really want to talk about it.

### PMH

Asthma

No previous surgeries

Some kind of pneumonia 8 years ago.

No personal history of heart attacks, liver problems, strokes,

Drug History

Beclomethasone/Formeterol combination inhaler

Salbutamol inhaler

Allergy to Amoxicillin (experienced anaphylaxis when had this for chest infection 8 years ago).

## FH

Father died of a heart attack at 56.

Mother is still alive and well and is currently 58.

## Social History

Never smoked.

You drink maybe most of a bottle of wine on weekends if you're with friends, otherwise you don't drink much because it compromises your progress in the gym.

You live alone in a flat, with Boris, your bull terrier dog.

You work on the security staff for a local nightclub. You hate your job, but have used it to "get by" while you search for a more permanent job. You were a fitness instructor at a local gym for 5 years until the gym was shut to make room for flats.

You get together with some friends to inject opiates on the weekend. You found that it helped you deal with the sudden loss of your dad. You're ashamed and do not want anybody else to find out because you "need to do this".

## ICE

You feel this may be another chest infection as your last one felt just like this, but the blood in the urine is strange. You think that another chest infection is possible because you have 3 cousins who keep getting chest infections, so it may be "in the genes". You also wonder if you have a kidney problem because you've googled the causes of blood in urine and have seen that young patients can get kidney problems which need steroid treatment-you love the gym and steroids would ruin your image. You expect to get a chest X-ray and antibiotics, hopefully without amoxicillin, because you nearly died the last time you received it from your local GP.

## Examiner Instructions

Ask the student to summarise their findings back to you.

Discuss the case with the student. Ask for their differential diagnosis, encouraging them to list at least 3 possible causes for the patient's presentation. Ask them which examination they would perform and why. You may use the following questions and corresponding notes to help guide discussion.

1. Can you outline some risk factors for infective endocarditis?
2. What examination findings might you expect from a patient with infective endocarditis?
3. How would investigate this patient?
4. What criteria can be used to enable a diagnosis of infective endocarditis?
5. What are some dermatological manifestations of infective endocarditis? Why do they occur?
6. What organisms are most likely to cause: a) native valve endocarditis b) prosthetic valve infective endocarditis?
7. Can you name some examples of culture negative causes of infective endocarditis? How might you detect the presence of these organisms otherwise?
8. What steps can be taken to manage this patient?
9. What are some complications of infective endocarditis?