

Instructions to Candidates: - Aim for 8 minutes

You are a Foundation doctor working in A&E.

Your next patient is Ms Sally Lim, an 83-year-old lady who is complaining of knee pain.

Please take a history and formulate your differential diagnoses.

At 6 minutes the examiner will ask you a few questions.

Name: Sally Lim

Age 83 **PC:** Knee pain

HPC:

For the past three days, you've been having discomfort in your right knee. It has now affected your walking – feels painful to weight bear and you have a limp. Pain started gradually, dull achy, no radiation, movement exacerbates the pain. You have tried using Voltaren gel prescribed for your back pain in the past, but it has not helped much. No other joints seem to be affected. This has never happened before.

Today you felt shivery and rigors when you woke up. Feels like you have a fever but had not taken your temperature. You find yourself quite sick as well and had to skip breakfast. You have not vomited. Otherwise systemically well.

Your knee appears slightly swollen, maybe red even but you have not touched your knee (ie don't know whether it feels hot or not). You cannot bend your knee as much as you usually can. You have not lost sensation below the knee. You can move your ankle and toes.

Only if asked about trauma, you had fell two steps of stairs at home and landed on your knee a couple of days ago. It hurt badly but you managed to get back on your feet and found some bruising and a small laceration on your right kneecap afterwards.

PMH:

Type 2 Diabetes Mellitus, Hypertension, Osteoporosis

PSH:

2 Caesarean sections, bilateral total knee replacement.

DH:

Metformin, Gliclazide, Losartan, Ramipril, Adcal D3

Allergy: NKDA

FH: Nil

SH (LOST):

Living situation:

Lives in a house with two small dogs, has stairs. Widow.

Occupation:

Retired Social worker.

Social: Smoking, Alcohol, Recreational drugs, Exercise

No smoke. Drinks occasionally. No recreational drugs. Evening daily walks as an exercise.

Travel Hx: N/A

I: Your previous surgery is not working anymore and you may need another one.

C: Worried that the pain will never go away.

E: appear cheeky, you expect the doctor to do their job.

Questions:

1. What are your differential diagnosis?

Septic arthritis, Haemarthrosis, Bursitis, Patella fracture, Meniscus injury, Ligament tear, Osteoarthritis, Gout

Which is your top diagnosis? Septic arthritis

2. What investigations would you like to request for this patient? And why?

Bloods: **FBC**, LFT, U&E, **CRP**, blood culture, lactate, urate level. (FBC – to check WCC, for infections. LFT and U&E – antibiotics can be metabolised and excreted. CRP and lactate – confirms infection/severity of sepsis if any. Cultures – to identify organisms if suspecting sepsis. Urate – if suspecting gout.)

Joint aspiration, send off synovial fluid for microscopy and culture.

Imaging: X-ray (for baseline to see how the joint is before, may reveal degenerative changes)

3. How will you manage this patient?

Analgesia, **antibiotics**, irrigation and debridement of joint.

Answer sheet:

Area	Clear Fail	Fail	Satisfactory	Good	Excellent
PC & HOPC					
PMH					
DH					
SH					
FH					
ICE					
Differential dx					
Investigations					
Rapport/ Comm skill					
Overall					

Feedback

Take septic arthritis seriously! It is an emergency and can progress to sepsis or lead to complications such as osteomyelitis and osteoarthritis. Patients need to be on antibiotics for at least 2 weeks (IV) or 4-6 weeks (oral). If you're not sure and the patient looks unwell, start sepsis six & speak to a senior!