

## Student Instructions

You are an FY2 doctor working in a GP surgery. Your next patient is Mr Arri, a 54-year-old gentleman who has come in for a routine appointment because he has been experiencing foot pain. His current medications are: Ramipril 2.5mg OD, Amlodipine 10mg OD, Salbutamol PRN, furosemide 20mg OD. Please take a history and perform an appropriate examination.

## Patient Instructions

You are Mr Arri, a 54-year-old building surveyor. You have an Afro-Caribbean background and live with your wife, Maisy and son, Gavin, who is just about to start University at Manchester, studying Pharmacy.

HPC: You have come in because you have been getting a pain in your left foot. It started suddenly four days ago when you woke up in a hotel room in London. The night before you were out socialising with work colleagues and had been to some bars after watching the football together. You don't recall one specific incident or injury that caused the pain, however when you were at the gym at the weekend, you wonder if you felt a 'twinge' of pain. You had been on the exercise bike and had done some swimming. The pain has got progressively worse since it started and is currently a 6/10 pain that is 'throbbing' in nature. You have also noticed some redness and swelling. There is no stiffness but you think the pain is worse when you've been on your feet all day. If asked specifically, the pain is located over your left, 1st MTP joint.

You've got to the point where you can't get around without having to sit down or rest because of the pain. You don't have any pain in any other joints. You tried taking paracetamol, but they don't seem to have made any difference. Although you don't like visiting the doctors, you went to see someone last week because of some swelling you've had in your legs. They started you on one of your tablets, but you can't remember which one.

ICE: You wonder if you might have broken a bone whilst at the gym. You are hoping that you can get an x-ray to make sure everything is ok. You're worried because you rely on being on your feet for work, and recently there has been an increased demand at your company for surveying to be done on numerous buildings. You want to keep working so that you can save some money towards an early retirement. Up to now, most of your savings had been saved for your son and his university costs.

PMH: You have high blood pressure and you see a practice nurse about this on a yearly basis. You had some leg swelling affecting both sides that appears to have got better recently, after starting a new tablet. You were once told you had asthma but your breathing hasn't been bad for years.

DH: Ramipril 2.5mg OD, Amlodipine 10mg OD, Salbutamol PRN, furosemide 20mg OD.  
No known allergies.

FH: Both of your parents had Diabetes and high blood pressure. Your mother is still alive but your dad died after having a stroke in his 80's a few years ago.

SH: You live in a detached countryside house with your wife and son. You have never smoked but drink around 8 pints of lager per week. You have a son who is just about to start University at Manchester and your wife is worried about her 'little chick flying the nest.' You feel like you have a balanced diet but particularly enjoy seafood and a good Sunday roast. If asked, admit that you probably do eat a lot of meat and drink to excess.

## Examiner Instructions

Please observe the student taking a history from this patient. Ideally, they should perform a foot and ankle examination. You should ask them to present their findings to you, with a list of possible differentials. An ideal list of differentials would look something like: “My primary differential diagnosis would be a monoarticular arthropathy, specifically, gout, due to the sudden onset pain in the MTP; a commonly affected joint. There are also numerous risk factors indicating gout. These include the patient’s Afro-caribbean ethnicity, alcohol consumption, high purine diet, recent commencement of diuretic medication and his male gender. I would also consider pseudogout or a reactive arthritis. I would want to exclude a septic arthritis, given the sudden onset, swelling and erythematous appearance of the joint, and consider a fracture, especially given a possible mechanism of injury at the gym.

Topics for discussion may include: - What investigations can you use to differentiate between your differentials? – Is an x-ray a useful investigation in this setting and if so, what would you expect to find? - What are the risk factors for gout? – What type of crystals may you find in a gouty joint? – What do you understand by the term: ‘gouty tophi?’