

## Student Instructions

Matt O'Trexate is a 16-year-old boy who has presented to the acute medical unit with painful bruises. He has also had abdominal pain.

Please take a history from Matt and perform the relevant examination. You will then be asked to discuss the case with the examiner.

## Patient Instructions

You are Matt O'Trexate, a 16 year old lad. You enjoy Stephen King novels and the greatest team in the world, Leicester Tigers.

HPC:

Two months ago you noticed that you started getting large purple marks on your shins and arms: like bruises except they felt more painful. They were slightly raised and faded after a few weeks, but then more would come up. Your mum thought they were just bruises because you play rugby a lot and are always injuring yourself, but they felt different from bruises you have had before and you couldn't think how you would have gotten them. They're really quite painful and they're getting in the way of you playing sports now because they hurt if you knock them.

You have also noticed that both knees have felt sore. They are not red or swollen but sometimes they hurt if you are running for a while. Your Mum gave you some ibuprofen which helped. You would rate the pain 5/10.

You have had some episodes of pain in your tummy for about the past six weeks. It is mainly right sided and low down, near your hip. It comes on gradually and lasts a few hours. It is not there all the times so it hasn't bothered you too much, although it can be really painful when it is there and you are now getting it more often. It is a cramping pain and sometimes you have to curl up to make it feel better. You don't think it's particularly associated with eating or going to the toilet. Now that you think about it, you think your stools have been runnier and you have been going more than often, maybe 4-5 times a day, rather than 1-2. You haven't noticed any blood but you haven't really checked.

You have also noticed some mouth ulcers when you are brushing your teeth. They're quite sore if you catch them with your toothbrush. Your Mum said it was because you didn't eat enough fruit and veg, but you try and eat healthily for your rugby training so you

don't see how you have gotten so many ulcers.

You haven't felt sick or vomited, but you have felt more tired than normal. You think you might have lost a little weight because your school trousers are a little baggier than they used to be.

PMH:

You are normally fit and well. You have had all your immunisations.

DH:

You do not take any regular medication except for the occasional ibuprofen for your knee pain. You are allergic to penicillin.

FH:

You think you might have an aunt who has bowel problem, but she never really speaks about it.

SH:

You live with your Mum, step-father and little sister, who is 12. Your parents are divorced and you stay with your Dad every other weekend. Your Mum is the manager of a department store and your Dad works in IT. Neither of them have any pets. Your step-father smokes but not inside the house. You have occasionally stolen a few cigarettes from him and sometimes smoke one or two cigarettes at parties.

You are currently doing your GCSEs and are managing okay with revision, although you're finding it harder to concentrate recently because you are feeling quite tired. And also maths. You hate maths.

You try and keep quite healthy because you are on the school rugby team and train three times a week, plus matches on the weekend. You go to a house party most weekends where you will drink eight cans of lager. You know it's bad for you and you shouldn't, but

all your mates do it and it's always good to celebrate when you've won a match.

#### ICE:

You have no idea what is going on, but lots of things seem to be happening to your body in the past month or so and you know something isn't right. You're worried now because the painful bruises and knee pain are getting in the way of your rugby and you have also starting getting the spells of abdominal pain more often. You would like to find out what is happening and make it stop so you can get back to playing rugby.

## Examiner Instructions

Please observe the student take a history from this patient. They should ideally carry out a gastrointestinal examination. Ask them to present their findings and list their differentials, which should include inflammatory bowel disease, specifically Crohn's disease presenting with erythema nodosum.

An example differential diagnosis may sound something like:

“My first differential diagnosis would be an abdominal cause: more specifically inflammatory bowel disease. This is because of a history of increased frequency of bowel movements, associated with painful bruising, weight loss, mouth ulcers and joint pain. This painful bruising is likely to be erythema nodosum, a well-established extra-intestinal manifestation of inflammatory bowel disease. The pattern of symptoms favours Crohn's disease, however further investigation would be required.

An alternative diagnosis would be an alternative gastrointestinal cause, such as coeliac disease. This would be consistent in a young person with weight loss and who is opening their bowels more frequently – however the systemic features make inflammatory bowel disease more likely.”

Possible questions for discussion may include:

- This patient has Crohn's disease. What further investigations could confirm a diagnosis of Crohn's disease?
- How would you manage this patient if they presented acutely unwell?
- Do you know any scoring systems for measuring the severity of an IBD flare?
- This patient had some extra-intestinal manifestations of IBD. Can you list some more?
- What are the differences between Crohn's disease and ulcerative colitis?