

## Student Instructions

You are an FY1 working in a paediatric admissions unit. You have been asked to see Sarah and her 4 year old son Mike who have been referred to the clinic by their GP as Mike has been generally unwell, has a temperature and is complaining of tummy pain.

Please take a history from Sarah and Mike and perform an appropriate examination. You will then be asked to provide a summary of the case, present a differential diagnosis and discuss aspects of the case with the examiner.

## Patient Instructions

Your name is Sarah and your son Mike is 4 years old. You took him to your GP today as he has been generally unwell and unsettled for a couple of days and today he had a bit of a temperature and has been complaining of pain in his tummy and “stingy wee”.

### HPC:

You first noticed about two days ago that Mike wasn't quite himself. He appeared unsettled and uncomfortable and wasn't as interested in playing with his toys as much. He seemed to be going to the toilet a lot more than usual, and was getting upset whenever he needed to go to the toilet, pointing to his tummy and saying “hurts” and also complaining that his wee was “stingy”. Today he seemed more unwell and looked very hot and flushed, so you checked his temperature and it was 38.2, which did settle after a while with Calpol.

### PMH:

Mike was born at term and weight 8lb 7oz. The pregnancy was uncomplicated, but Mike got stuck and they needed to use the forceps to help get him out. You were both fine afterwards and were able to go home the next day. He is fully up to date with his vaccinations. He was breastfed, gained weight well and has a healthy diet now, although he is quite fussy and it can be a challenge getting him to try new things. There were no concerns with his development and the health visitors were never worried on his routine checks.

Mike is a fit and well little boy – other than coughs and colds and chickenpox when he was a toddler he has never been ill.

### ICE:

You assumed Mike has a water infection and weren't really concerned until you saw the GP. You thought the GP would just give Mike some antibiotics to take for a few days, so

you were surprised that she referred you to the hospital. You're worried that there might be something more serious going on with Mike as the GP didn't really explain very much, she just told you "you'll have to take him to the hospital" and that they'd be expecting you when you arrived.

SH:

You live at home with your husband, Phil, and Mike is your only child. You've both considered having another baby, but at the moment Phil's job means he works away Monday – Friday most weeks so you feel it would be a bad time. There has never been any involvement from social services and you are well supported by yours and Phil's parents who both live nearby. You work in marketing and have been working part-time since having Mike, but are thinking you might go back to full time when he starts primary school in September.

DH:

Mike does not take any regular medication. You think he might be allergic to cat hair as he gets "very snotty and sneezy" around his Aunt's cat.

FH:

Your father has Type 2 diabetes and there is a history of breast cancer in the women on Phil's side of the family – his mother and another female relative, you think aunt or cousin but you can't remember which.

## Examiner Instructions

Please observe the student taking a history from both Sarah and Mike. The student should elicit Sarah's ideas, concerns and expectations and offer appropriate reassurance/information. The student should interact with the child and attempt to build a rapport with him and keep him calm as much as possible. They should perform a general paediatrics examination, looking for any signs of infection, and specifically should examine the abdomen.

Please ask the student to summarise the case, present their examination finding and suggest differential diagnoses.

An example of a good differential diagnosis would be similar to:

“My primary differential diagnosis is a urinary tract infection, due to the description of increased urinary frequency and dysuria which are common symptoms of a UTI in verbal, older children. The abdominal pain and fever are less common in a child of Mike's age, but are still consistent with a diagnosis of a urinary tract infection.”

Points for discussion:

- Initial investigations and management
- Why was Mike referred to paediatrics and not managed in the community?
- What is meant by “atypical” or “recurrent” UTIs in children?
- Indications for USS/DMSA/MCUG in children with UTIs – students should be familiar with NICE guidance
- What are the potential problems/complications which can occur in children with UTIs?

What are the associated long term risks?

- Give example of some of the risk factors for UTIs/serious underlying pathology in a child presenting with a UTI.

