

## Student Instructions

You are an FY1 doctor on placement in Accident and Emergency. Your next patient is 5-year-old Hallie Peridol attending today with her father George. George reports that Hallie has been reluctant to use her left leg since this morning.

Please take a history from Hallie and George, performing a relevant examination, ensuring you elicit ideas, concerns and expectations from both, and that you address the patient in an appropriate manner.

## Patient Instructions

Hallie:

You are Hallie Peridol, you are 5 and three quarters years old, and in Year 1 at school. You like playing with toy horses and going to ballet classes with your friends. You're at the doctors because you have a sore leg and you don't want to stand up because it hurts. It hurts you to stand up, and it hurts just in the top part of your leg and your hip joint.

You can't remember having fallen over, or bumped into anything. Today you feel fine apart from your leg. You're upset because you are missing school because it is so sore and you're worried about missing your ballet class in a few days. You're a bit nervous about being at the doctors as last time you were here you got given an injection which wasn't very nice.

George:

You are George Peridol, here today with your 5-year-old daughter Hallie. A few days ago you noticed Hallie walking a bit funny, with a bit of a limp when she came home from school. You asked her but she can't remember falling over or bumping it, and you checked with the teachers the next morning who don't report anything having happened at school.

Today when you got Hallie up for school, you noticed her hopping down the stairs on her right leg for breakfast. When you asked her to walk properly, she said that she couldn't because it hurt to put her left foot down. When she tried to show you, she started crying saying it was too painful and immediately sat down and refused to get back up. You've had to carry her everywhere since then.

Poor Hallie has been through the works the last few weeks- she missed 3 days of school

last week due to having a dreadful bug that gave her a bit of a fever, a runny nose and a cough. These symptoms have disappeared, but you did notice her feeling a little warm this morning when you picked her up, although you haven't measured her temperature.

Other than her painful left leg, Hallie has returned to her normal bright self. When she's sitting down and not having to use the leg, she's calm, happy and plays normally.

## ICE

You are worried that Hallie has hurt herself at school and broken a bone. Your son Daniel broke his leg last year and wasn't able to walk on that, and he was in a plaster cast for 6 weeks which wasn't any fun for any of the family. Daniel had an X-Ray, and you're thinking Hallie will have the same, and you're expecting that you'll leave today with Hallie in a plaster cast. You know Hallie loves dancing, and are concerned that she'll have to miss her dance show in three weeks, that she's worked really, really hard for.

## Developmental History:

Hallie was born at 40 weeks. She was a breech baby, but was still able to be delivered vaginally. A day after she was born, the doctor came to check Hallie over, and it was found that her right hip was clicky. She had to be in a strange splint thing for about 6 weeks, and after that she didn't have any more problems, and she started walking at 1 year.

She's always been quite on target with all her other milestones. You have no worries about social or physical development. She's always eaten well, and has never been too small or too big. She's a bright girl, always getting 10/10 on her spellings. She's up to date with all her vaccinations.

## PMH:

Developmental Dysplasia of the Hip

DH:

None

No allergies

Nothing taken for pain today

FH:

Brother broke right leg last year

SH:

Hallie lives at home with you, your wife Mary, and her eight-year-old brother Daniel, and your pet cat Sid. You live in a lovely detached house on a nice estate nearby. You work as a lawyer with a local firm, and your wife is a secondary school teacher. Neither of you smoke nor do you let anybody smoke in your home. Both children attend the same local primary school, a five-minute walk from your house. Hallie is a very bright girl and does well at school, and has a lot of friends. There have never been any issues with bullying.

## Examiner Instructions

The student should take a thorough history of Hallie's symptoms, gathering information from both Hallie and George, and eliciting the concerns of both, addressing them in an appropriate fashion. An examination of the hip would be appropriate, but a pGALS examination could also be performed.

### Differential Diagnosis

My differential diagnosis would include causes of hip pain and limp in a child. Hallie's symptoms would fit with a diagnosis of transient synovitis. She is clinically well, with a mild pyrexia, and is recovering from an upper respiratory tract infection. It is important to rule out septic arthritis, due to the destructive nature of this condition, but children tend to be systemically unwell. Other causes of hip pain in a six year old would include Legg-Calve-Perthe's disease, in which there is avascular necrosis of the femoral head, and juvenile arthritis. These conditions would be expected to have a more gradual onset, over weeks rather than days. Hallie also has a history of developmental dysplasia of the hip, which could cause a limp in a child. However this limp would more likely be painless, have been more longstanding, and from the history, it sounds like this condition was treated early.

### Discussion Questions:

What is transient synovitis?

What would be appropriate investigations to carry out in Hallie? What results would you expect?

How is transient synovitis managed? How does this compare to management of septic arthritis?

What would be appropriate advice to give Hallie's father?

Hallie was born with DDH. What is this, and how is it tested for in a newborn?