

Student Instructions

It's a Sunday morning, you are an FY1 working in the Paediatric A&E in your hospital. April is a 3-year old girl who has been brought to A&E by her father who reports that April has started developing a non-blanching rash.

Please take a history from April's father and perform an appropriate examination. Ensure that you undertake a relevant history of presenting complaint and address his concerns.

Patient Instructions

Your name is James, you are 33 and the father of April. You work as a nurse in a local hospital. You have been looking after April alone over the weekend as her mother has been working over the weekend. You had one job, which was to look after April, and it's not going very well.

HPC: You started to worry about April's condition a few days ago as she has not been herself. She has been much more lethargic and less playful than normal, staying close to you instead of playing outside like she normally does. April has also been walking less and less, insisting on being pushed in the pram. On Friday her nursery teacher also mentioned that April had seemed more tired than normal over the past few days. You have also noticed that April has recently developed bruising over her lower legs, however you do not remember her falling over. You checked with her nursery teacher on Friday about the bruising, and she does not recall April hurting herself during play time. Over the weekend, April has also been complaining of pain, particularly in her arms and legs, which you are worried could be connected to the bruising.

You are concerned that April looks paler than usual today and this morning have also noticed that small red spots have appeared on her skin. The spots do not go away when you press on them with a glass. You remembered an advert on the TV about this, so rushed straight to hospital after seeing this.

When questioned, you also remember that April has had 3 nosebleeds which have occurred spontaneously over the past week. She has never had regular nosebleeds before.

April has not been sensitive to light and has not had a fever or neck stiffness.

ICE: You are extremely worried that April might have meningitis as the red spots do not

blanch during the glass test.

PMH: April does not have any other medical problems. However, she was brought to the GP with a cold a few weeks ago. She has never been admitted to hospital or required any surgery. April was delivered by normal vaginal delivery and there were no complications during the pregnancy. Her mother did not take any medication during the pregnancy apart from 400micrograms of folic acid in the first trimester. She has had no developmental issues and has hit all of her developmental milestones. Her vaccines are up to date.

DH: April is not taking any medications. She has no allergies.

FH: There is no significant family history

SH: April lives at home with her mother and father. She also has an older sibling called David who is 5. She attends nursery during the week while her parents are working. Neither James nor April's mother smoke. They have a pet Labrador called Rufus.

Examiner Instructions

The student should demonstrate a clear history of April's condition and enquire about key negatives in order to differentiate Acute Lymphoblastic Leukaemia (ALL) from infections, such as meningitis.

Please ask the student to:

- Summarise their history
- Give a differential diagnosis
- Explain what investigations you would perform in this setting
- What blood results would you expect in ALL (particularly in the WBC breakdown)
- Explain how to manage ALL