



## Learning points

- Assessment of atraumatic limp in children
  - SUFE diagnosis and management

### The Case:

- 11 year old boy presented to ED with his Dad. Normally well, no PMH / medications or allergies.
- 2 days previously had developed a twinge in left hip playing football. Completed the game. The next day was slightly worse and was limping, the following day he was unable to walk so was brought to ED via YAS
- On assessment he had significant pain reported in his left hip
- He was unable to straight leg raise and was in a lot of pain on minimal movements
- There was no overlying erythema or skin changes to the leg
- Back, abdominal and testicular examinations were normal
- He reported tingling in the left leg but sensation was present in all dermatomes

### So what are our next steps?

- Firstly, analgesia! Apart from being a nice thing to do we need to properly assess him and his degree of pain was limiting our ability to get a good history and examination
- He had paracetamol, ibuprofen and then IV morphine and ondansetron

### And what are our differentials?

- Well, there are many, as the table on the next page demonstrates
- But we can skew our differentials based on the age of the child and how well or unwell they are. Also important to differentiate between traumatic and atraumatic presentations.
- Importantly we need to exclude all red flags – this child was non weight bearing as opposed to limping which is itself a red flag.
- Other important red flags include fever, systemic upset, back pain, night pain, abnormal neurology, limp for more than 4 weeks or suspicion of NAI
- Thankfully, this is all summarised nicely on our [EMBEDS limping child page](#)

# ED Case of the week 12



## Hip pain in children

| < 4 years old  | 4 - 10 years  | 10 - 16 years   |
|--|---|---|
| <ul style="list-style-type: none"> <li>- Transient synovitis</li> <li>- Osteomyelitis/septic arthritis</li> <li>- Juvenile idiopathic arthritis</li> <li>- Non-accidental injury</li> <li>- Referred pain from limb</li> <li>- <i>uncommon:</i> <ul style="list-style-type: none"> <li>- Leukemia</li> <li>- Eosinophilic granuloma</li> <li>- Metastases neuroblastoma</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>- Transient synovitis</li> <li>- Perthes disease</li> <li>- Osteomyelitis / septic arthritis</li> <li>- <i>uncommon:</i> <ul style="list-style-type: none"> <li>- Leukemia</li> <li>- Ewing</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>- Slipped femoral epiphysis</li> <li>- Avulsion fractures</li> <li>- Osteomyelitis / septic arthritis</li> <li>- <i>uncommon:</i> <ul style="list-style-type: none"> <li>- Leukemia</li> <li>- Osteoid osteoma</li> <li>- Ewing</li> <li>- Osteosarcoma</li> </ul> </li> </ul> |

### Back to the Case:

- We had cannulated to give him some morphine and so took and sent bloods for inflammatory markers. These were normal.
- He was sent for a pelvic and frog leg lateral xray which is shown:



- X ray confirmed a left sided SUFE
- This case is obvious, but more subtle ones can be missed
- Diagnosis can be made by drawing [Klein's lines](#) on and looking for Trethowan's sign. If the lateral femoral epiphysis is not intersected, you have a SUFE!

He was admitted locally under Orthopaedics before subsequently being transferred to the LGI for operative intervention several days later