



PAEDIATRIC ACUTE CARE GUIDELINE

Limp and Hip Pain

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| Scope (Staff): | All Emergency Department Clinicians |
| Scope (Area): | Emergency Department |

This document should be read in conjunction with this DISCLAIMER
<http://kidshealthwa.com/about/disclaimer/>

Limp and Hip Pain

Background

Limping may be due to pain referred from elsewhere:

- Pain from the hip may refer to the thigh or knee
- Pain from the spine or genitalia may refer to the hip
- Always consider the possibility of non-accidental injury (NAI)
- Limping for less than 3 days without any red flags does not require investigation

History

Ask about:

- Trauma
- Fever
- Preceding infections
- Rate of onset
- Duration of limp / pain
- Rashes
- Drug exposure
- Features of systemic disease with joint involvement
- Morning stiffness

Examination

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| General: <ul style="list-style-type: none"> • Temperature • Inspect for rashes/bruises • Assess for signs of the “unwell child”: <ul style="list-style-type: none"> ◦ Poor perfusion ◦ Tachycardia/tachypnoea |
| Gait: <ul style="list-style-type: none"> • Fully mature gait is attained by the age of 4 years • Running accentuates any pathological features of gait • Recognised gait patterns include: <ul style="list-style-type: none"> ◦ Antalgic gait due to a pain in the lower limb ◦ Trendelenburg gait due to weakened hip abductors or an unstable hip fulcrum e.g. Perthes Disease, Slipped Upper Femoral Epiphysis (SUFE) ◦ Spastic gait as seen in cerebral palsy ◦ Proximal muscle weakness gait seen in neuromuscular conditions |
| Standing: <ul style="list-style-type: none"> • Examine the back and spine for tenderness or deformity (discitis may cause exaggerated lordosis) • Look for pelvic tilt |
| Supine: <ul style="list-style-type: none"> • Examine each joint separately for tenderness, swelling, effusion, erythema, warmth and range of movement • Disorders of the hip usually cause restriction of hip abduction and internal rotation and pain on these movements • Severe restriction of movement suggests septic arthritis • Note the position held by the child at rest • Check the foot for embedded foreign body • Assess for leg length discrepancy • Look for muscle atrophy, tenderness, weakness or abnormal reflexes • Neurological examination |
| If no clear cause for limp is found on examination of the lower limbs or spine, examine the groin and abdomen |

Investigations

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| In a well child with < 3 days history of limp <ul style="list-style-type: none"> • No investigations are required |
| In a sick child, seek advice from an ED Senior Doctor <ul style="list-style-type: none"> • Bloods: FBC, CRP, ESR, blood cultures • X-Ray hip – lateral + AP pelvis • Hip ultrasound may be required • Discuss with Paediatric Orthopaedic Team |

In children with fever or severe hip pain/spasm

- Seek advice from an ED Senior Doctor
- Blood tests: FBC, CRP, ESR, blood cultures
- X-Ray hip – lateral + AP pelvis
- Hip ultrasound may be required
- Lateral frog-leg view X-Ray needed if considering SUFE (25% are bilateral, therefore X-Ray both sides)

Differential diagnoses**Transient Synovitis (Irritable Hip):**

- Most common cause of limping in pre-school children
- Diagnosis of exclusion
- Age range: 3 – 8 years
- Boys : Girls ratio 2:1

Perthes Disease:

- Age range: 4 – 12 years
- Boys : Girls ratio 4:1

Slipped Upper Femoral Epiphysis (SUFE):

- Age range: 10 – 15 years
- Boys 12 – 15 years
- Girls 10 – 13 years
- Boys : Girls ratio 4:1
- Typically overweight children

Management

- If either a fever or raised ESR is present, the patient is **8 times** more likely to have an infection or an autoimmune process than if both parameters are normal
- If both these parameters are raised, more than **90%** of cases will be due to an infectious or autoimmune cause

Initial management**Well children:**

- Discharge home
- Advise bed rest
- Regular non-steroidal anti inflammatory drugs (e.g. Ibuprofen, Naproxen)
- Review in ED in 2 – 5 days or earlier if the child becomes febrile or the condition worsens

Sick Children:

- Discuss with and admit under the Orthopaedic Team

Septic Arthritis/Osteomyelitis:

- Discuss with and admit under the Orthopaedic Team
- IV antibiotics – consider (do not give without discussing with the Orthopaedic Team)

Perthes:

- Discuss with the Orthopaedic Team
- Usually requires admission

SUFE:

- Discuss with and admit under the Orthopaedic Team
- Will require surgery


Referrals and follow-up

- Children with hip pain for longer than 4 weeks can be referred to the Paediatric Rheumatology Team
- Ask their advice on the appropriate blood tests to do in the meantime

Tags

epiphysis, femoral, fever, fracture, gait, genitalia, hip, hip effusion, hip restriction, irritable, knee, leg pain, limp, limping, nai, pain, rash, sore, sore leg, spine, synovitis, thigh, trauma

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