Systematic Approach to Limping Child

A practical pediatric assessment guide

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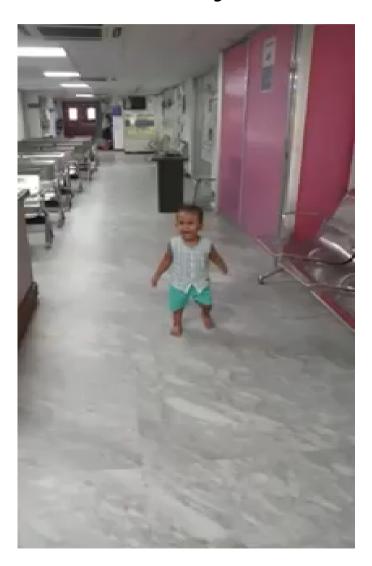
Introduction

 Definition: Deviations from a normal ageappropriate gait pattern due to

Age-Based Differential

- 0-3 yrs: DDH, toddler's fracture, septic arthritis, transient synovitis
- 4-10 yrs: Perthes, transient synovitis, JIA, trauma
- 11–16 yrs: SCFE, apophysitis, overuse injuries, OCD

Case 1: A 2-year-old boy with a left-sided limp for 3 days.



Key History Questions

- Onset: sudden vs gradual
- Trauma: minor or major?
- Pain: site, severity, radiation
- Fever/constitutional symptoms
- Night pain or limping in the morning
- Systemic symptoms: rash, weight loss, joint swelling

Physical Examination

- Observe walking, running, and standing
- Gait: antalgic, Trendelenburg, toe-walking, stiff leg
- Joint exam: swelling, warmth, ROM
- Bone tenderness: tibia, femur
- Spine and SI joints: tenderness
- Neurologic: tone, reflexes, strength

Case2: A 3-year-old child presents with abnormal gait since learning to ambulate.



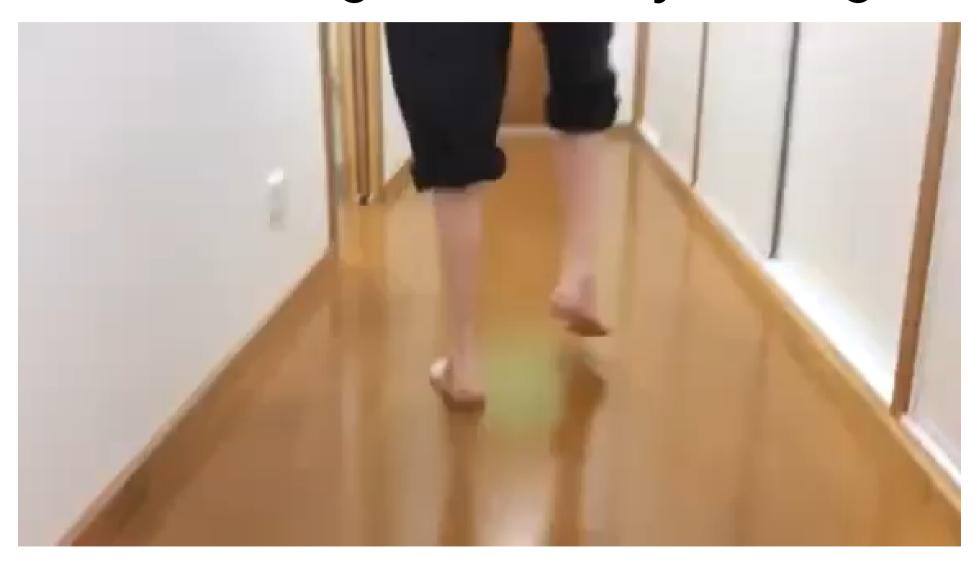
Case 3: An 18-month-old female presented with an abnormal gait first noticed by her family 3 months prior.



Case 4: 5 years female noticed with abnormal gait for 3 years ago



Case 5: A 12-year-old male with abnormal gait since 2 years ago



Investigations

- Bloods: CBC, ESR, CRP, cultures
- X-ray: always start here
- Ultrasound: joint effusion, hip
- MRI/CT: deep infection, tumor, occult fracture
- Joint aspiration if infection suspected

Management Principles

- Treat underlying cause
- Urgent referral if: inability to bear weight, fever + limp, SCFE signs
- Monitor closely for red flag features

Red Flags - 'STOP LIMP'

- S Sepsis: septic arthritis, osteomyelitis
- T Trauma: fractures, soft tissue injury
- O Oncology: leukemia, bone tumors
- P Perthes/SCFE
- L Leukemia: pain + constitutional symptoms
- I Inflammatory: JIA, transient synovitis
- M Mechanical: flat foot, limb discrepancy
- P Pain (chronic): overuse injuries