

ADOLESCENT HIP PAIN

CLINICO PATHOLOGICAL CONFERENCE FROM DEPARTMENT OF ORTHOPAEDICS

Chief complaint:

- 12-year-old boy with limping on left side since 5 months, following fall.

History of present illness:

- Previously normal, fell while playing football (5 months ago).
- Walked after incident but had significant left groin pain.
- Took analgesics and pain subsided after 1 month.
- Limp persisted; no radiating/rest/night pain.
- No fever, constitutional symptoms, or mass to hip.
- Able to squat, difficulty sitting cross-legged.

Past history:

- No childhood limp, major surgeries, or chronic illness.
- Normal developmental milestones.

General examination:

- Height: 150 cm, Weight: 50 kg.
- No craniofacial dysmorphism, thyroid swelling, or genital abnormalities.
- Axillary/pubis hair present.
- **Gait:** unassisted, bipedal, Trendelenburg gait.

Local examination:

- **Inspection:**
 - Supine, hip in external rotation (patella & foot outward).
 - ASIS at same level.
 - No scars, sinuses, swelling, veins.
 - Left lower limb shortened by 1 inch.
 - No muscle wasting.
- **Palpation:**
 - No temperature rise, joint line tenderness, or trochanteric irregularities.
 - Femoral pulses felt equally on both sides
 - No palpable lymph nodes.

Range of movements (Right vs Left):

- Flexion: 110° vs 70°
- Extension: 10° vs 0°
- Abduction: 40° vs 20°
- Adduction: 20° vs 20°

- External rotation: 40° vs 30°
- Internal rotation: 30° vs 0–10°
- SLR: 90° vs 70°

Measurements:

- Apparent length: 111 vs 109 cm
- True length: 90 vs 88.5 cm
- Bryant's triangle base: 8 vs 6.5 cm
- **Shortening:** Apparent 2 cm, True 1.5 cm (supra-trochanteric).

Special tests:

- Nelaton's line: GT above line (left).
- Shoemaker's line: Converge below umbilicus.
- Chiene's line: Converge left.
- Telescopy test: Negative.
- Trendelenburg test: Positive.
- Sectoral sign : positive

Other systems examination: no abnormality notes

Provisional diagnosis - ? 1. Slipped capital femoral epiphysis

? 2. Perthes disease

Blood investigations

Hemoglobin	14gm%
CRP	1mg/l
Rapid antigen (Covid)	Negative

TWBC	6.31×10 ⁹ cells/uL
Serum T3	1.50ng/ml
Serum T4	5.20ng/ml

TSH	2.50uIU/ml
Serum calcium	10mg/dl

- One diagnostic test was done.