

History and examination of the hip

Objective: To evaluate the structure and function of the hip joint, identify abnormalities, and diagnose potential pathologies.

Anatomy:

Bones: Femoral head, acetabulum of the pelvis.

Ligaments: Iliofemoral, pubofemoral, ischiofemoral

Intra-articular structures: Labrum

Muscles: Gluteals, iliopsoas, adductors, quadriceps, hamstrings.

History Taking:

Pain: Differentiate mechanical, inflammatory, neurogenic, referred pain

Location - groin, lateral, buttock (point to site)

SOCRATES

Deformity: progressive shortening

Mechanism of Injury: Trauma (direct blow, twisting), overuse, or non-traumatic

Stiffness: Morning stiffness or after periods of inactivity

Functional Impact: Walking distance, ADLs

Limitation in ROM – cutting toenails, wearing socks

Risk factors: Steroid use, Alcohol use, smoking, history of chemotherapy, Diving

Other symptoms: Snapping

History guides provisional Dx and differential Dx

(Groin pain is more specific for intra-articular pathology)

Possible Dx: Osteoarthritis (1° or 2°), osteonecrosis, adult hip dysplasia

Need to exclude: Rheumatoid, Crystalline Arthropathy, Spondyloarthropathies

Lateral sided, buttock – consider tendinitis, bursitis, spine origin

Examination (confirms diagnosis)

Inspection (from afar):

Posture: Check for pelvic tilt, leg length discrepancy (uneven pelvis, flexion of knee, tiptoe)

Gait abnormalities: Observe for antalgic gait, Trendelenburg gait (hip drop).

Trendelenburg's test: single-legged stance, the centre of gravity shifts to the weight-bearing leg. The pelvis is has to pulled up (by the muscle) on the unsupported side. If the pelvis drops on the unsupported side, the body may be shifted towards the loaded side to adjust the centre of gravity.

“Sound side sags”

Lie patient down:

Close inspection (look):

Skin: Scars, skin changes, or signs of previous surgery.

Level of malleolus.

Palpation: Bony Landmarks, also square pelvis (marking of ASIS may save you time)

Range of Motion (ROM):

Extension (ie Thomas test to visualise FFD) and Flexion

Abduction and Adduction (square pelvis)

Internal Rotation and External Rotation

Leg Length Measurement

Stinchfield's test:

resists active hip flexion past 30-45°, positive test likely to be associated with an intraarticular hip pathology

Square Pelvis

Galeazzi test (screen for site of shortening)

Measure true and apparent leg length

If presence of shortening at femur, perform the Bryant's triangle.

Finish with neurovascular examination of the limb

If time permits, examine the spine and neurology.

Summary and Documentation

History: Summarize the key positive complaints – suggests your provisional Dx
Outline relevant negatives to exclude differentials

Examination: Supportive findings of provisional Dx
Also can outline the severity of condition

Plan: Further investigations (confirm Dx, stratify severity)
Common management options:

Conservative	Surgical
Weight loss	Osteotomies (rare)
NSAIDs	Hip arthroplasty
Lifestyle modifications	
Physiotherapy	