

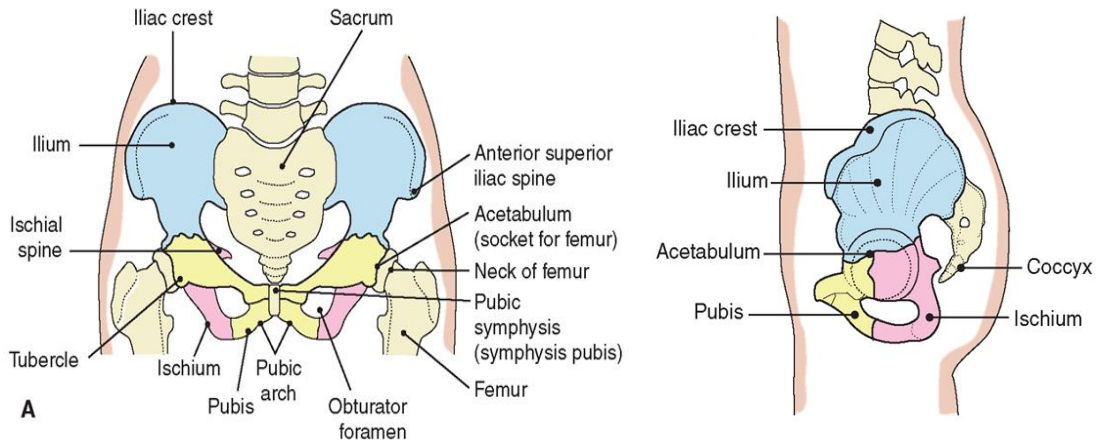


Unit VII – Problem 4 – Radiology: Imaging of Hip Fracture and Dislocation

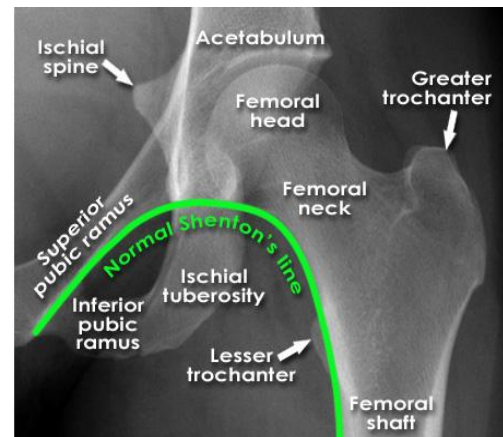
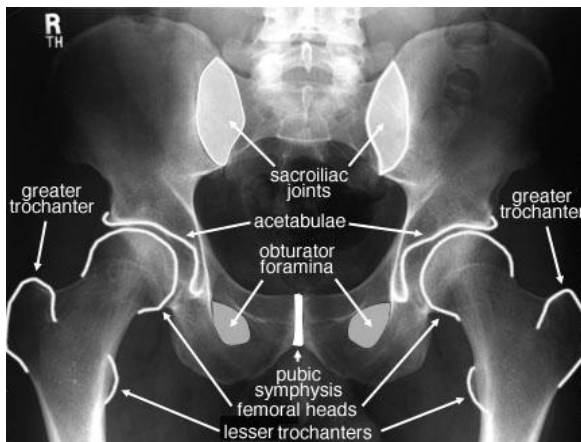
The bony pelvis is formed of 2 parts:

- **Pelvic girdle (which is also known as appendicular skeleton):** it consists of paired hipbones, connected in front at the pubic symphysis and behind by the sacrum; each is made up of three bones:
 - ✓ The blade-shaped ilium, above and to either side, which accounts for the width of the hips.
 - ✓ The ischium, behind and below, on which the weight falls in sitting.
 - ✓ The pubis, in front.

All three unite in early adulthood at a triangular suture in the acetabulum, the cup-shaped socket that forms the hip joint with the head of the femur (thighbone).
- **The sacrum and coccyx (axial skeleton).**



Radiographs below show most important bony landmarks of the pelvis:

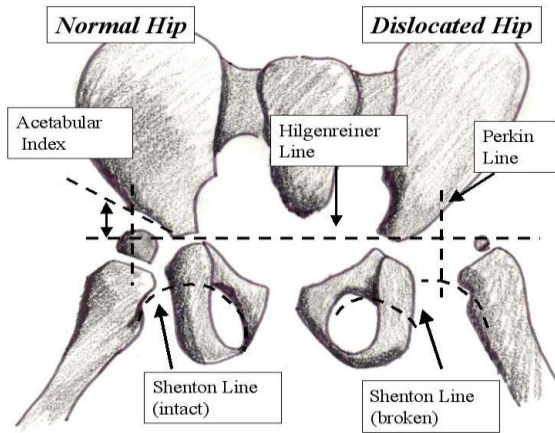




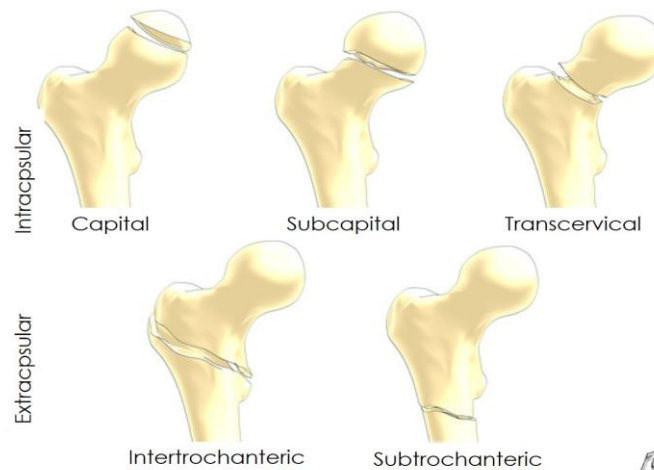
- A radiograph of a 25 years old male who presents to the emergency with a history of fall from height of 5 meters.

• **Comments (on the left side):**

- ✓ There is interruption of the Shenton line.
- ✓ Discontinuity of acetabular roof.
- ✓ femoral head is displaced superiorly.

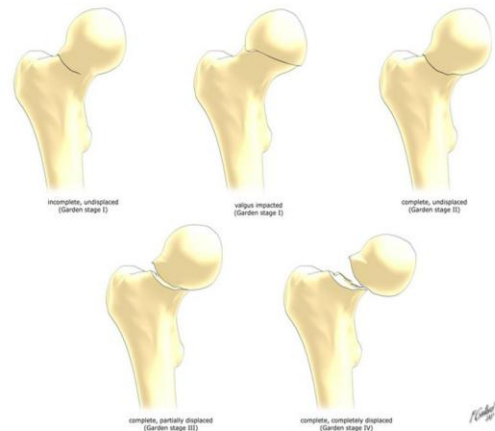


- The image below shows types/classification of femoral fractures:



- Garden classification of proximal femoral fractures:

- **Stage-I:** undisplaced incomplete, including valgus impacted fractures.
- **Stage-II:** undisplaced complete.
- **Stage-III:** complete fracture, incompletely displaced.
- **Stage-IV:** complete fracture, completely displaced.



Stages I and II are considered to be stable fractures and can be treated with internal fixation while stages III and IV are considered unstable fractures and treated with arthroplasty.