

HIP JOINT:

Type: Ball of socket of synovial joint.

Articular surface: Head of femur with Acetabulum of pelvis.

→ Hip joint is unique having high degrees of stability as well as mobility.

- Stability depend upon depth of acetabulum
- strength of surrounding muscle
- length & obliquity of neck of femur.

Ligament: Fibrous capsule

Anterior

Pubofemoral ligament

Ichiofemoral ligament - posterior

Ligament of head of femur

Acetabular labrum

Transverse Acetabular ligament

Fibrous capsule: Attached on hip bone to acetabulum

Labrum: Transverse Acetabular ligament

→ on femur to the intertubercular line of femur

→ capsule made up of 2 fibres

→ one longitudinal

→ some cross

Fibrous capsule: Attached on hip bone

Pubofemoral ligament Y shaped ligament:

divided into 3 → strength ligament of body.

1. Anterior band - oblique. Apex is attached to - AITD

2. Middle band - be → vertical ⇒ Base → Intertubercular line

3. Posterior band - approx

Pubofemoral ligament → support the joint anteriorly.

→ Dis shape

→ Squarer attach. (Two pubic eminence)

→ Inferiorly → into part of capsule

once broad of ilio femoral ligament

Ichiofemoral ligament: cross the joint posteriorly.

→ Fibrous are twisted. extend from

some femoral isium of Acetabulum.

→ some fibrous attach to greater trochanter

Ligament of head of femur

→ Apex attach → Tuber calcanei

→ Base margin of acetabulum notch

Acetabular labrum: Fibro cartilaginous

→ Attach to margin of Acetabulum

Relation:

Ant: Tendon of iliopsoas

Bursa

Femoral vein

Femoral Artery

Femoral Nerve

Post: Piriformis

Sciatic Nerve

Obturator foramen of 2 foramina

Quadratus femoris

Gluteus Max

Gluteus Med

Glute Min

Glute Med

Dr: Obturator externus

Hamstring Ms.

Blood supply: Obturator Artery

Quadratus femoris

Artery: 2 Gluteal Artery

Nerve supply: Femoral Nerve

Ant division of Obturator nerve

Nerve to Quadratus femoris

Sup. Gluteal nerve

Movement: Flexion of Extension - Transverse Axis

Adduction of Abduction - Ant/Post Axis

Medial of Lat. Rotator - Varied Axis

Circumduction



Injury

clinical correlation: 1st half of 1st yr

② Congenital dislocation: The joint capsule is loose at birth

③ Hypoplasia of acetabulum

④ Luxation of tibia valgus

⇒ Position device → abduction of flattening of the head of femur with an increase joint space.

Waves bottom

⇒ Inflamed of enlarged synovial base b/w the acetabulum & of ischial tuberosity.

Movement

- ⇒ Flexion → Psoas Major, Iliac (Major), Saeator, Rectus Rt
- ⇒ Abduction → Glute Med & Min, Peroneus, Sartorius
- ⇒ Adductor → Adductor, Pectus, magnus, Pectus, gracilis
- ⇒ Extension → Glute Max & hamstring
- ⇒ Medial → Ant & post of glute & adductor of femur
- Latiss → Pectus short back, Ant

Structure passing through greater sciatic foramen

⇒ Piriform, superior gluteal & N. Sciatic Ne, posterior nerve of thigh, Nerve to quadratus femur. Pectus N

Lesser sciatic foramen

⇒ Tendon of obturator internus.

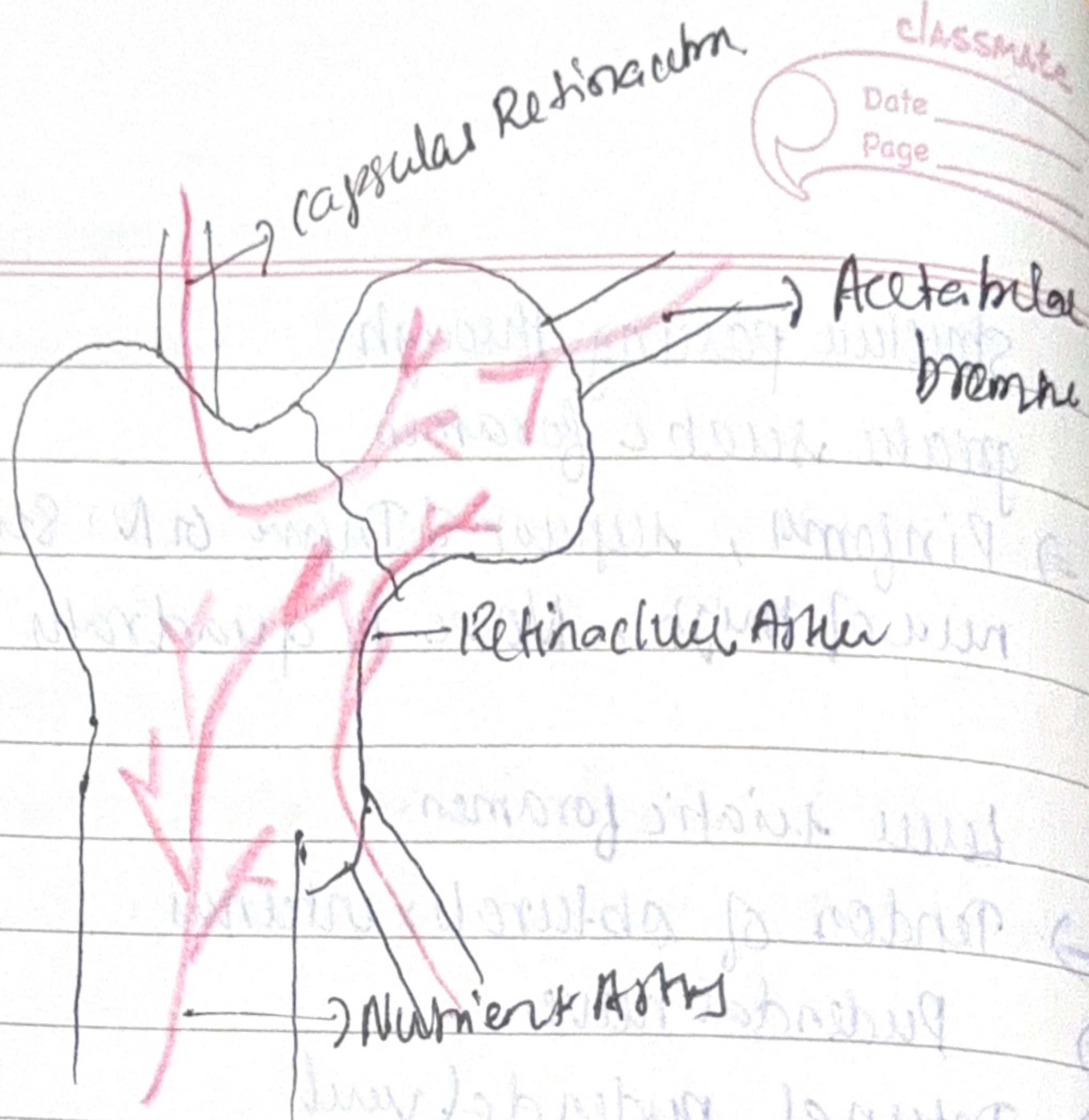
⇒ Pudendal nerve

⇒ Internal pudendal vein

→ Nerve to obturator externus

⑤ Pectus major's sign: Pectus major's sign is a clinical sign of congenital dislocation of hip joint.

Acting from below, both the gluteal Medial & Minimus pull the unsupported middle of the pelvis from sagging during walking and thus maintain the horizontal level of the pelvis provided the hip joint of neck - neck angle of the femur is normal.



It is clinically Imp:

(a) Acetabular branches of obturator A of Medial Circumflex Artery reach the head through Round Ligament of the head

(b) Retinacular vessels: — medial CFA

(c) Nutrient Arty $\rightarrow$ neck of head of femur