SNS COLLEGE OF PHYSIOTHERAPY

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Coimbatore– 641035

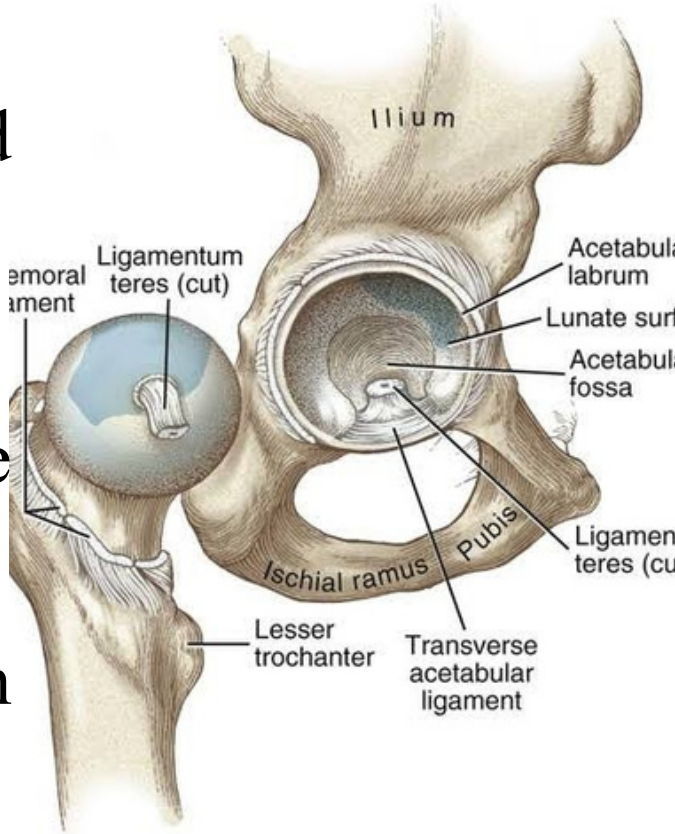
COURSE NAME :ANATOMY II

SUBJECT CODE: 6273

TOPIC:ARTHROLOGY OF HIPJOINT

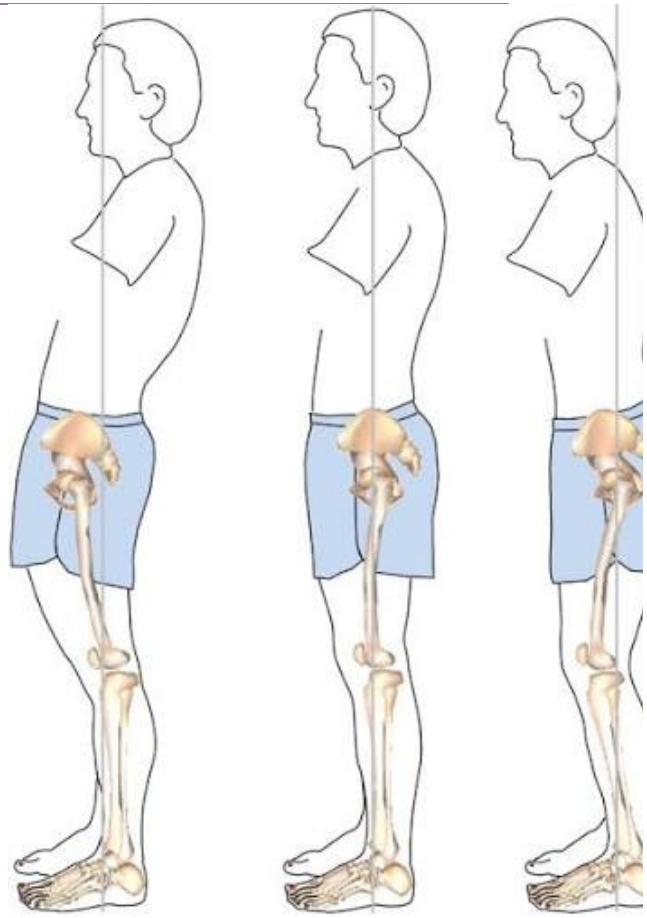
DEFINE

- Difficulty in understanding:
- Relationship between ligamentand movements
- Stability during erect posture
- Weight transmission through the joint
- Need for clear correlation between anatomy, function,
- and clinical relevance



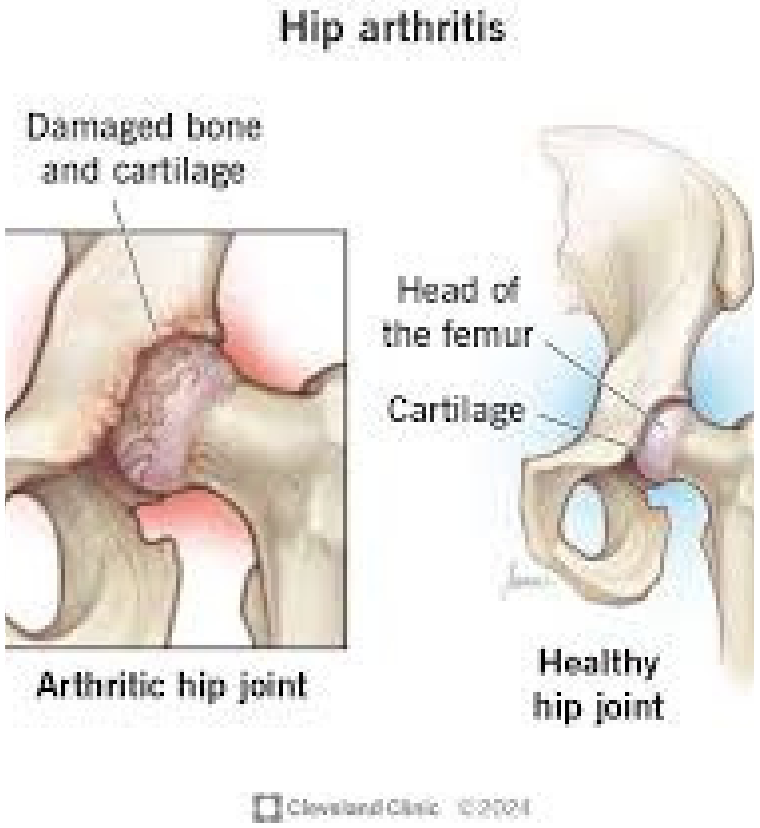
IDEATE

- Use movement-based diagrams for learning Correlate ligaments with restricted movements Apply arthrology knowledge to: Gait analysis Postural assessment Rehabilitation planning



EMPATHIZE

- Hip joint disorderscause pain, limping, and difficulty in daily activities Common conditions include: Osteoarthritis of hip Fracture neck of femur Hip dislocation Students often find it difficult to understand ligament orientation and movement control



TYPE and ARTICULATING SURFACES

- Type:Synovial, multiaxial,ball-and-socket joint
- Articular surfaces:

Head of femur (covers about two-thirds of a sphere)

- Lunate surface of acetabulum

Acetabular labrum deepens the socket and increases stability

Acetabular notch is bridged by transverse acetabular ligament

CAPSULE OF HIPJOINT

•Strongand dense fibrous capsule

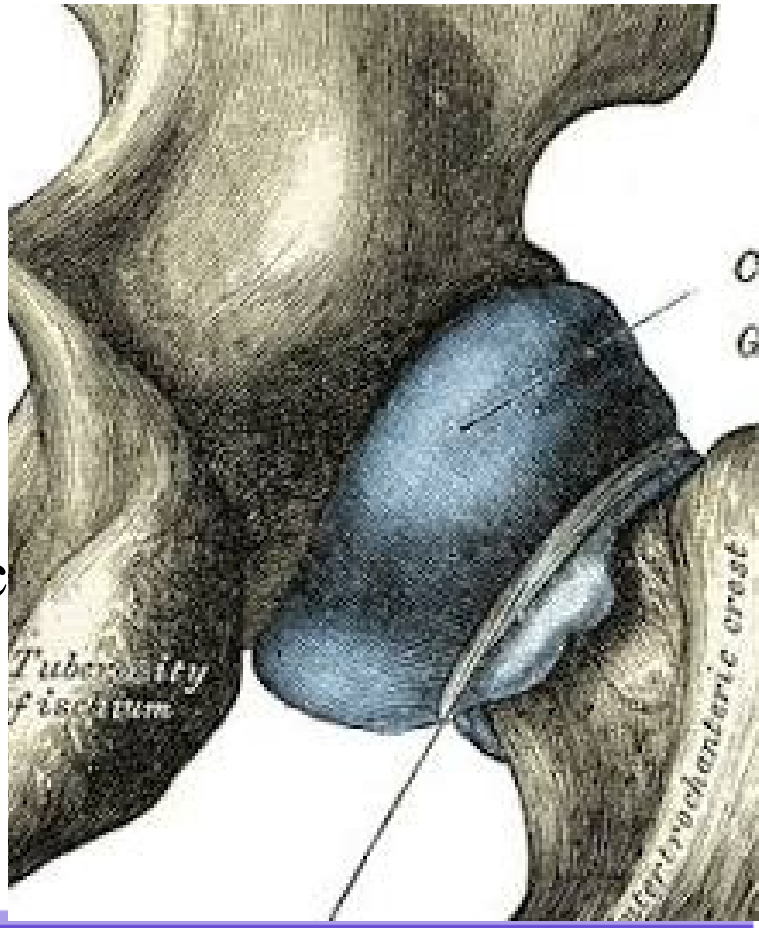
Proximal attachment:

•Margin of acetabulum Acetabular labrum Transverse acetabular ligament

Distal attachment:

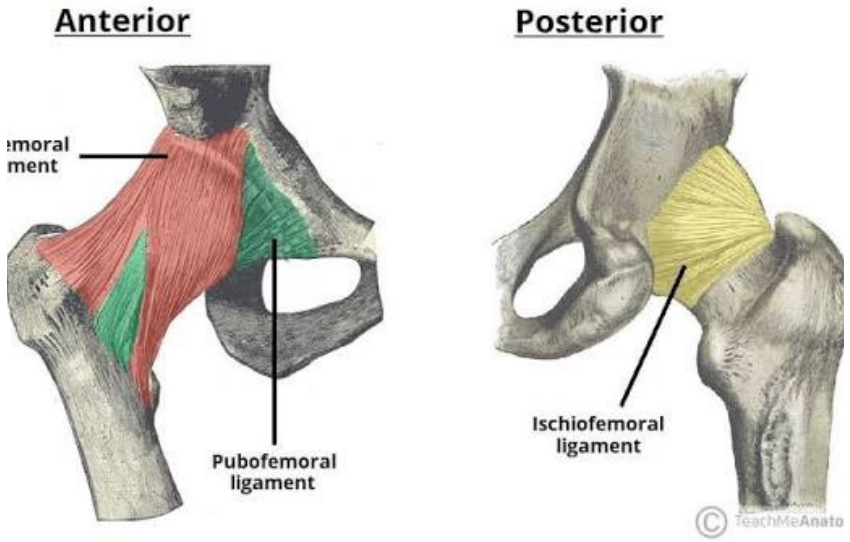
•Anteriorly to intertrochanteric line Posteriorly to neck of femur

•Capsule is thick anteriorly and thin posteriorly

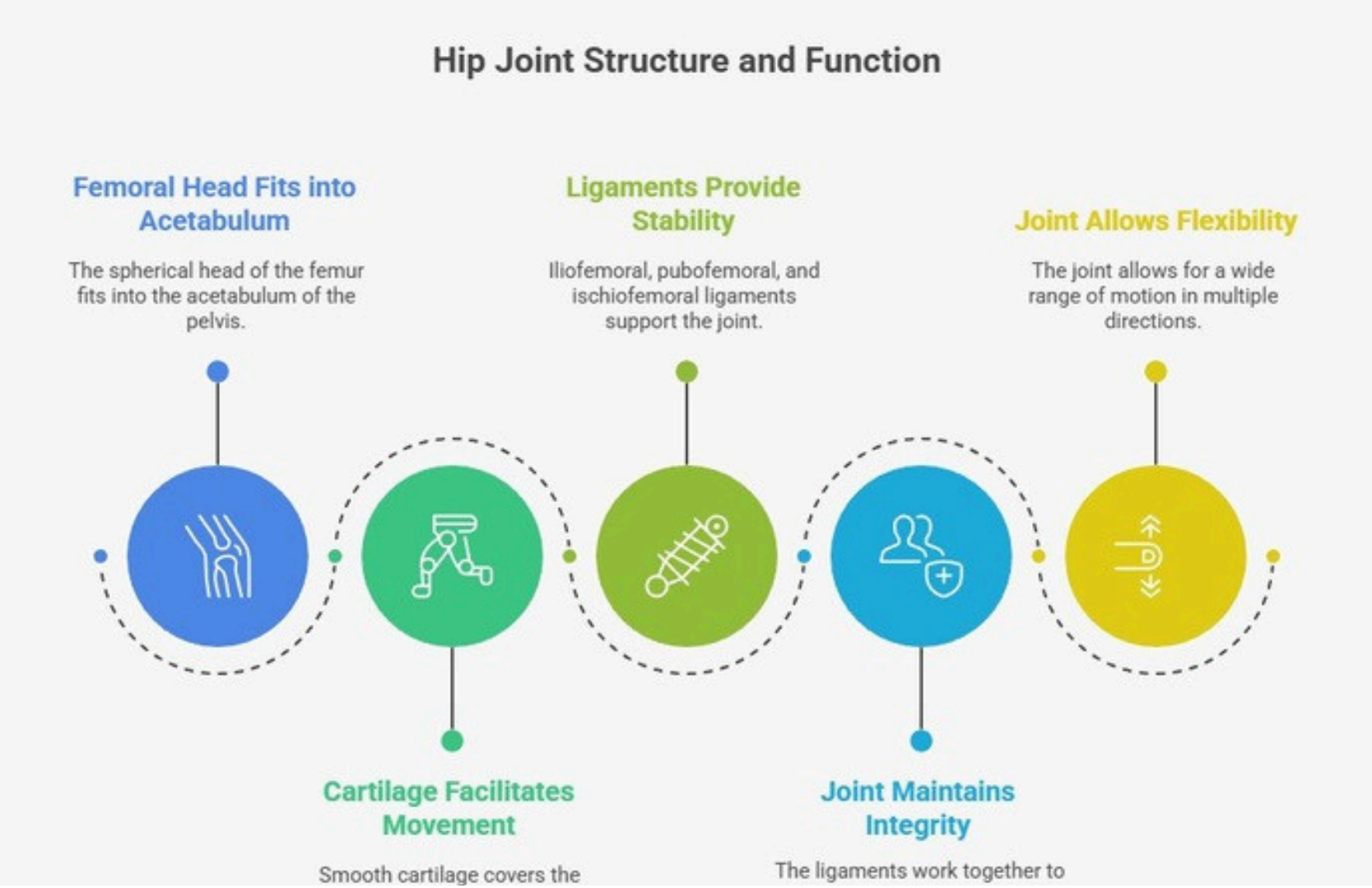


LIGAMENTS

- Iliofemoralligament(Y ligament of Bigelow) – strongest ligament Pubofemoral ligament Ischiofemoral ligament Ligament of head of femur (ligamentum teres) Transverse acetabular ligament
- These ligaments prevent excessive movements and maintain erect posture



FLOW CHART


Hip Joint Structure and Function
Femoral Head Fits into Acetabulum
The spherical head of the femur fits into the acetabulum of the pelvis.
Ligaments Provide Stability
Iliofemoral, pubofemoral, and ischiofemoral ligaments support the joint.
Joint Allows Flexibility
The joint allows for a wide range of motion in multiple directions.
Cartilage Facilitates Movement
Smooth cartilage covers the
Joint Maintains Integrity
The ligaments work together to

In class assessment

1. Define the hipjoint andmention its type.
2. Name the articular surfaces forming the hip joint.
3. Describe the capsule of hip joint with its attachments.
4. Enumerate the ligaments of the hip joint.
5. Write a short note on the iliofemoral ligament.

In class assessment

6.Listthe movements possible at the hip joint.

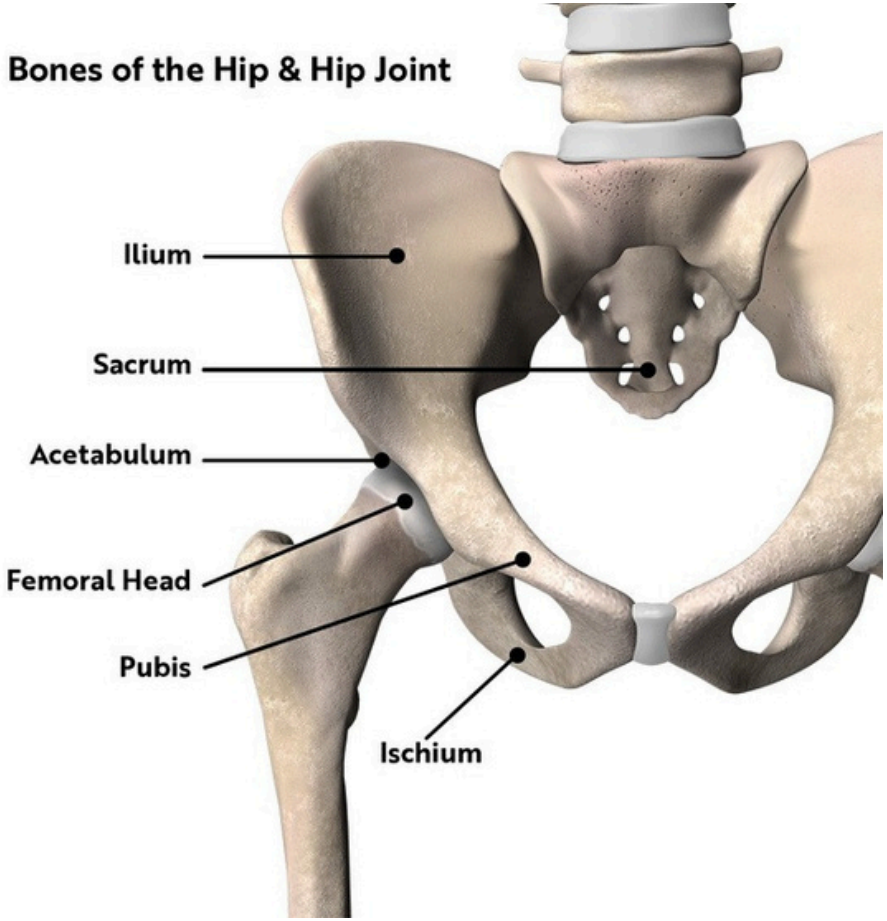
7.Mention the muscles responsible for flexion and extension of the hip joint.

8.Describe the blood supply of the hip joint.

9.Write the factors responsible for stability of the hip joint.

10.Write the applied anatomy of the hip joint (any two).

Thank you


Bones of the Hip & Hip Joint
Ilium
Sacrum
Acetabulum
Femoral Head
Pubis
Ischium