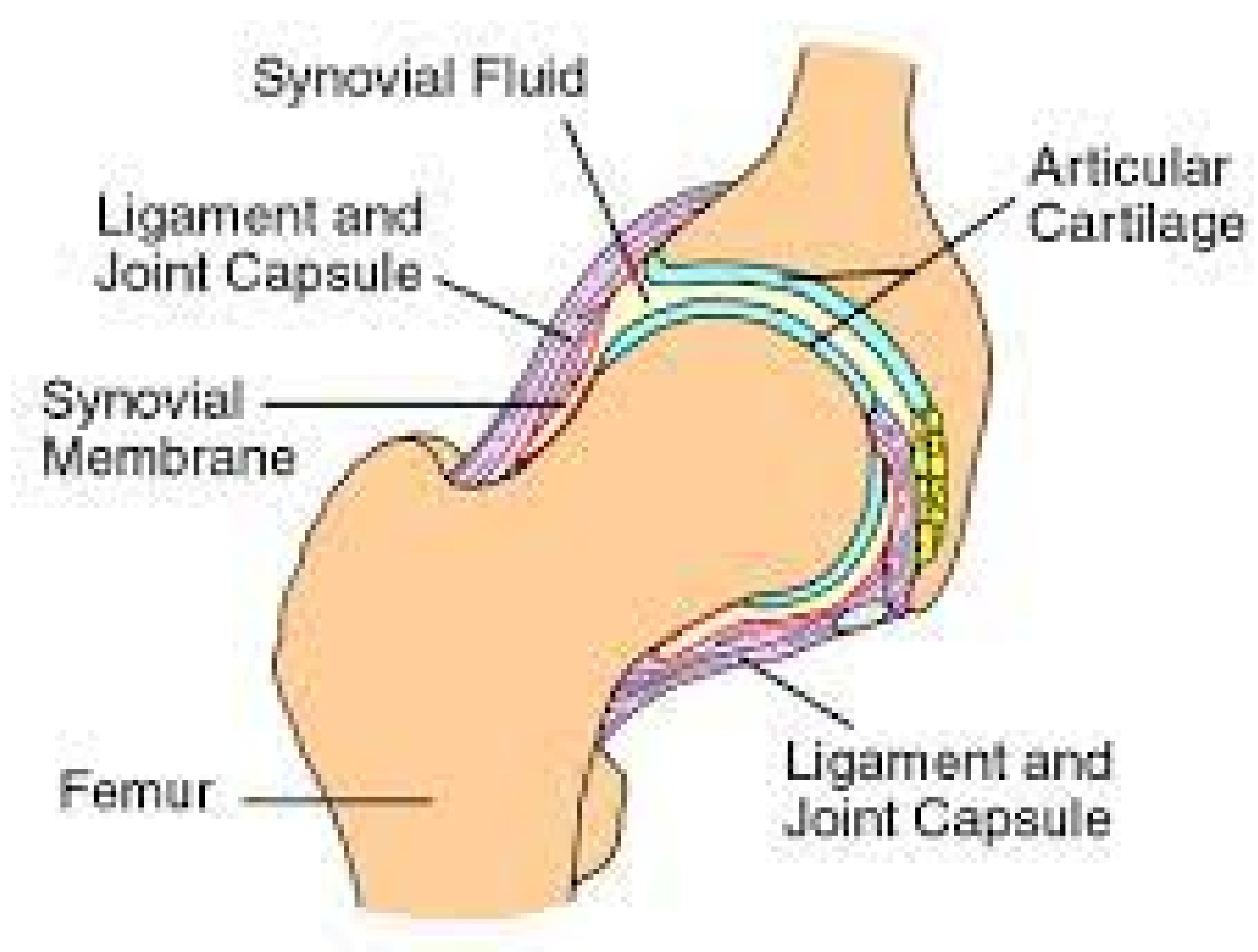


# HIP JOINT

# Hip joint

- It is the largest joint of the human body.
- 2nd largest weight bearing joint of human body.
- Hip joint is a synovial articulation between head of femur and acetabulum.
- TYPES: Multiaxial ball and socket type of synovial joint
- Hip joint is designed for stability over a wide range of movements
- Descriptive planes:
- Flexion /extension : sagittal plane
- Abduction/adduction : frontal plane
- Medial/lateral rotation : transverse plane (circumduction)

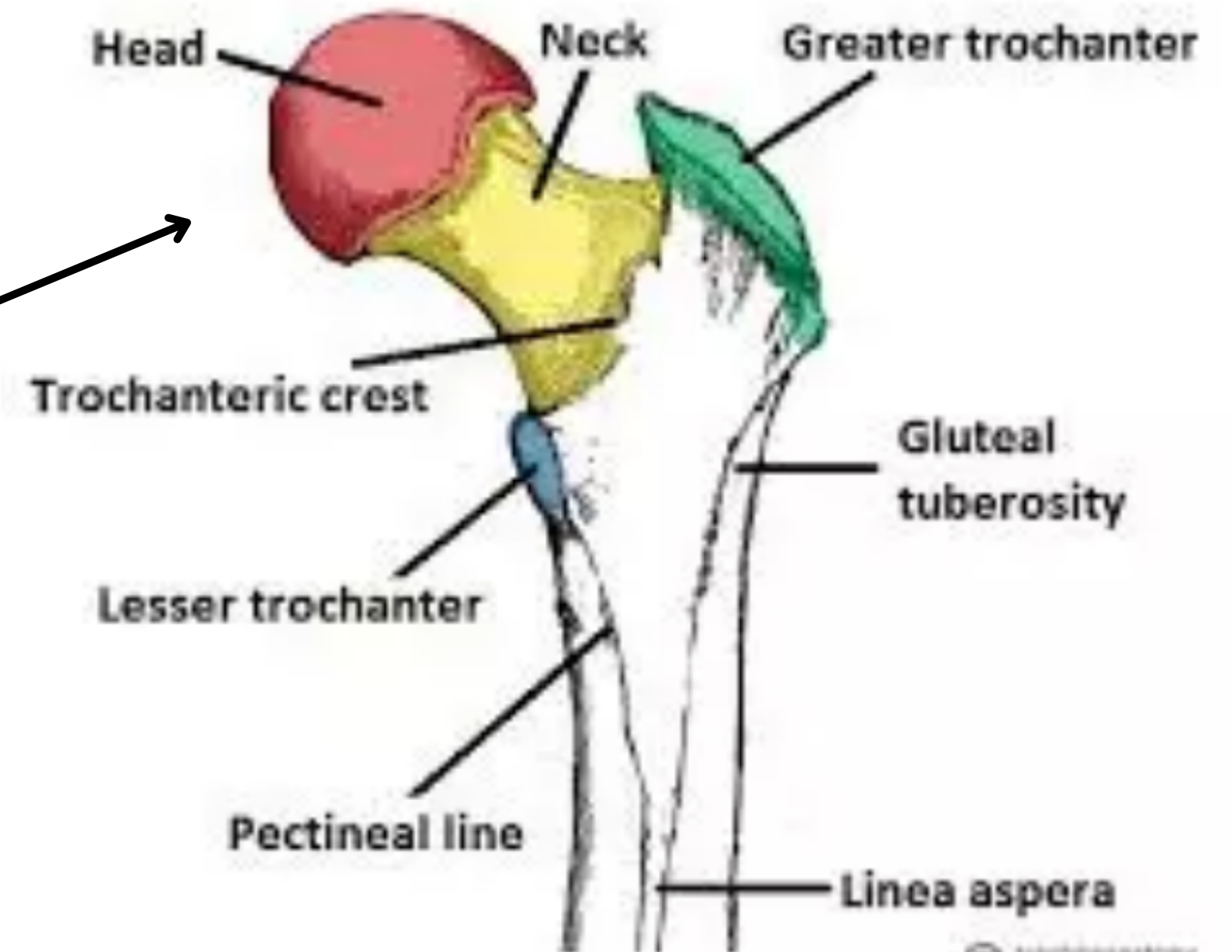
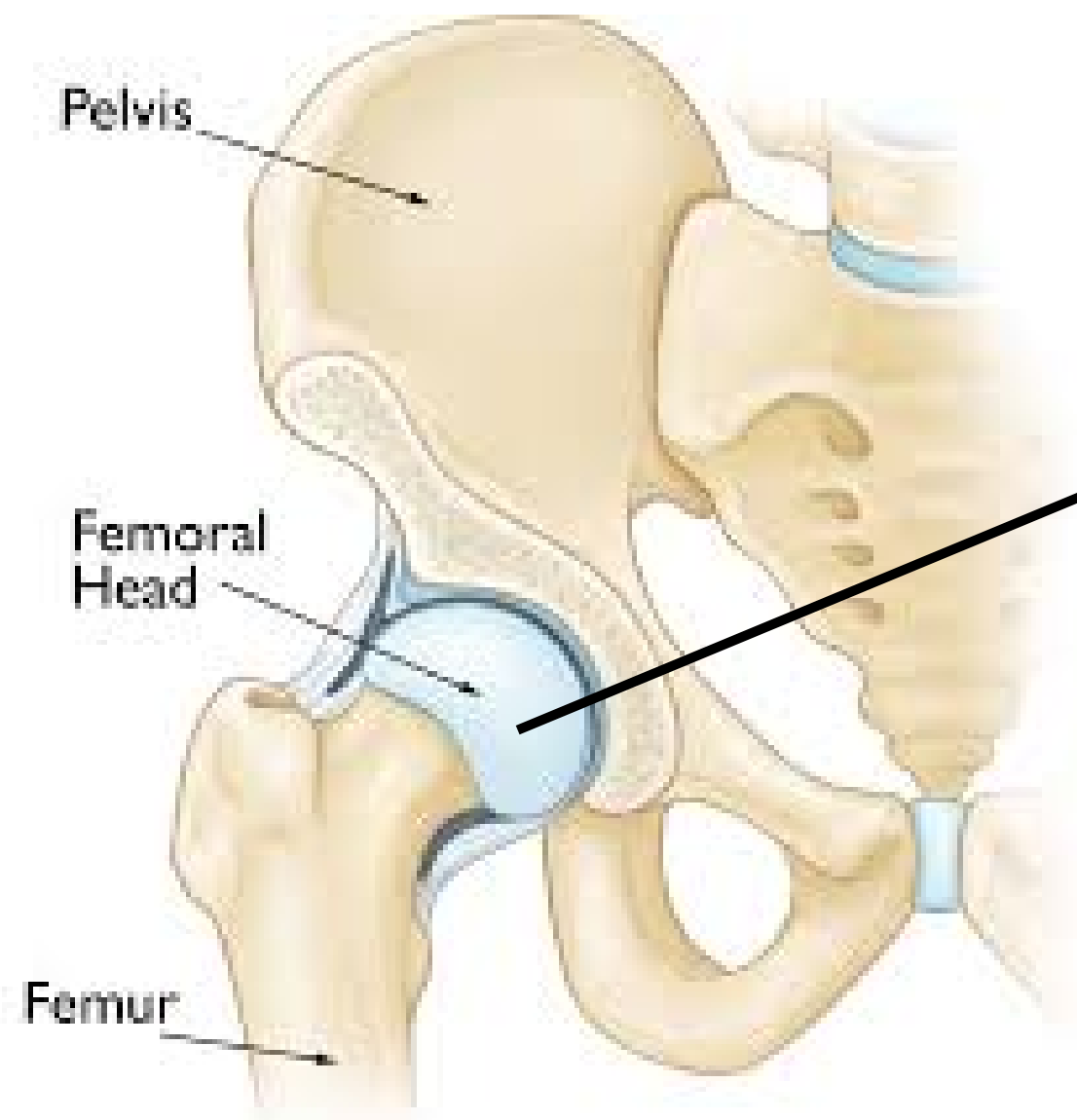
# Hip Joint



# ARTICULAR SURFACES OF HIP

1. lunate surface of the acetabulum

2. Spherical head of femur

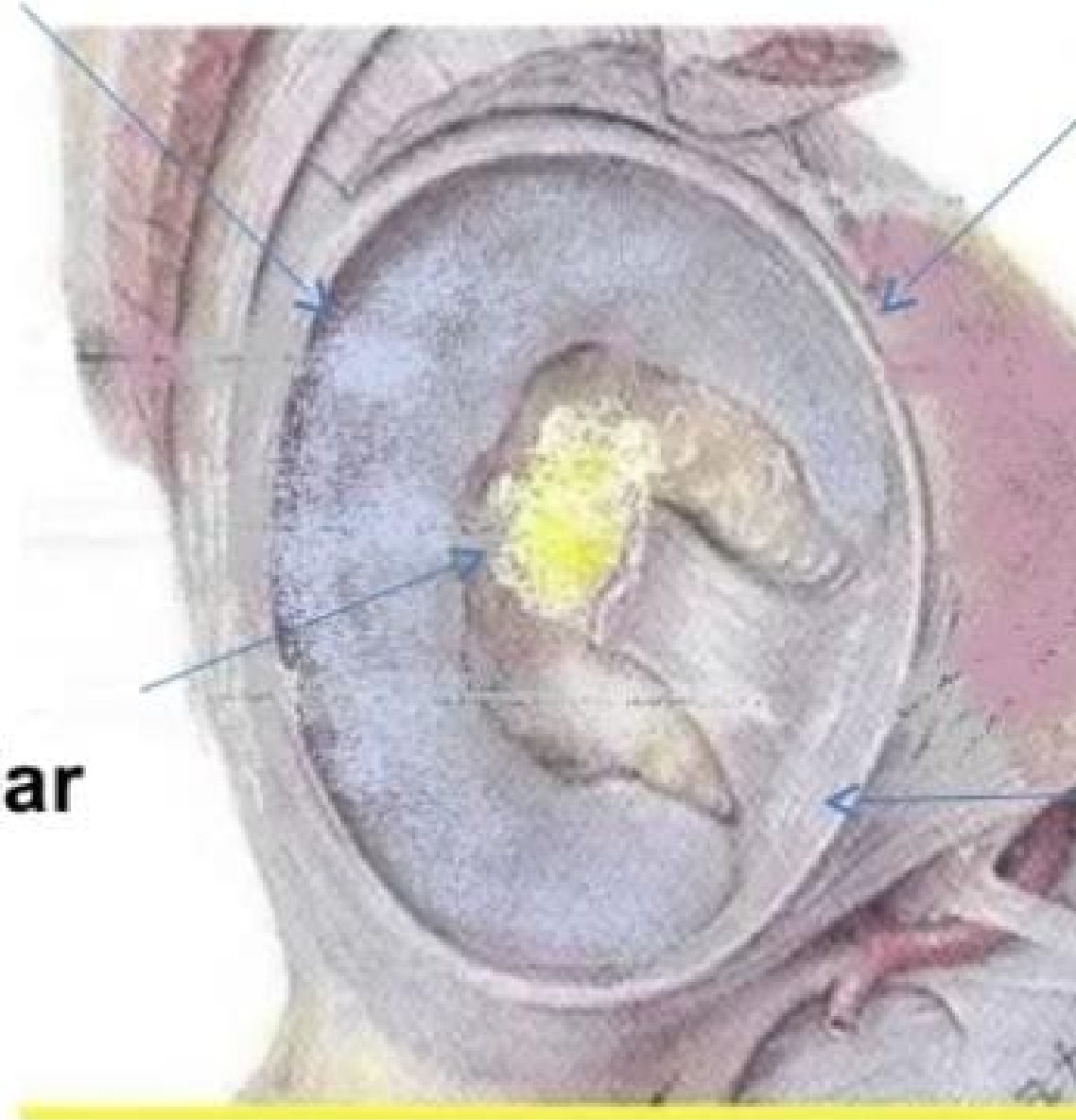


# Acetabulum

Horse-shoe shaped  
articular surface

Deepened by  
fibro-cartilaginous  
rim called  
**acetabular  
labrum**

Nonarticular  
part, **acetabular  
fossa**, lodges  
pad of fat



Deficient  
inferiorly as the  
**acetabular  
notch** that is  
bridged up by  
**transverse  
acetabular  
ligament**

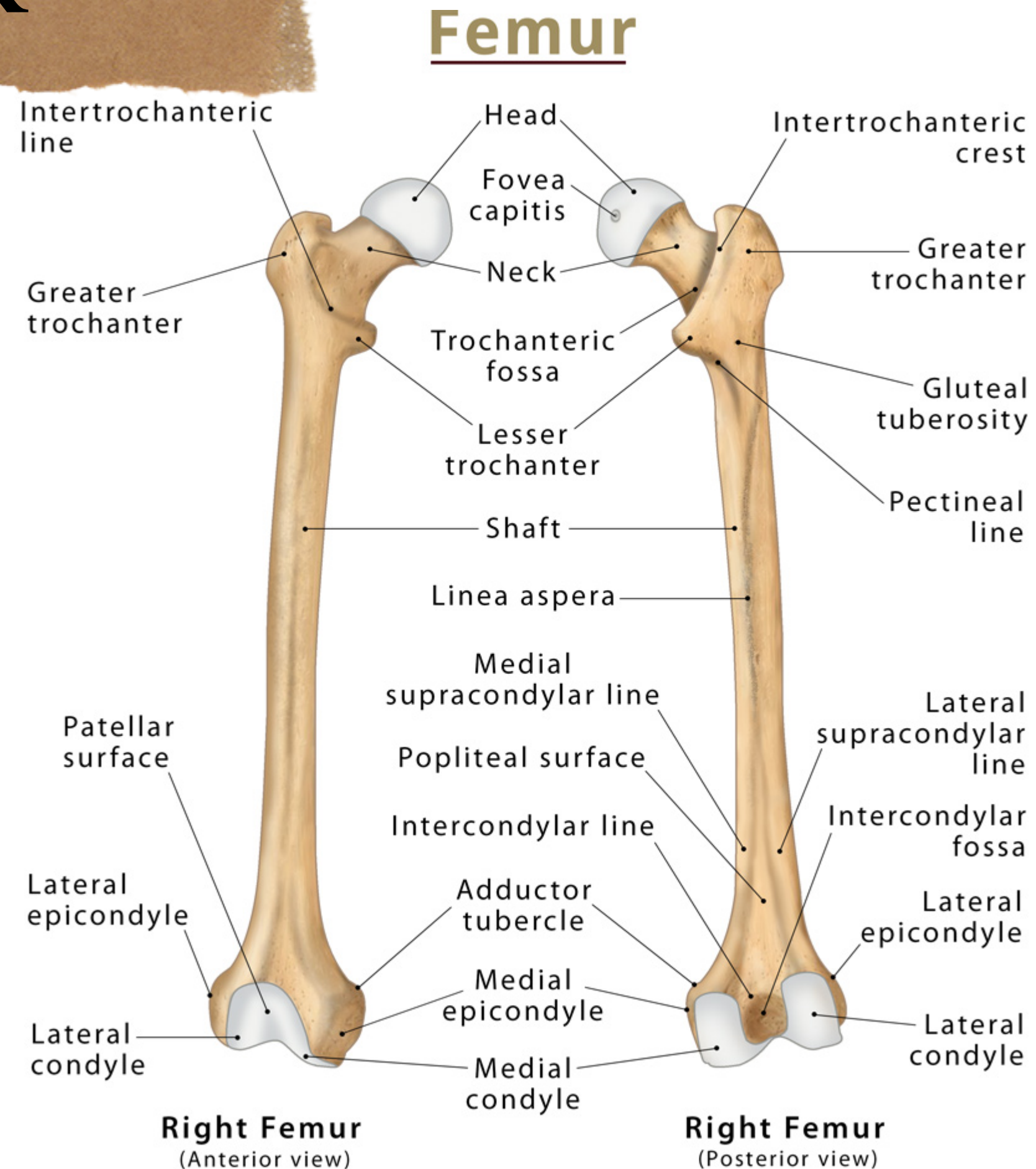
# Acetabulum

- Acetabulum is the depression or fossa where the femoral head articulates. Its positioned in downward and outward direction
- The rim of acetabulum is raised slightly by a fibro cartilaginous collar known as acetabulum labrum. Inferiorly the labrum bridges across the acetabulum notch as the transverse acetabulum ligament and converts the notch into foramen.
- The lunatic surface of the acetabulum is covered by hyaline cartilage except for fovea
- Acetabulum fossa is non articular. Formed mainly by ischium and contains loose connective tissue.



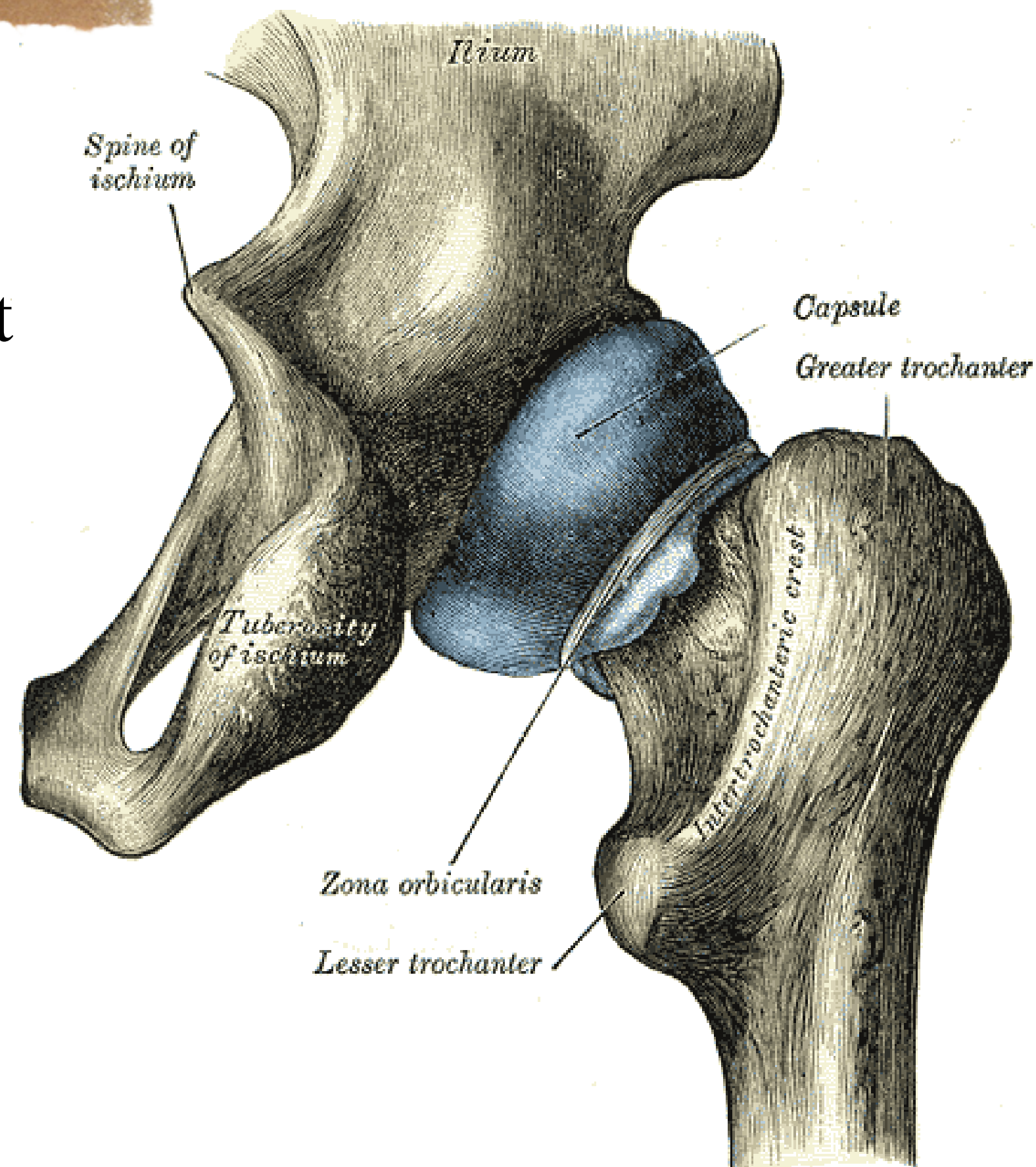
# FEMUR

- Head of femur is globular and forms 2/3 of as sphere.
- Covered by hyaline cartilage(except fovea)
- The femur connect to the head via femoral neck
- The angle of inclination is approximately is 135deg
- The angle of anteversion or torsion is forward relationship of head and neck
- the angle of torsion is normally in the 12-15 deg



# CAPSULE

- Strong, thick
- **MEDIA**LLY : attached to margin of acetabulum, transverse acetabulum ligament and adjacent margin of obturator foramen
- **LATER**ALLY : attached to intertrochantric line of femur. Just proximal to intertrochantric crest on posterior surface
- Femoral neck: intracapsular
- Greater and lesser trochanter: extracapsular





# SYNOVIAL MEMBRANE

- Extensive synovial membrane within the capsule
- Lines the intracapsular portion of neck of femur and both surface of acetabulum labrum, transverse ligament and fat in acetabulum fossa.
- Forms a tubular covering around the ligament of head of femur and lines the fibrous membrane of joint

