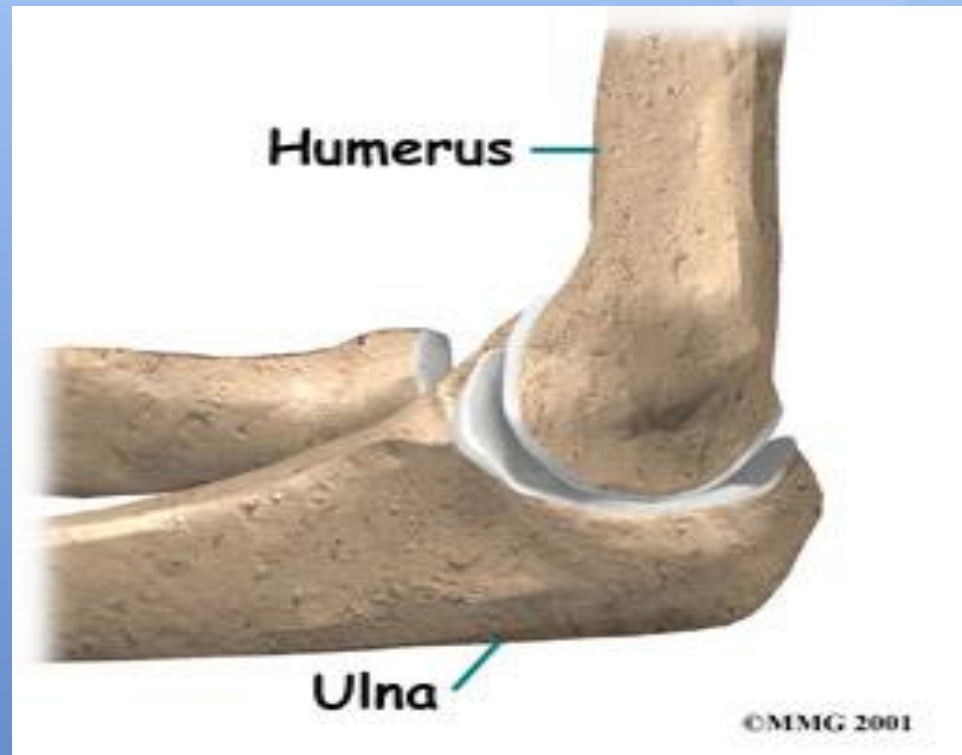


JOINTS

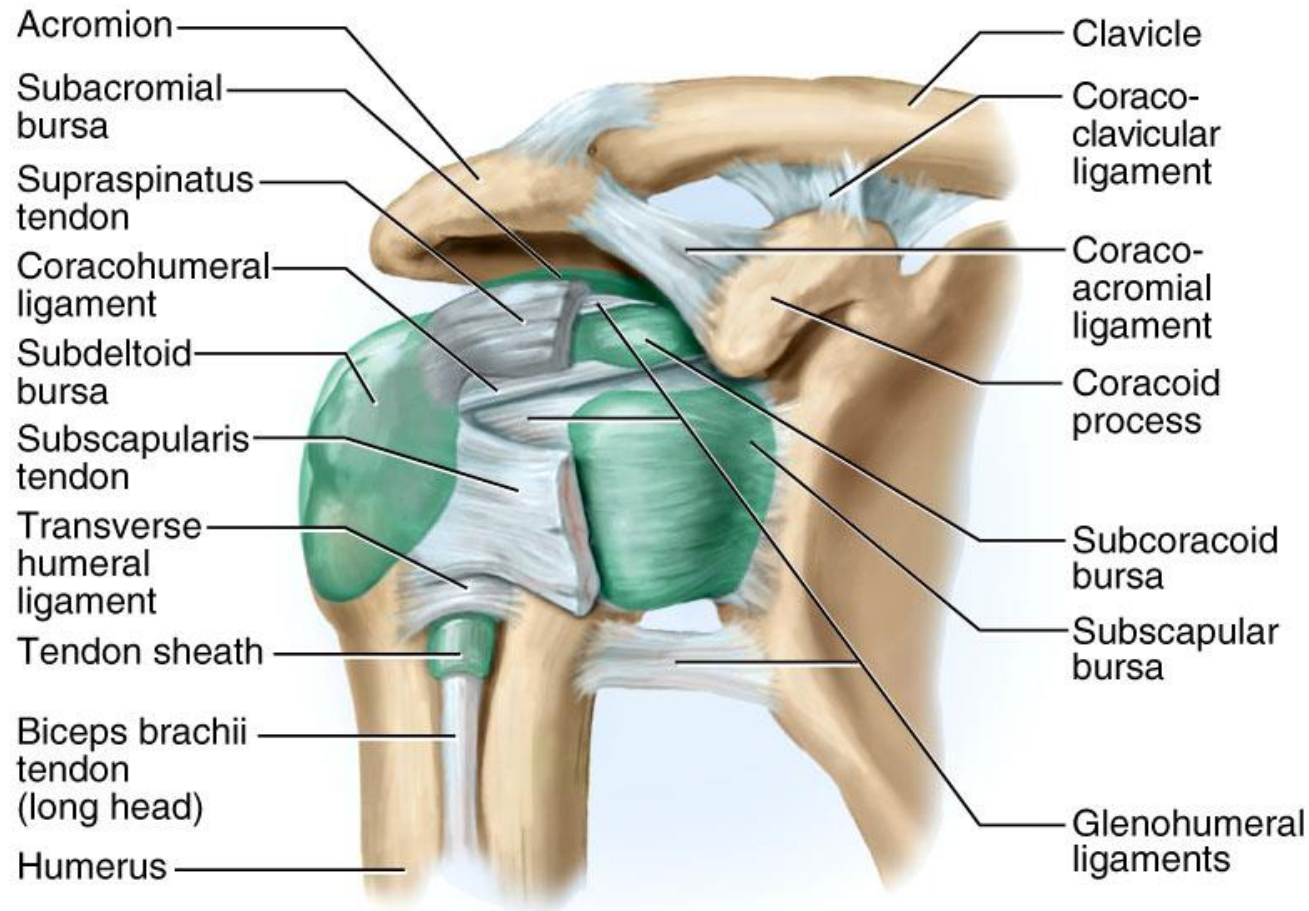
FirstRanker.com

OA site where two or more bones come together, whether or not movement occurs between them, is called a joint.



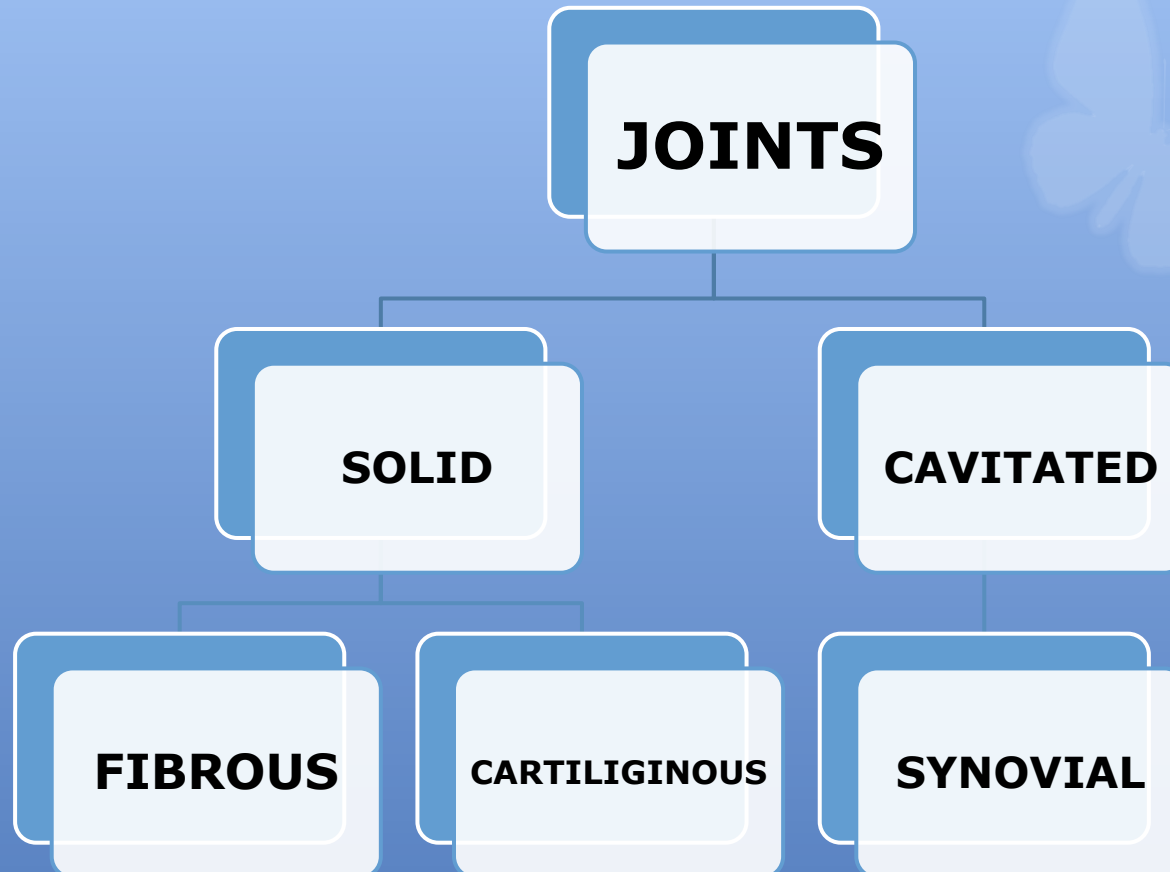
ARTHROLOGY

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(b) Anterior view www.FirstRanker.com

CLASSIFICATION



FIBROUS JOINTS

Articulating surfaces of bones are joined by connective tissue. Very little movement is possible

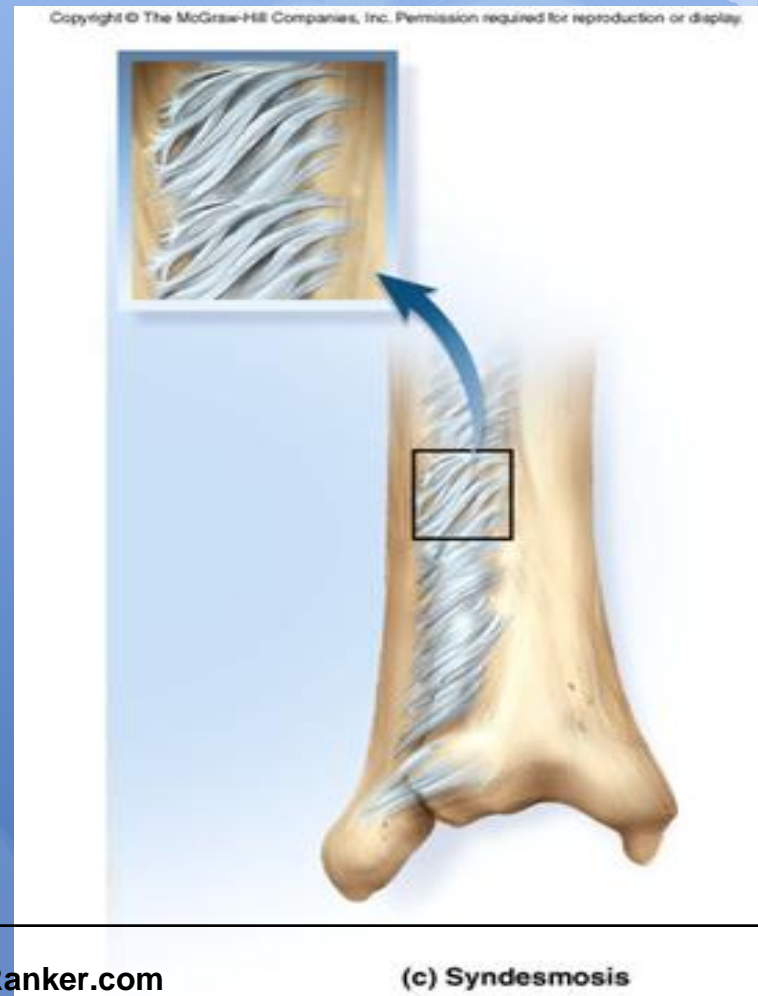
- Syndesmoses

- Sutures

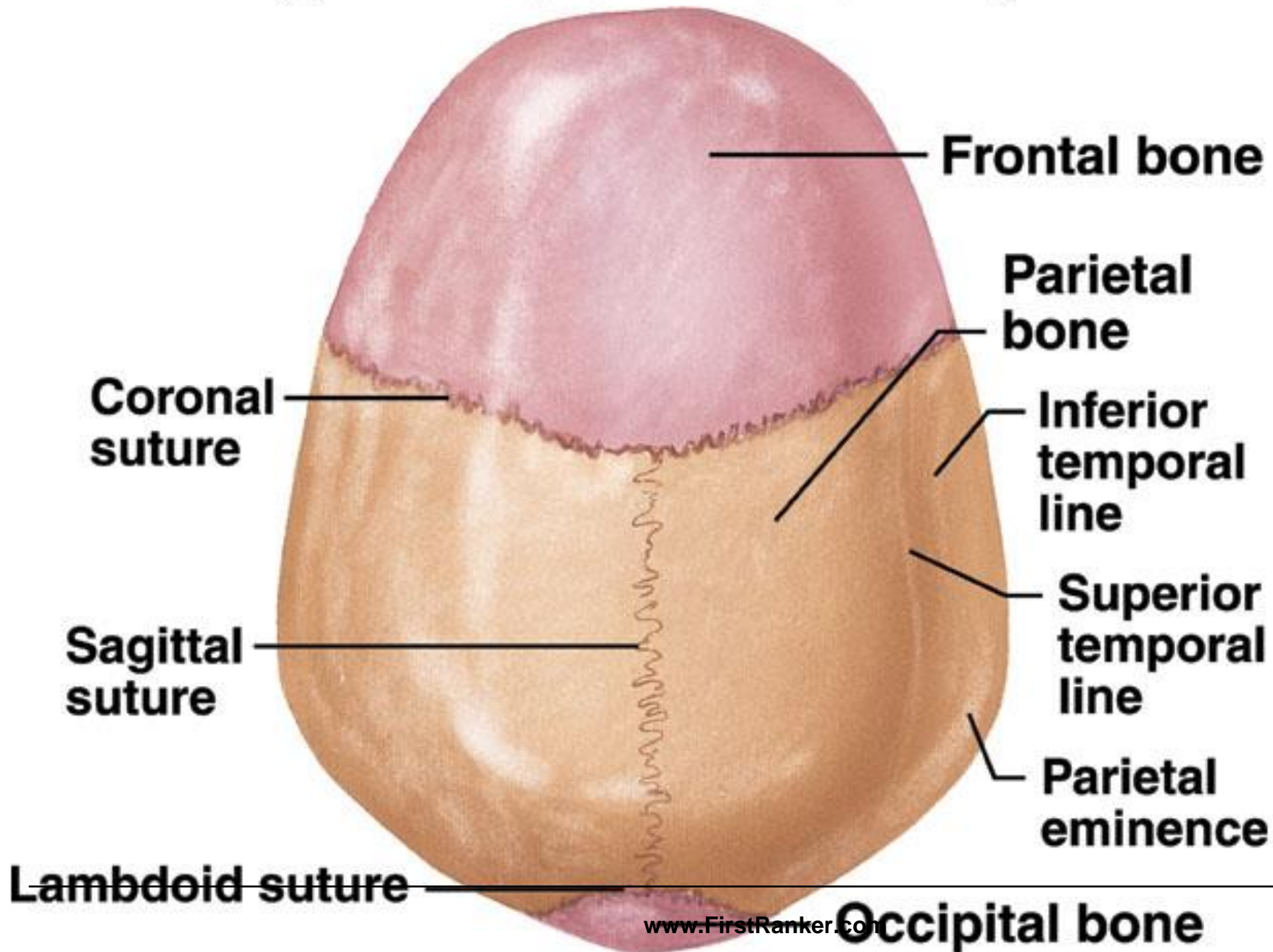
- Gomphoses

SYNDESMOSIS

- Two bones bound by ligament only
- Most movable of fibrous joint
- Interosseus membranes unite radius to ulna and tibia to fibula

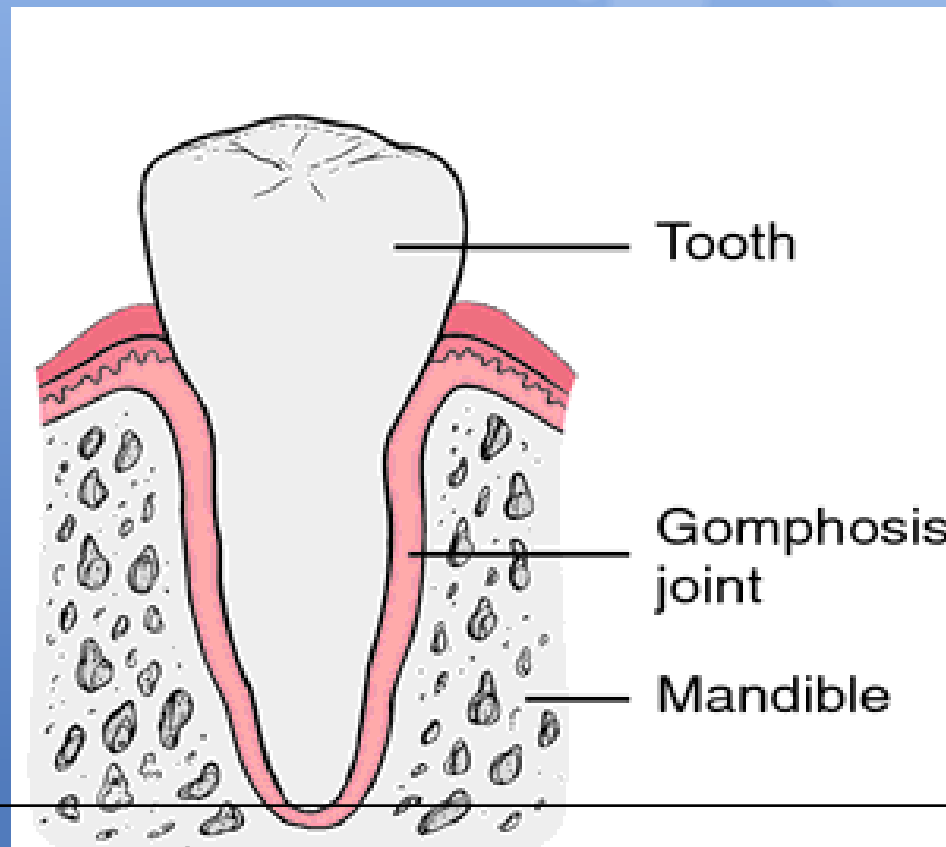


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GOMPHOSIS

- a type of fibrous joint in which a conical process is inserted into a socket-like portion.



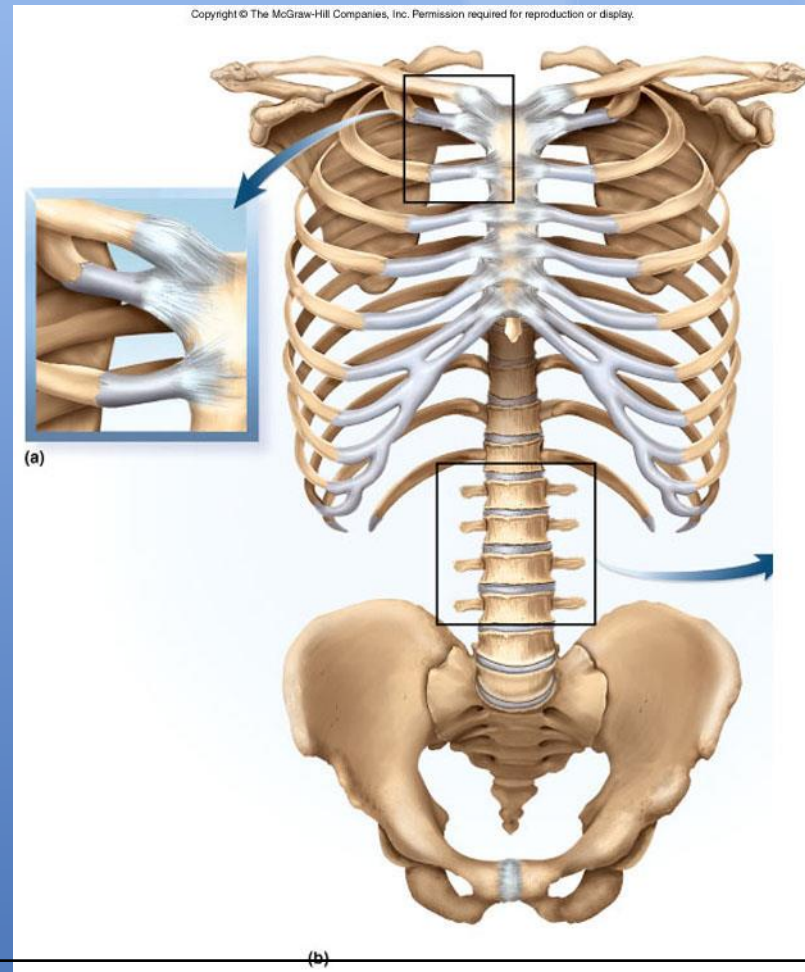
CARTILIGAGINOUS JOINTS

These are of two types

- Primary
- Secondary

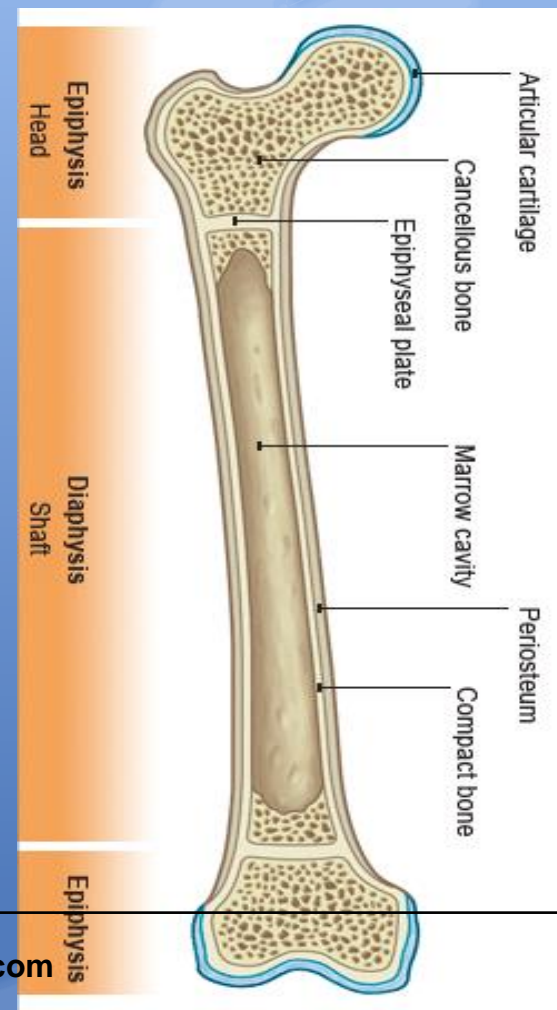
PRIMARY CARTILAGINOUS JOINT

- Bones are joined by hyaline cartilage
- No movement is possible



PRIMARY CARTILAGINOUS JOINT

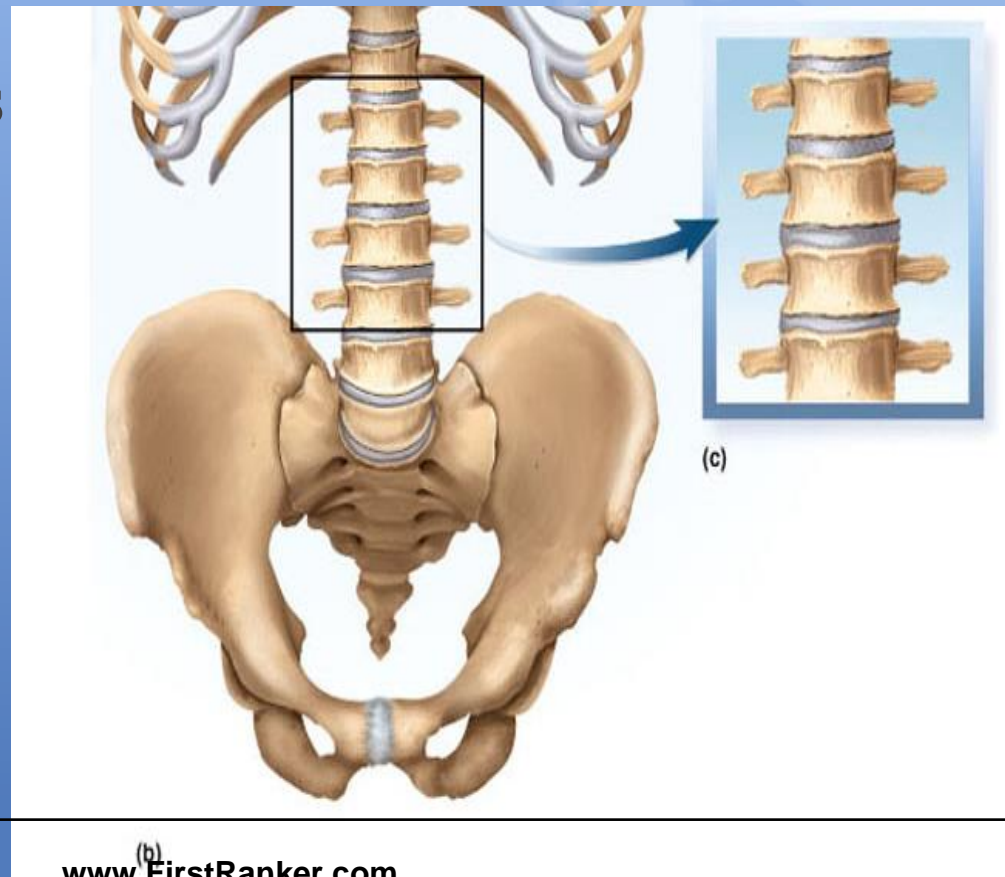
- First rib attachment to sternum
- Union between epiphysis and diaphysis



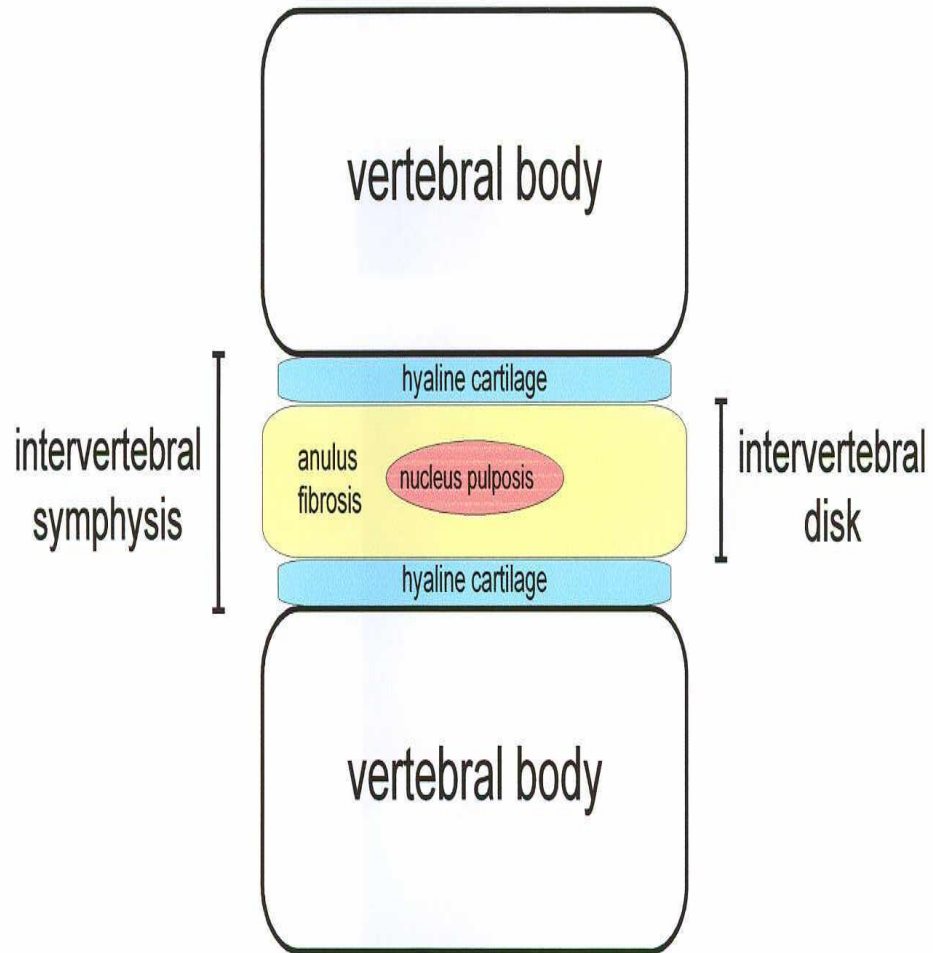
SECONDARY CARTILAGINOUS JOINT

2 bones joined by fibrocartilage

- pubic symphysis and intervertebral discs
- Only slight amount of movement is possible



Coronal section



STABILITY OF JOINTS

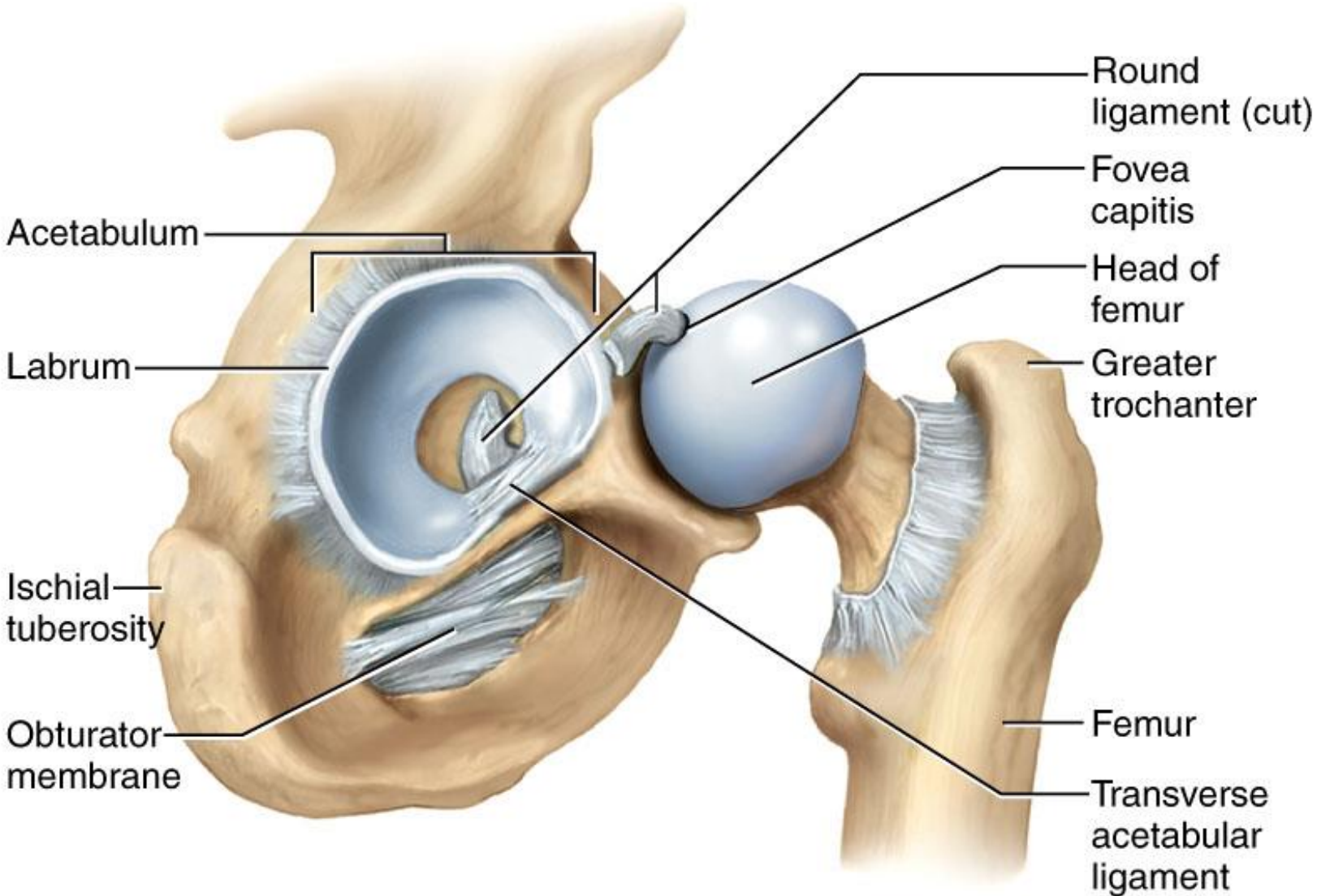
Stability depends on 3 main factors

○ Shape, size and arrangement of articular surfaces

○ Associated ligaments

○ Muscle tone

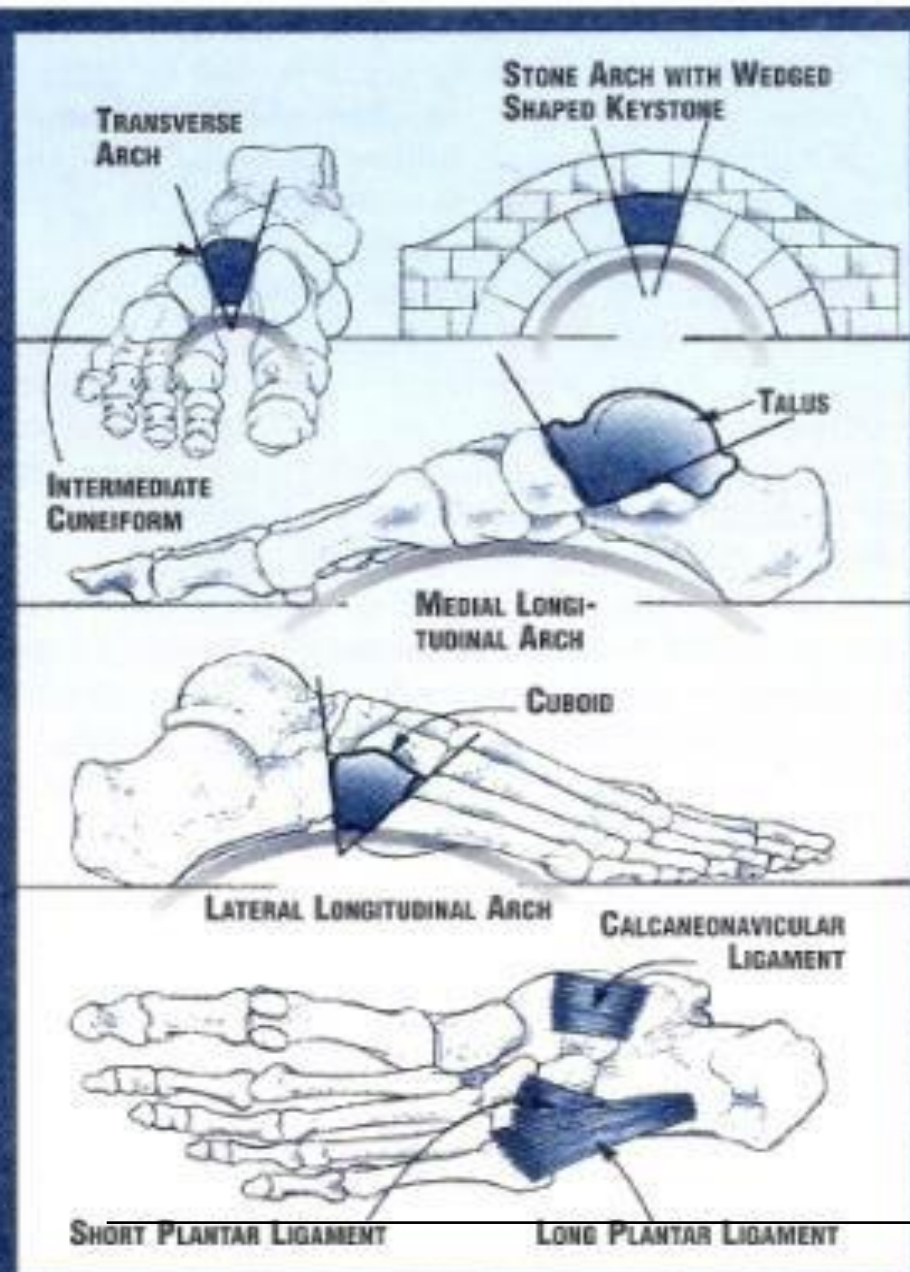
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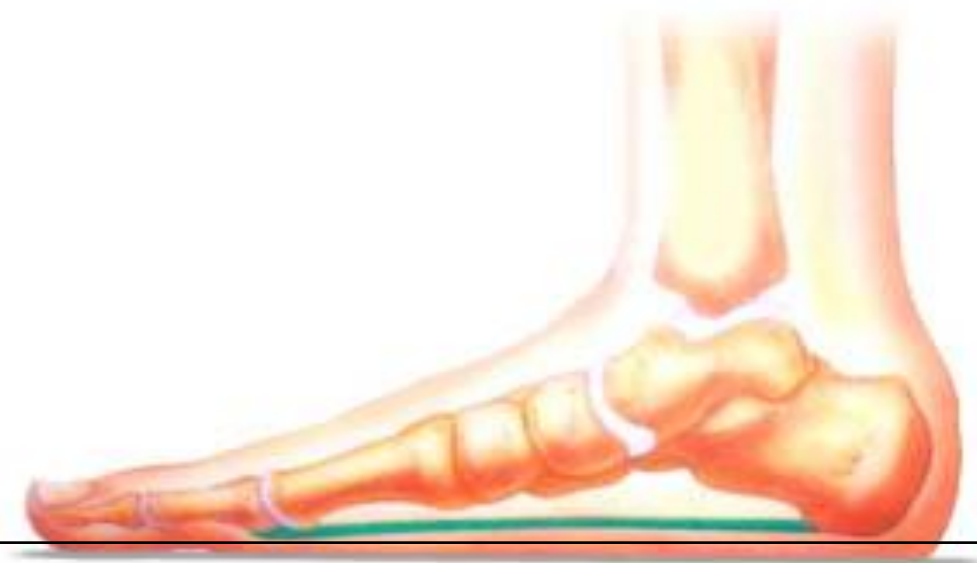
(b) Lateral view, femur retracted

LIGAMENTS

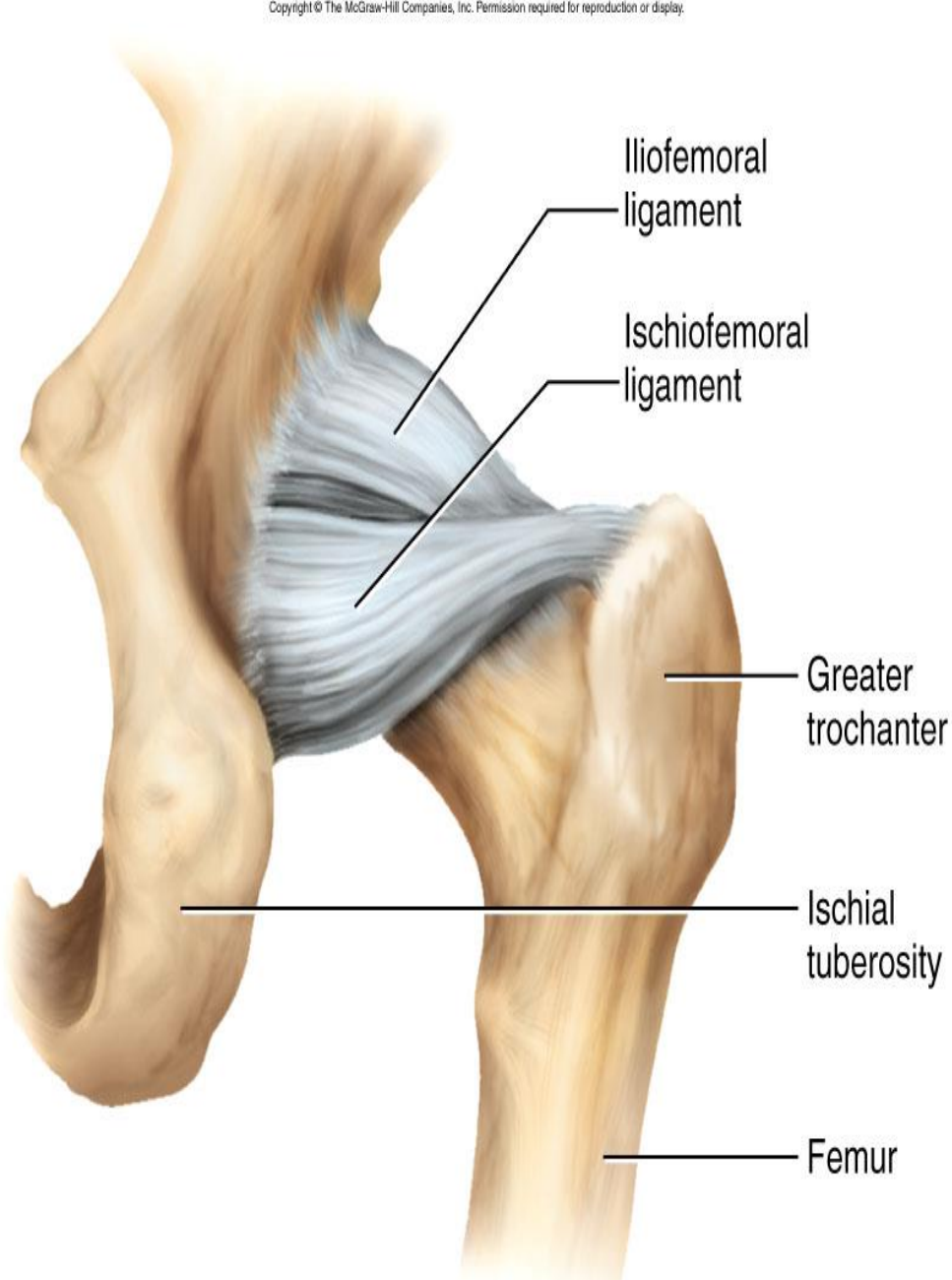
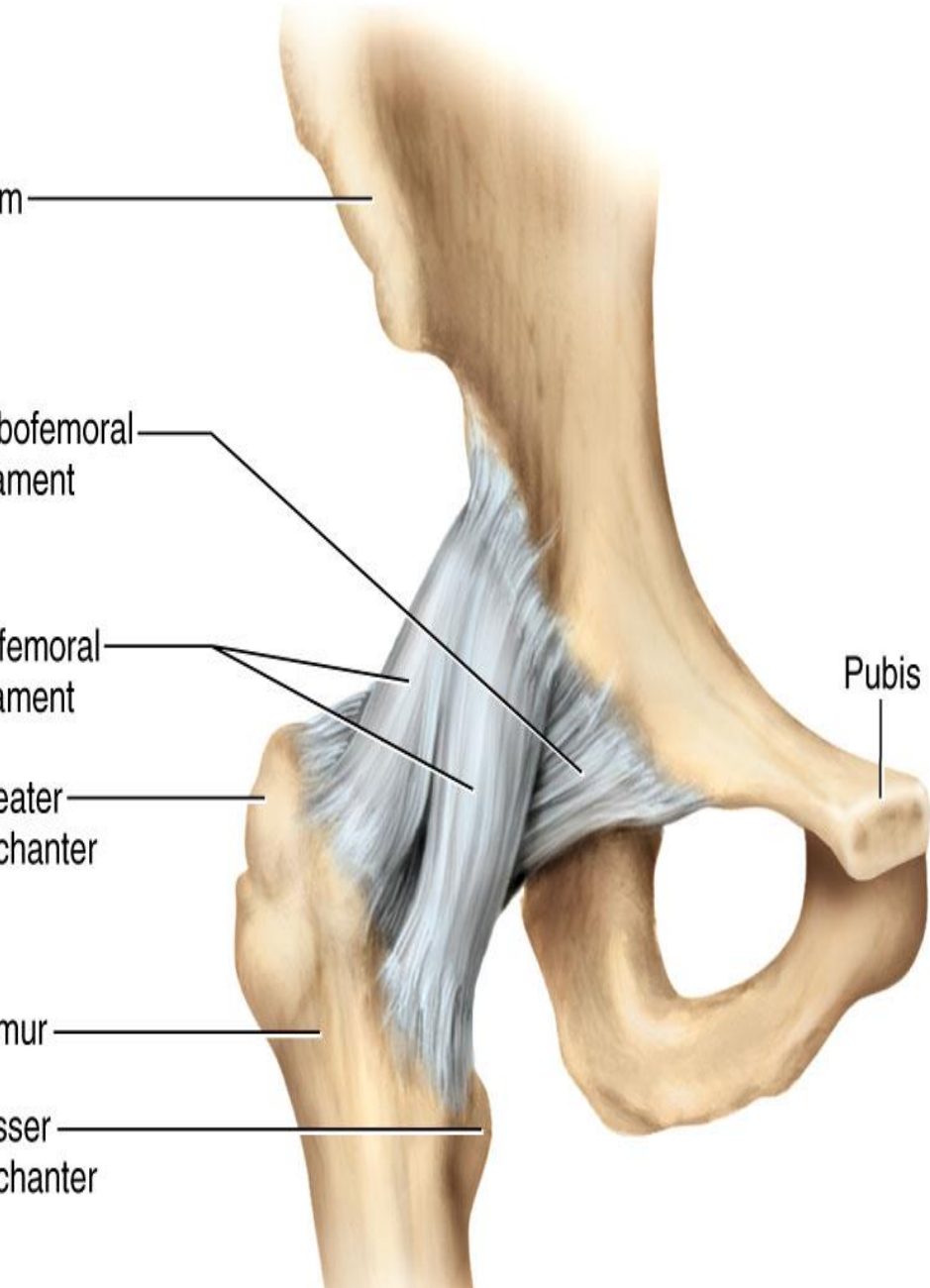
- Fibrous ligaments prevent excessive movement in a joint , but if stress is continued for an excessively long period ,then ligaments will stretch



Normal Arch



Flat Arch

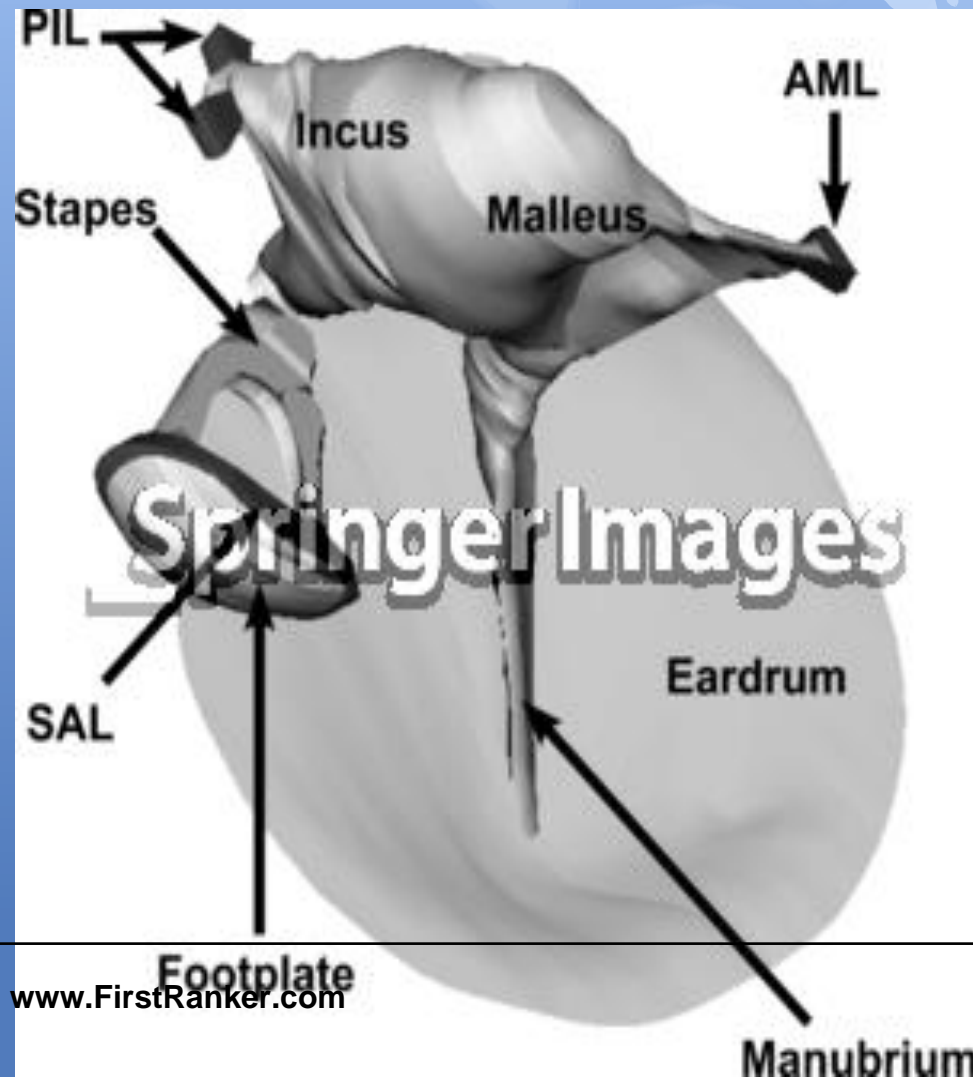


(c) Anterior view

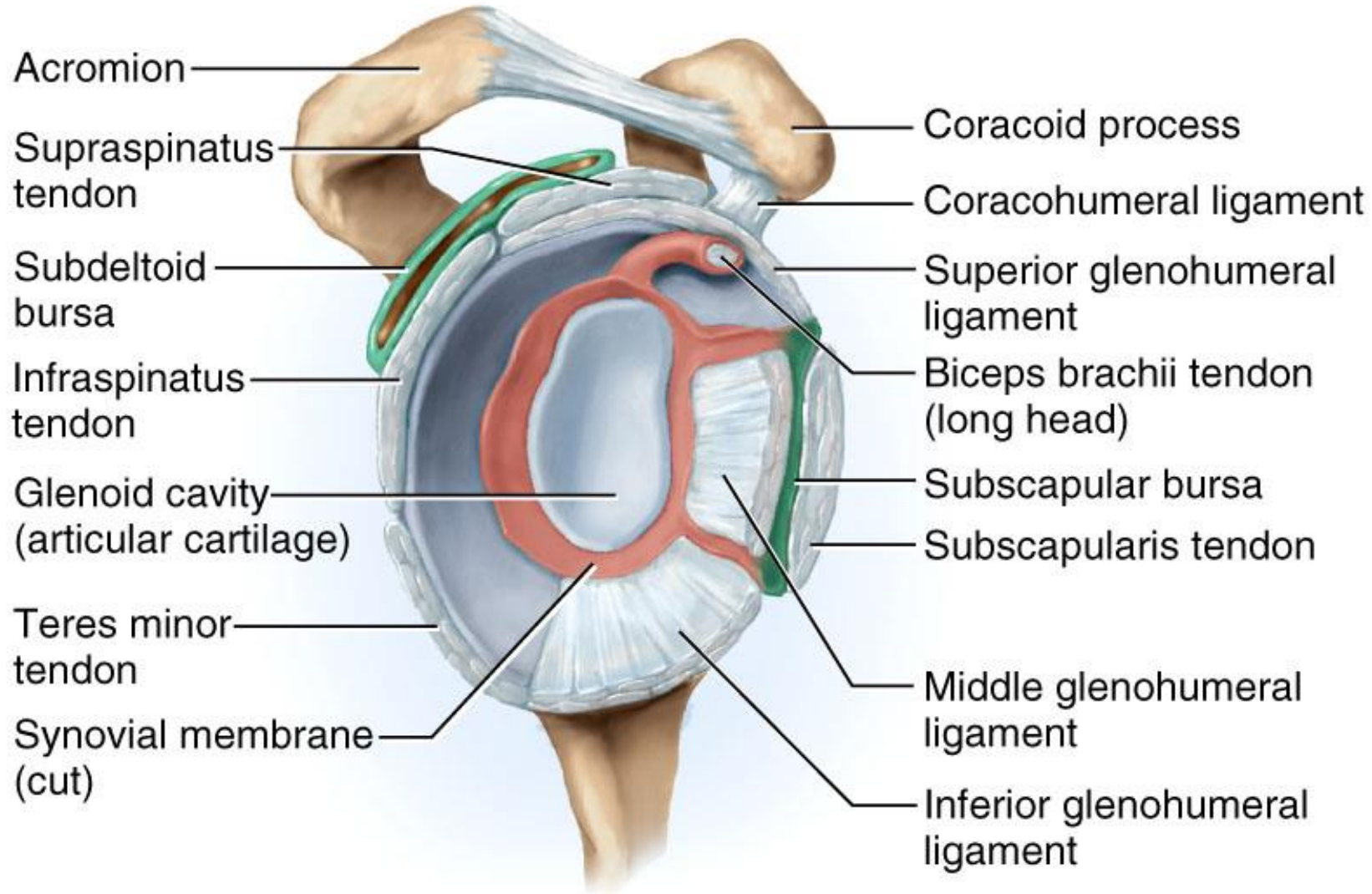
(d) Posterior view

ELASTIC LIGAMENTS

- Return to their original length after stretching

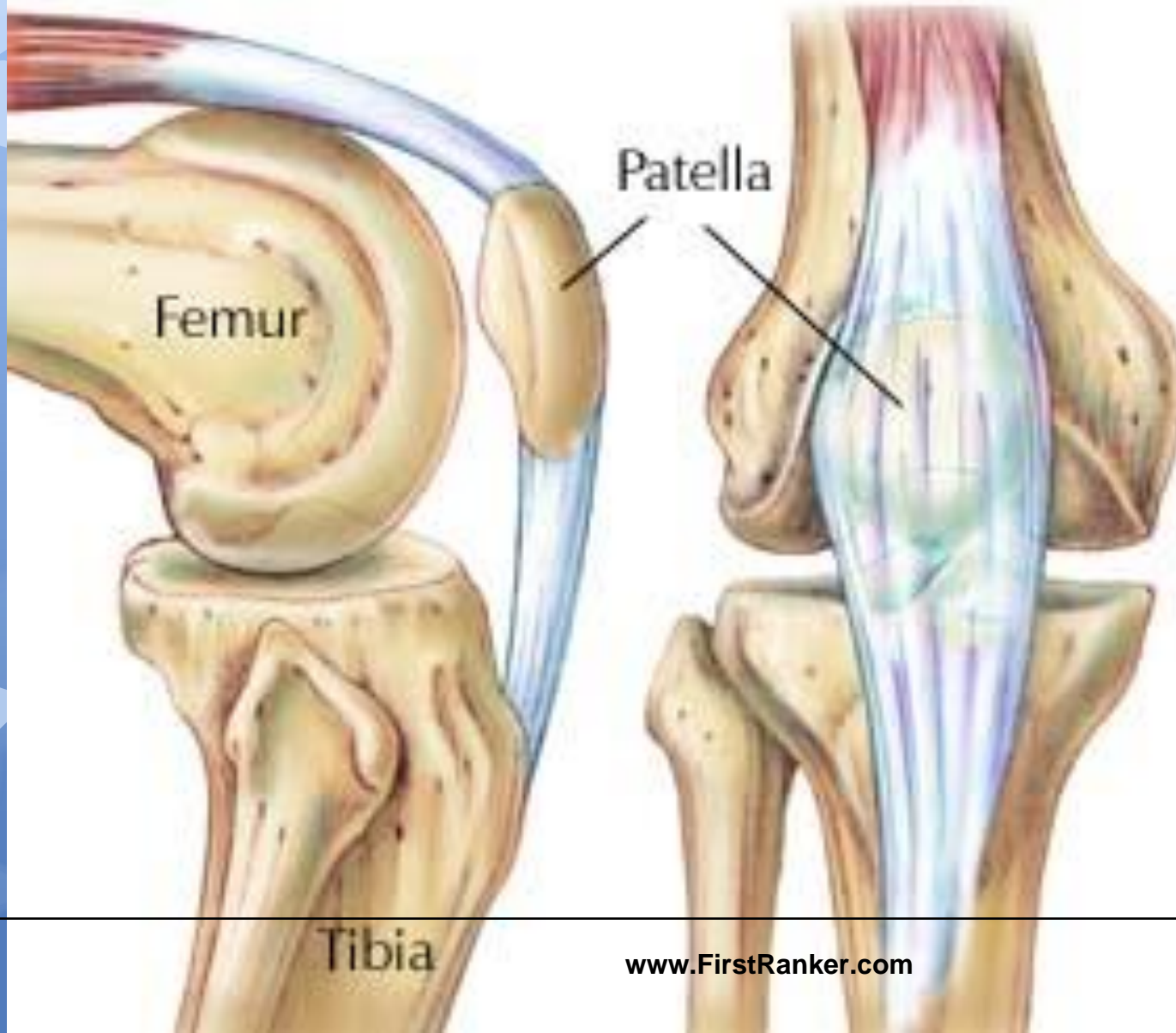


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(d) Lateral view, humerus removed

The Patellofemoral Joint



ARTHRITIS

- Arthritis is a broad term for pain and inflammation
- Osteoarthritis results from years of joint wear
 - articular cartilage softens and degenerates
 - accompanied by crackling sounds called crepitus

RHEUMATOID ARTHRITIS

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JOINT PROSTHESIS

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Femur

Prosthesis



Artificial acetabulum

Artificial femoral head

Thank you