

A site where two or more bones come together, whether or not

movement occurs between them is called a joint.

• Exception is.

Joints are classified according to the tissue that lie between the bone: fibrous joint, cartilagenaous joint, and synovial joints.

Shoulder Joint

 Articulations: This occur between the rounded head of the humerus and the shallow pear shaped glenoid cavity of the scapula.

The articular surface are covered by hayline articular cartilage. The glenoid cavity is depended by the presence of a fibrocartilaganous rim called **glenoid labrum**.

Type: synovial ball and socket joint.

Capsule: This surround the joint and is attached

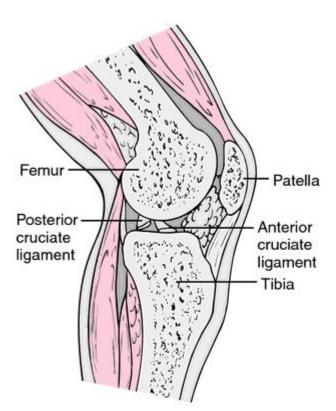
- Medially to the margin of the glenoid cavity outside the labrium.
- Laterally it is attached to the anotmic neck of the humerous.

- The capsule is thick and lax allowing a wide range of movement.
 Ligaments
- The glenohumeral ligaments are three weak band of fibrous tissue that strengthens the front of the capsule.
- The transverse humeral ligaments strengthens the capsule and bridges the gap between the two tuberosites
- The corachohumeral ligament strenghten the capsule above and stretches from the root of the coracoid process to the greater tuberosity of the humerous.

Accessary Ligaments:

- The coroacoid ligament extend between between the coracoid process of the acromian.
- The function is to protect the superior aspect of the joint.

Synovial Membrane:

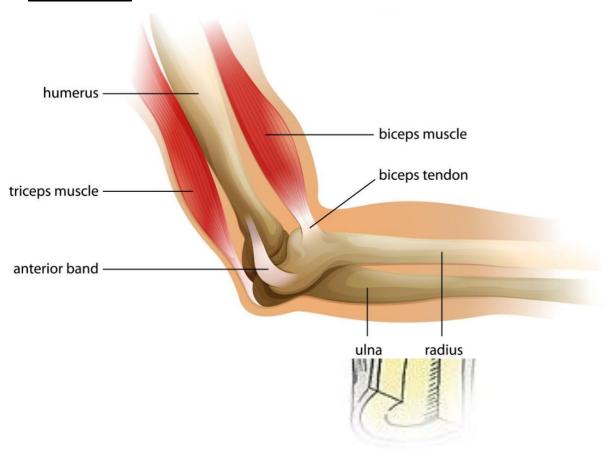


- This line is the capsule and is attached to the margin of the cartilage covering the articular surfaces
- It form a tubuler sheath around the tendon of the long head of the biceps brachi.

Nerve supply: The axillary and suprascapular nerves.

ELBOW JOINT

Articulation:



• This occur between

The trachkea and capitullem of the humerous.

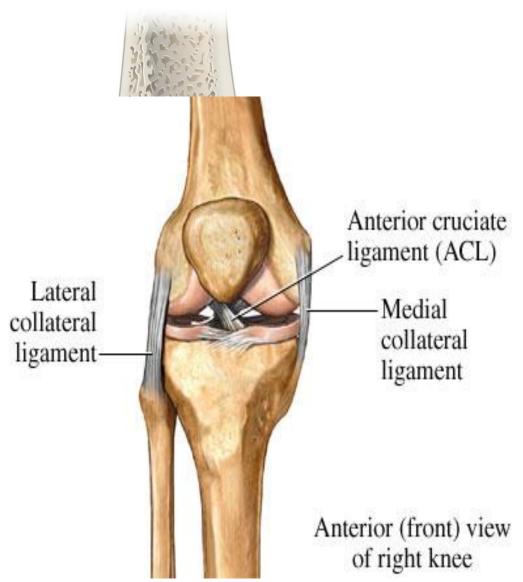
<u>And</u>

The trochlear notch of the ulna and the head of the radius

• The articular surface are covered with hayline cartilage.

Type: Synovial hinge joint.

Capsule: anteriorly it is attached



Above: To the humerou alongh the upper margins of coranoid and radial fossae.

To the front: of the medial amd lateral epicondyles.

Below: To the margin of the coranoid process of the ulna and to the alunar ligament, which surround the head of the humerous.

Posterioraly it is attached.

Above to the margin of the olecranin fossa of the humerous. **Below** to the upper margin and the side of the olecranin process of the ulna and to the alunar ligament.

Ligaments:

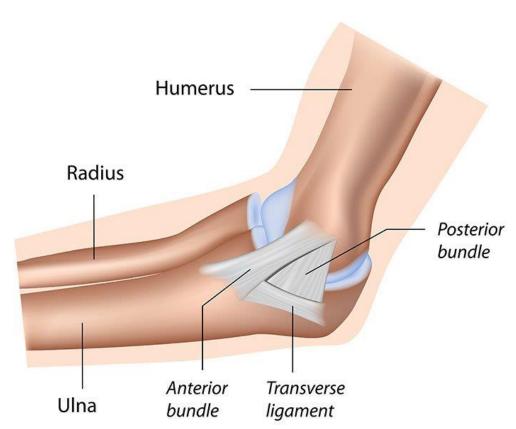
• The radial colletral ligament is triangular and is attached By its apex to the lateral epicondyl of the humerous By it's base to the upper margin of the anular ligament.

The Ulnear collateral ligament:

The medial ligament is also triangular and consist principally of three strong bands:

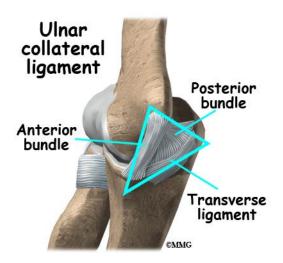
The anterior band, which passes from the medial epicondyle of the humerous to the medial margin of the coranoid process **The posterior band** which passes from the medial epicondyle of the humerous to the medial side of the olecranin process.

The Transverse band which passes between the ulnaer attachment of the two preceding band.



Synovial Membrane:

This line the capsule and fatty pads in the floor of the coranoid, radial and olecranin fosae it is continous below with the synovial membrane of the proximal radioulnar joint.



Nerve Supply:

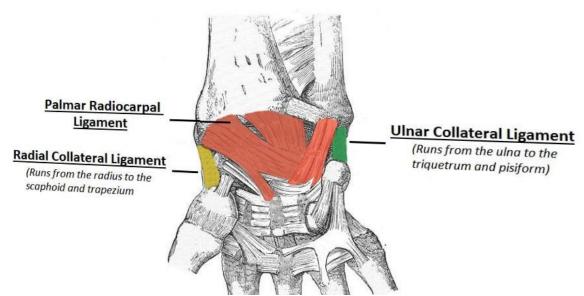
- Branches from
- Median nerve
- Ulnear nerve
- Musculocutanos nerve
- Radial Nerve

WRIST JOINT:

Articulation:

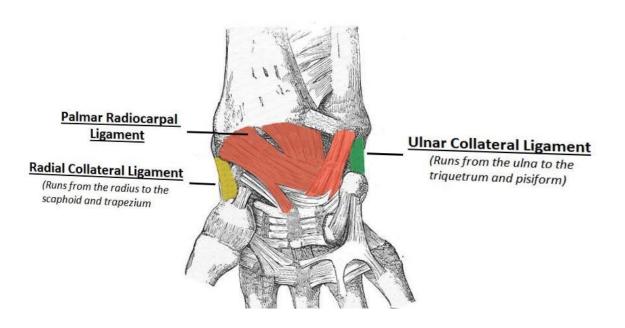
Above the distal end of the radius amd the articular disc. **Below** the scaphoid lunate, and tri quetral bones.

Capsule enclose the joint and is attached



Above the distal end of the radius and ulna.

Below the proximal row of carpel bone.



Type synovial elipsoid joint

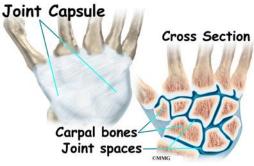
Ligaments:

The medial ligament

Origin: styloid process of the radius.

Insertion: scaphoid and tarpizum.

• Provide laterally stability.



Anterior ligament:

Most important ligament for controlling motion and wrist stability.

Origin anterior surface of distal radius.

Insertion: course oblequely and midakkt to split into.

- The radiocapitate ligament
- The radiotriquetram ligament
- The radioscaphoid ligament

Posterior ligament:

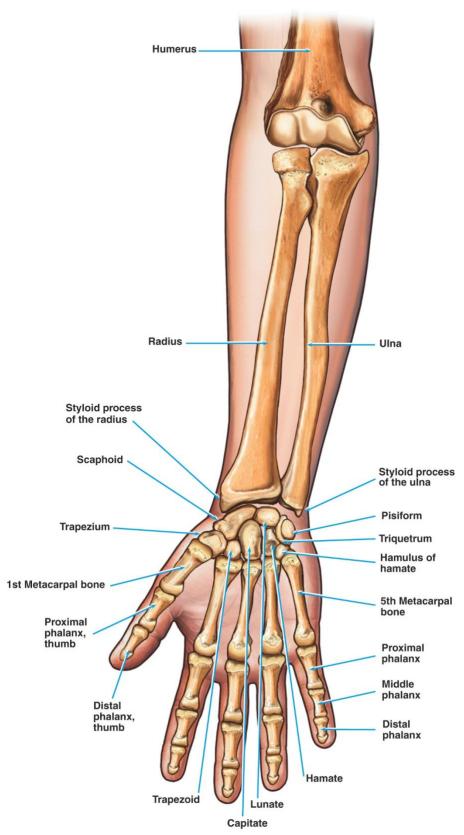
Origin posterior surface of the distal radius and styloid process. **Insertion** lunate and triquetram.

Synovial membrane: this line the capsule and is to attached to the margin of the articular surface. The joint cavity does not communicate with that of that distal radioulnar joint or joint with cavities of intercarpels joints.

Nerve supply:

Interior interosseous nerve Deep branch of the radiul nerve.

Joints of the hand and fingers:



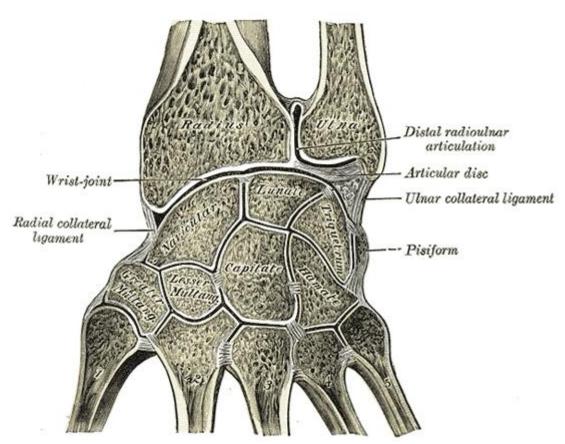
INTERCARPEL JOINT

Articulation:

- Between the individual bone of the proxmial row of the carpus;
- Between the individual bone of the distal row of the carpus.
- And the finally the midcarpel joint between the proximal and distal row of carpel bone.

Synovial membrane: This line and the capsule is attached to the margin of the articular surface. The joint cavity of mid carpel joint extend not only between the two rows of carpel bone but also upward between the individual bone forming the proximal row and downward between the bone of the distal row.

Nerve supply: anterior interosseous, deep branch of the radial nerve, and deep branch of the ulnar nerve.



Type synovial plane joint.

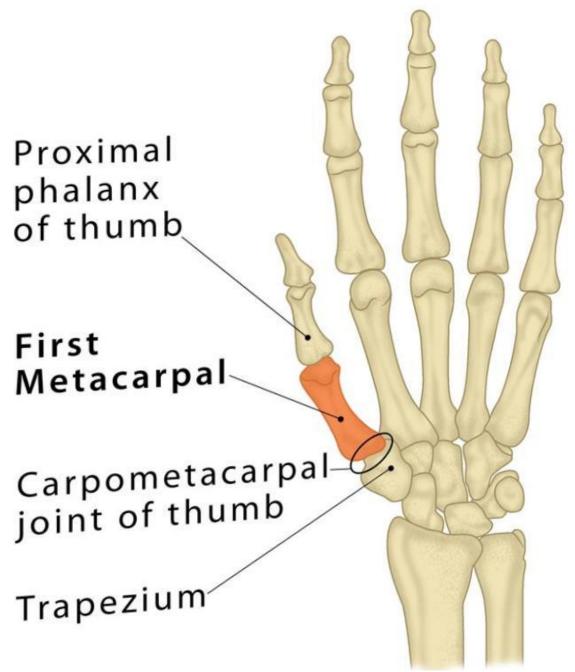
Membrane A small amount of gliding movement is possible.

CARPOMETACARPELS AND INTERMETACARPELS JOINT:

The carpometacarpel and intermetocarpel joint are synoil plane joint possesing anterior, posterior and interssossous ligament. They have a common joint cavity.

A small of amount of gliding movement is possible.

First Metacarpal



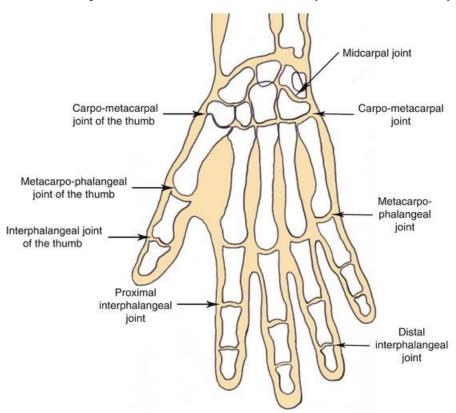
CARPOMETACARPELS JOINT OF

Articulation between the tarpizum and the saddle shaped based of the first metacarpel bone.

Type synovial saddle shape capsule

Capsule: The capsule surround the joint.

Synoial Joint: This line the capsule forms a separte joint cavity.



Interfhalnges joint:

Interfhalanges joint are synoil hinge joint that have structure similar to that of the metacarpophalengal joint.

- They are
- Proxinal interphalengal joint.
- Distal interphalengal joint.

BONES OF SHOULDER GIRDLE

- The clavicle
- The scapula

Bone of arm: Humerous

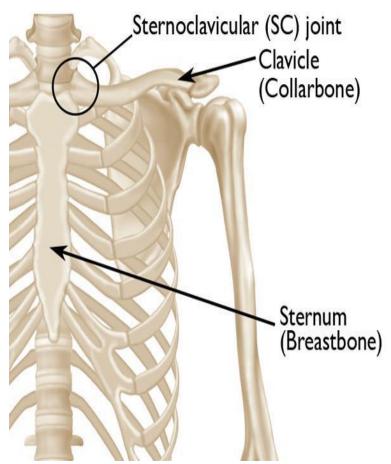
Forearms bone: radius(is the lateral bone)

Ulna(is the medial bone) **Shoulder GIRDLE consist of**

The clavicle

The scapula

THE CLAVICLE



The clavicle is a long slender bone that lies horizontally across the root of the neck just beneath the skin.

It is also called collar bone

It connects upper limbh to the trunk.

End and surfaces.

It consists

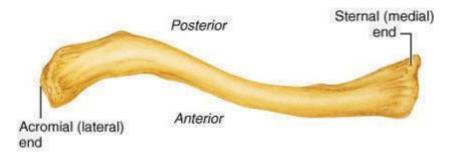
Sternal end: enlarge and tringular

Acromial end: flat

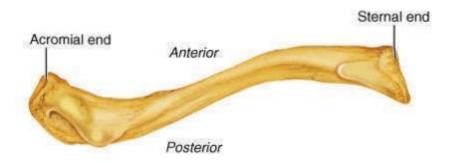
Body(shaft): elongated

It consists of four structure

- Inferior
- Superior
- Anterior
- Posterior



(b) Right clavicle, superior view



Its divided into

- Medial two thirds
- Lateral one third

Medial two third of the clavicle is convex forward **And**

Lateral one third is concave forward

INFERIOR SURFACE

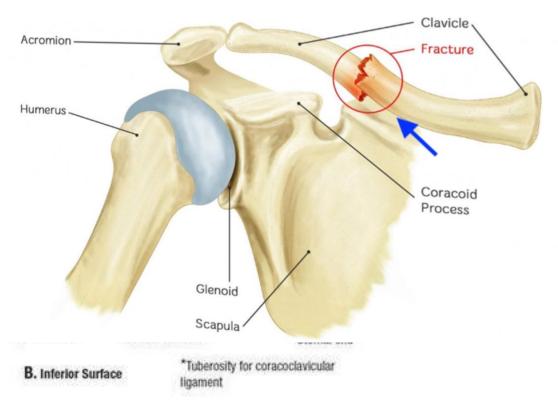
Conoid tubercle: near the acromial end of the clavicle give attachment to the conoid ligament.

Trapezoid line_near the acromial end of the clavicle, give attachment to the trapzoid ligament.

Subclavian groove is the medial third of the shaft of the clavicle give attachment to the subclavis muscle.

Costoclavicle ligament rough depressed oval area at sternal end that given attachment to the costoclavicle ligament.

Clavicle Fracture



SUPERIOR SURFACE

Attachment for sternocleidomastoid muscle at medial two third of clavicle

Attachment for trapizus muscle at lateral one third of the clavicle.

Anterior Surface

Attachment for pectorallis major muscle at medial third of the clavicle.

Attachment for deltoid muscle at lateral one third of clavicle.

Fracture Of The clavicle

It is the most commonly fracture in the body

The fracture usually occur usually occur as result of a fall on the shoulder or unstrected hand, the force transmit into clavicle, which break to its weakest point

The junction of the middle and outer thirds.

After the fracture the lateral fragment is depressed by the weight of the arm and it is pulled midally and forward by the strong adductor muscle of the shoulder joint, especially the pectorad major.

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SUBJECT: HUMAN ANOTOMY