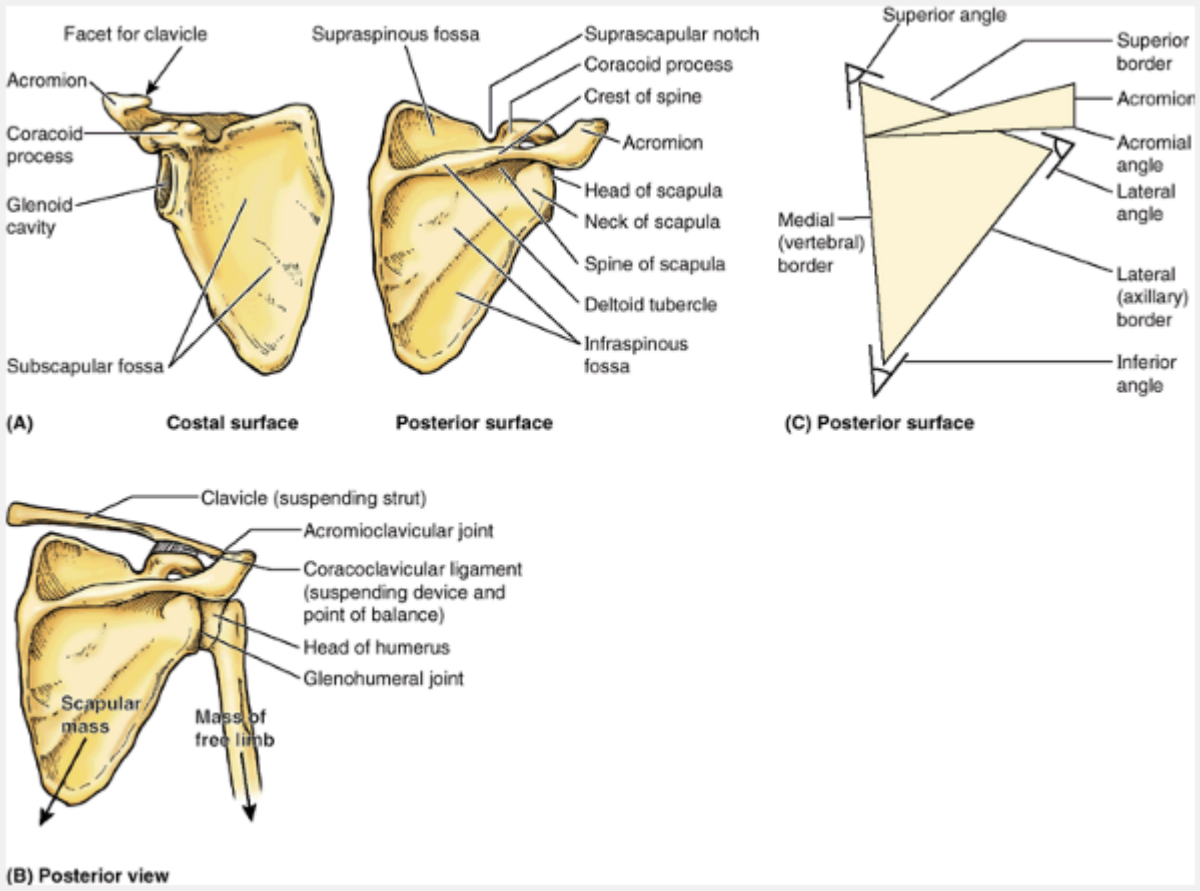
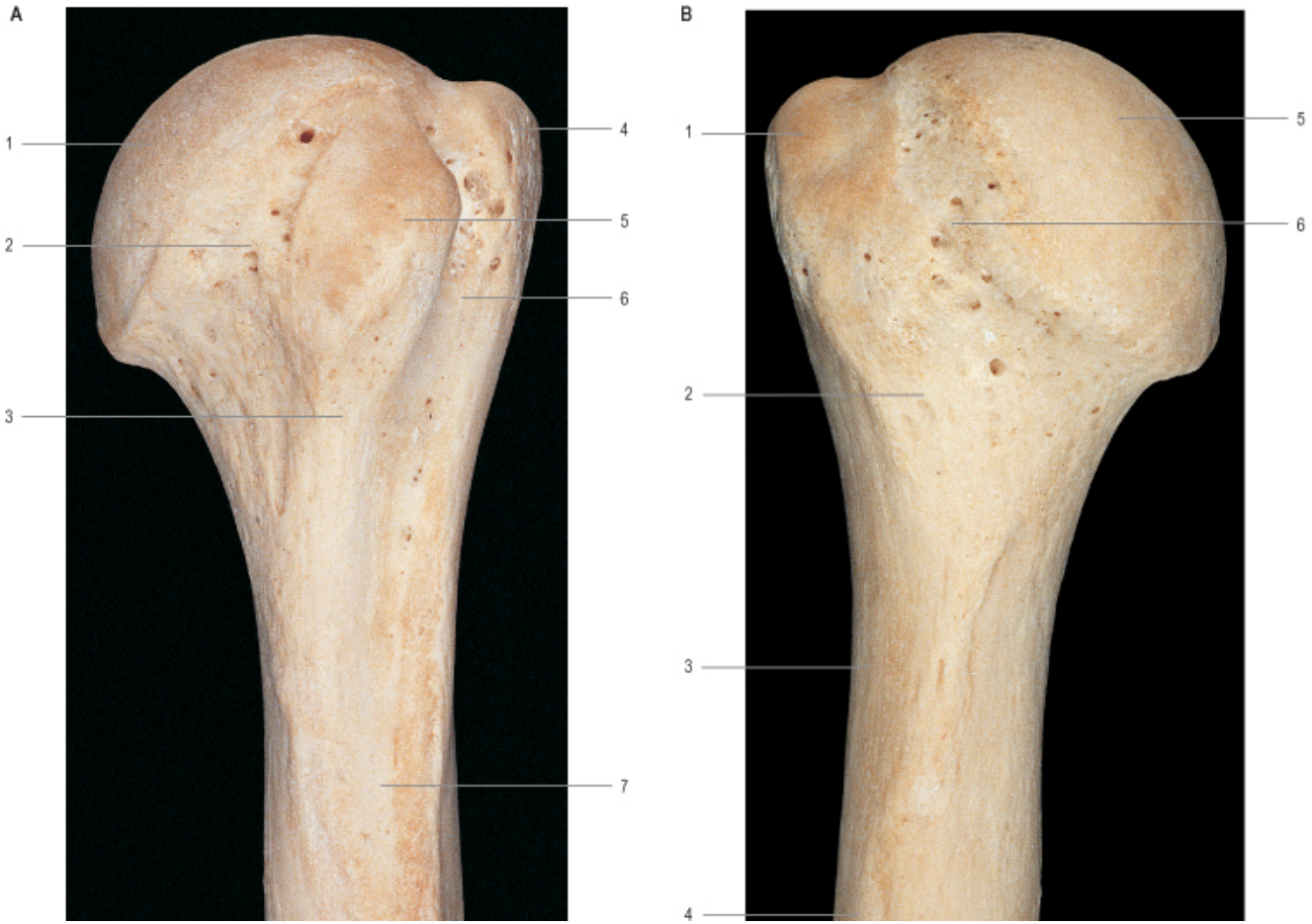
RADIOLOGY

Scapula

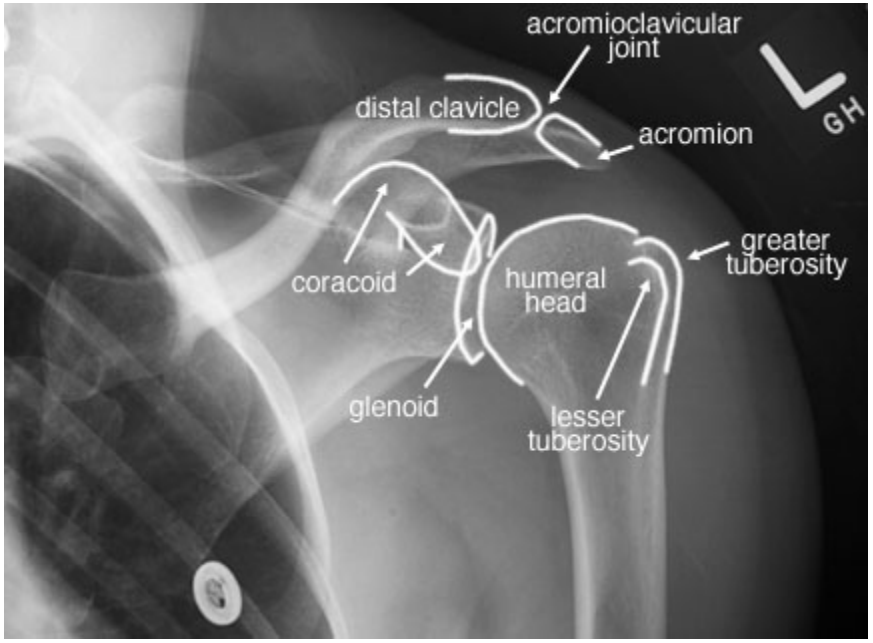

Facet for clavicle
Acromion
Coracoid process
Glenoid cavity
Subscapular fossa
(A)
Costal surface
Supraspinous fossa
Suprascapular notch
Coracoid process
Crest of spine
Acromion
Head of scapula
Neck of scapula
Spine of scapula
Deltoid tubercle
Infraspinous fossa
Posterior surface
Superior angle
Superior border
Acromion
Acromial angle
Lateral angle
Medial (vertebral) border
Lateral (axillary) border
Inferior angle
(C) Posterior surface
Clavicle (suspending strut)
Acromioclavicular joint
Coracoclavicular ligament (suspending device and point of balance)
Head of humerus
Glenohumeral joint
Scapular mass
Mass of free limb
(B) Posterior view

A. Anterior aspect of proximal end of left humerus
B.Posterior aspect of proximal end of left humerus



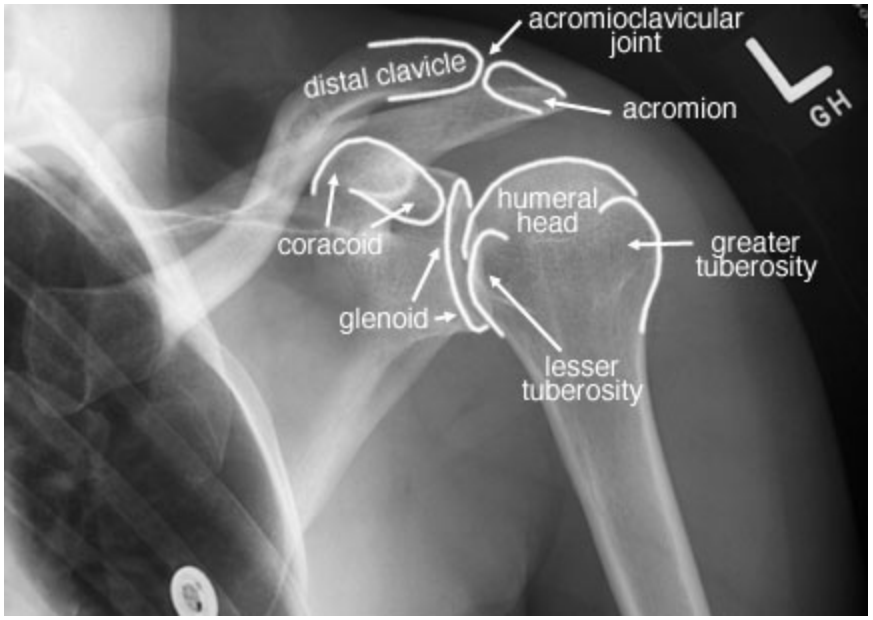
Part A: 1. Head. 2. Anatomical neck. 3. Surgical neck. 4. Greater tubercle. 5. Lesser tubercle. 6. Intertuberous sulcus. 7. Shaft.
Part B: 1. Greater tubercle. 2. Surgical neck. 3. Shaft. 4. Radial groove. 5. Head. 6. Anatomical neck.

SHOULDER- external rotation

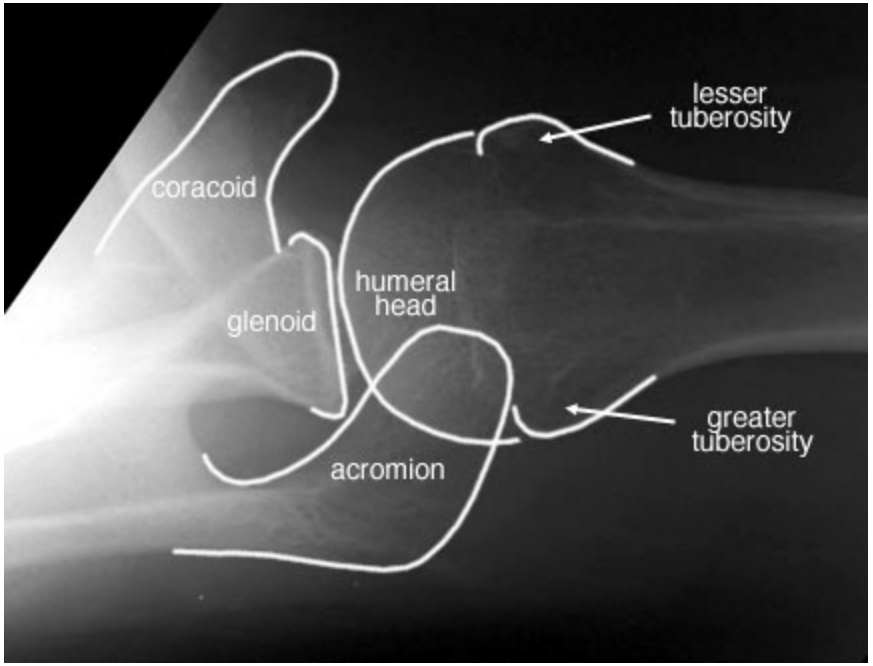


- The usual radiograph is an AP view with the humerus laterally rotated so that its epicondyles are parallel with the X-ray film cassette. Because some obliquity of the glenoid cavity occurs normally, it appears oval in shape. In this view, the lateral two thirds of the clavicle is visible. The articulation of the acromial end of the clavicle with the acromion of the scapula at the AC joint is apparent. This is a frequent site of subluxation of the joint. The surgical neck of the humerus, approximately 2.5 cm distal to the greater and lesser tubercles, is a common site of fracture. The axillary nerve is in contact with the surgical neck and vulnerable to injury. Examination of the humerus reveals dense cortical bone along the shaft, which thins out proximally and becomes extremely thin over the head of the bone. The radial nerve runs inferolaterally in the radial groove on the posterior surface of the humerus and is vulnerable to injury in a midhumeral fracture.

SHOULDER-internal rotation

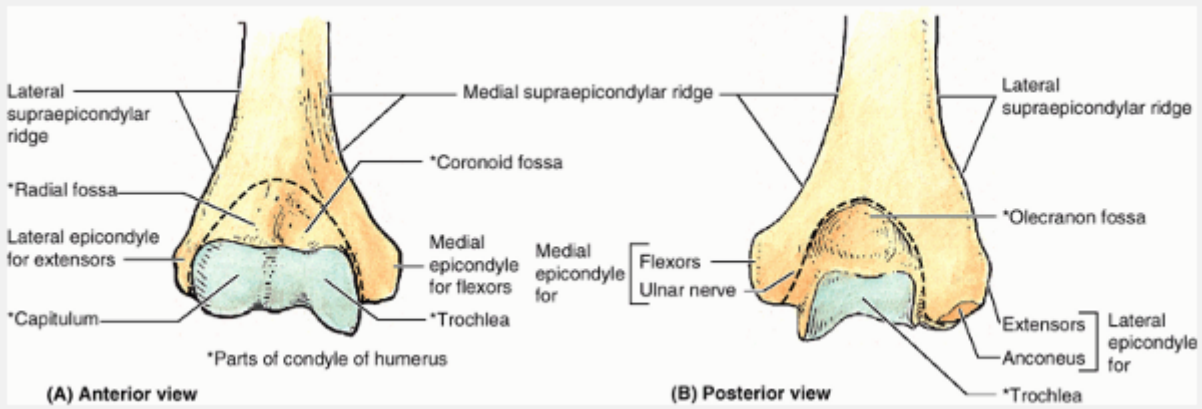


SHOULDER-axillary view

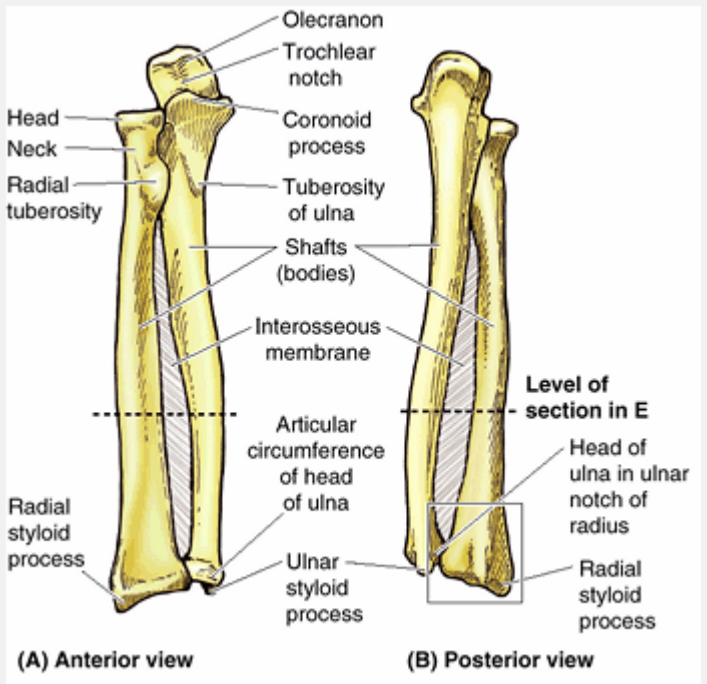


- An axial projection of the shoulder provides an essential additional view of the AC and glenohumeral joints. To obtain an axial projection, the person is asked to abduct the arm and extend the shoulder over the X-ray film cassette.

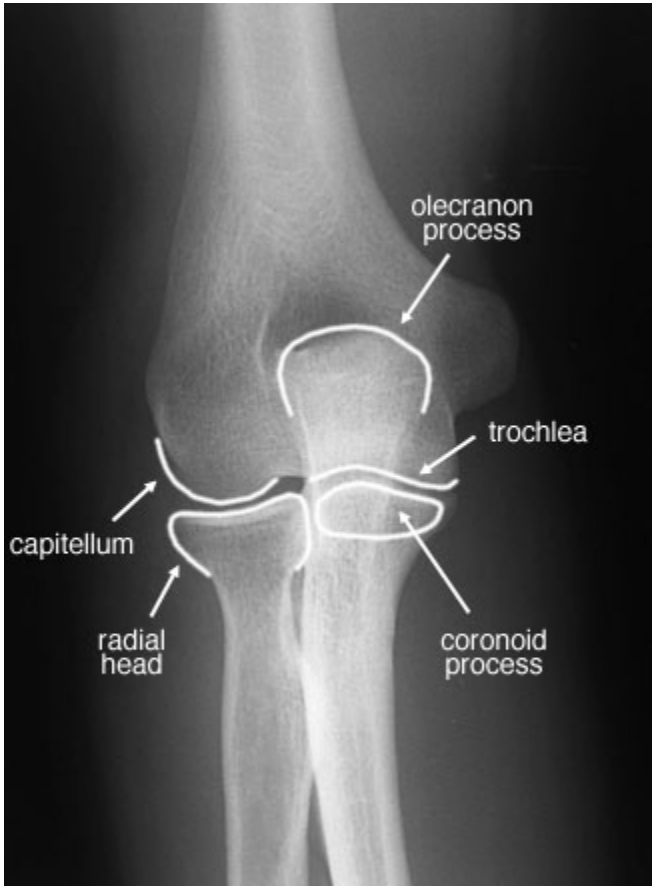
Distal end of right humerus



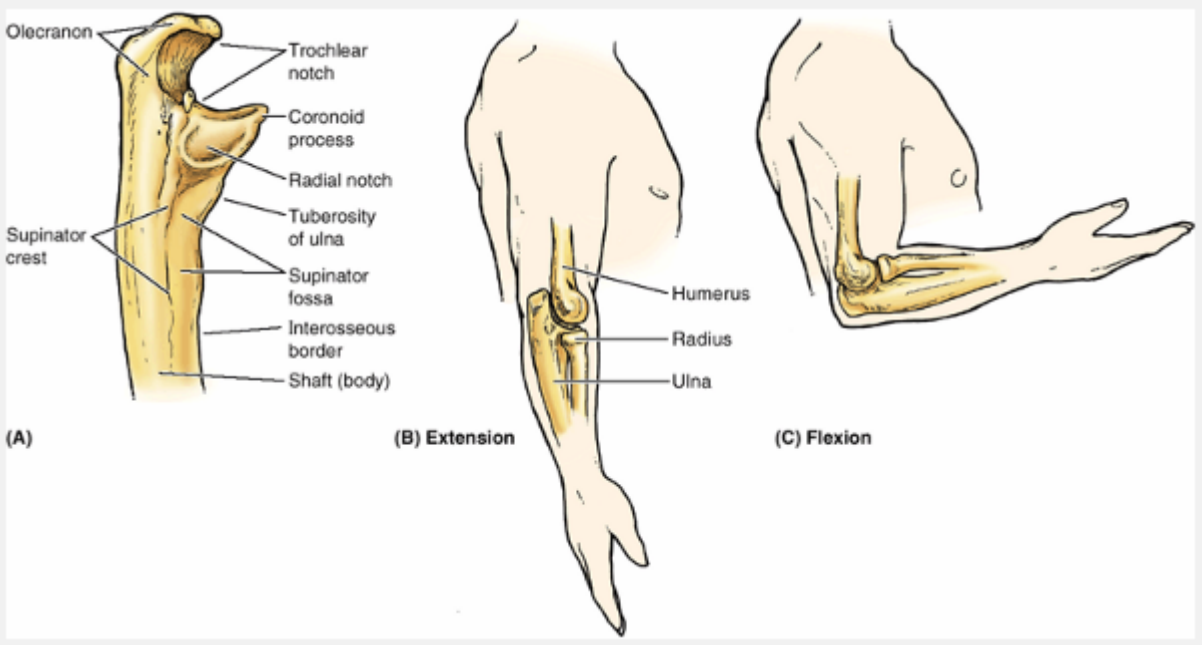
Right radius and ulna



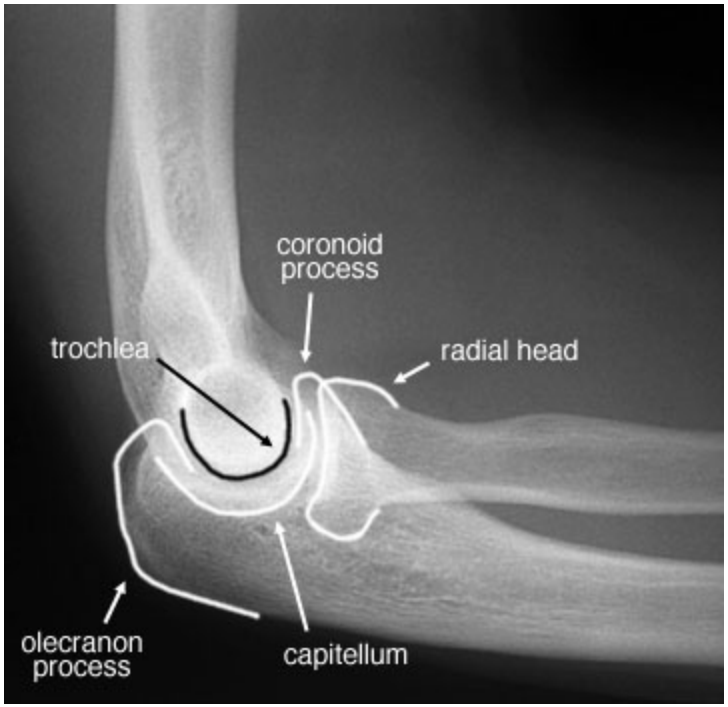
ELBOW-AP VIEW



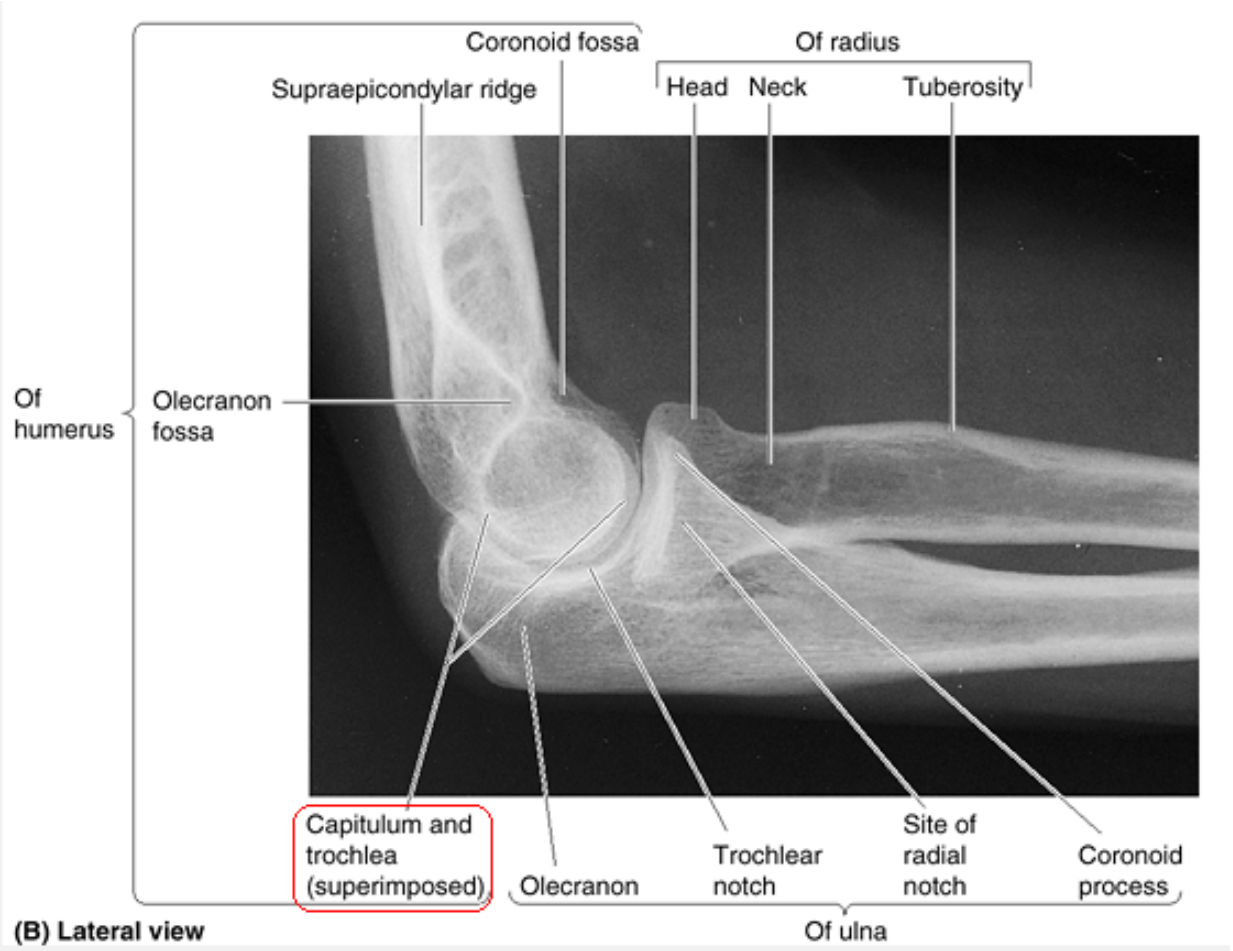
Bones of right elbow region



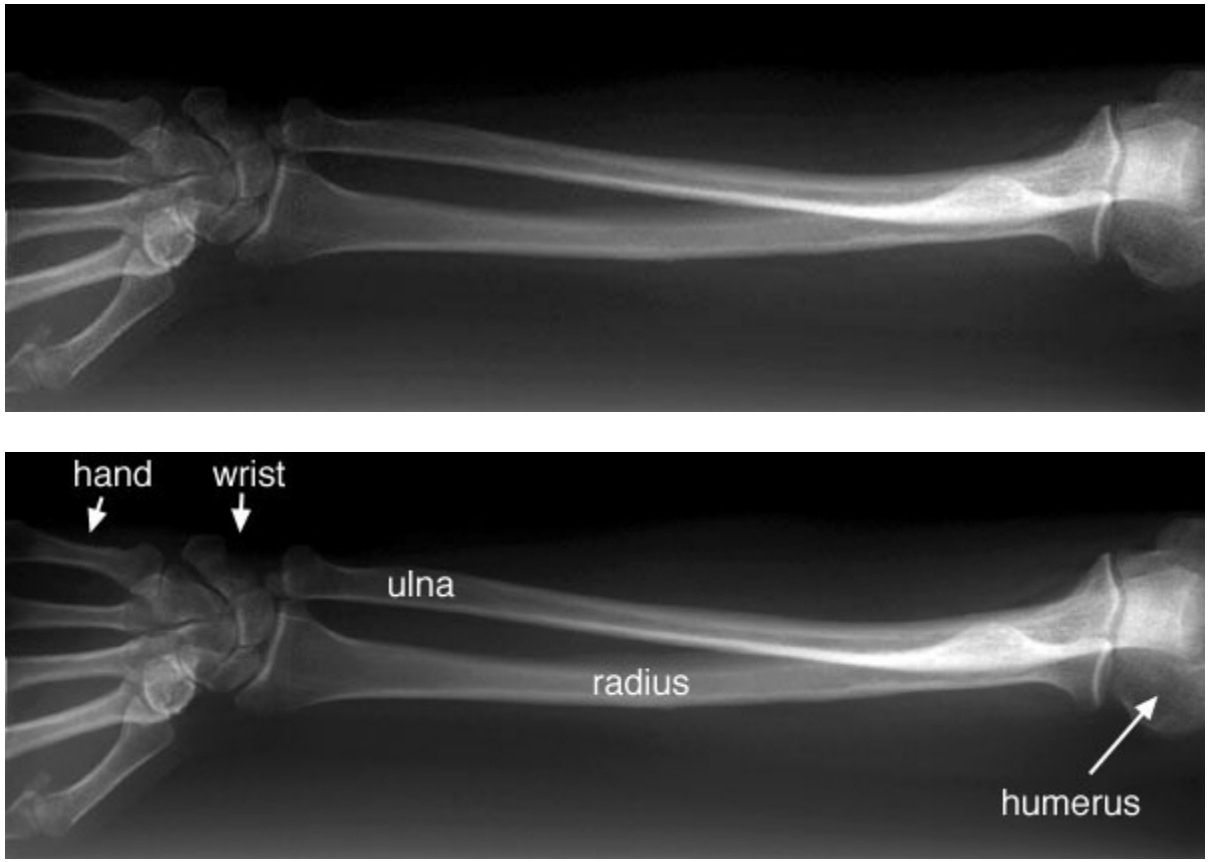
ELBOW-LATERAL VIEW



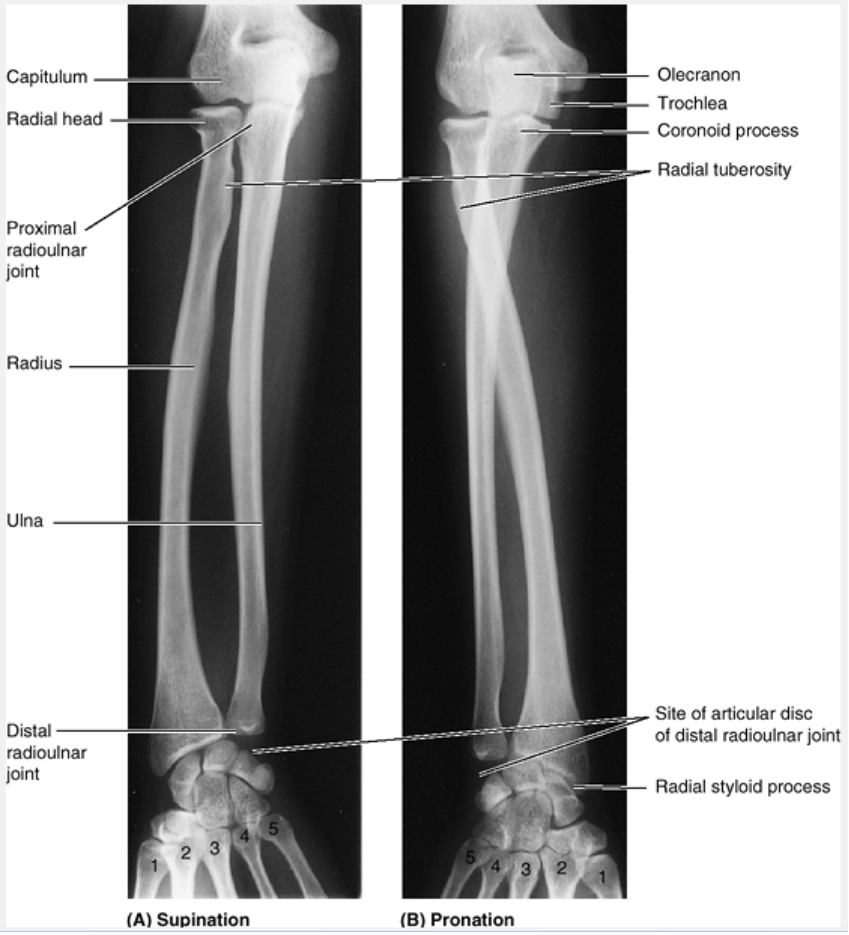
Elbow- lateral view



FOREARM-AP VIEW



Fore arm-AP views

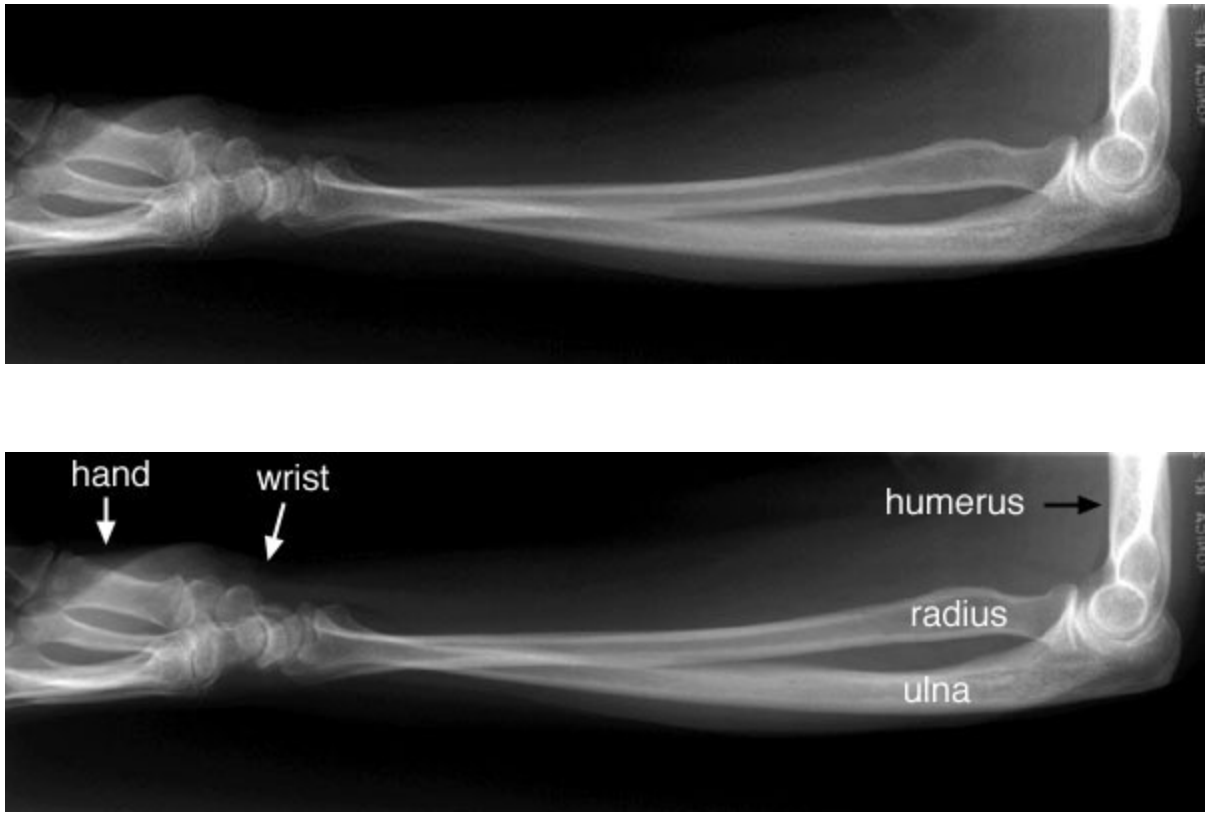


- A. In the supinated position, the radius and ulna are parallel.
- B. During pronation, the inferior end of the radius moves anteriorly and medially around the inferior end of the ulna, carrying the hand with it; thus in the pronated position, the radius crosses the ulna anteriorly.

Fore arm-AP view

- Observe the translucent area between the capitulum and the radial head and between the trochlea and the coronoid process. This area is where the articular cartilages of the articulating bones are located. The radius and ulna bow (are outwardly convex) as they extend distally from the elbow. The bones become increasingly separated from each other in their distal two thirds, coming into contact more abruptly distally. The interosseous membrane is radiolucent (invisible to radiographic study). To detect fractures and verify their correct reduction (restoration to the normal position), keep in mind that the radial styloid process normally ends 1 cm distal to the ulnar styloid process.

FOREARM-LATERAL VIEW

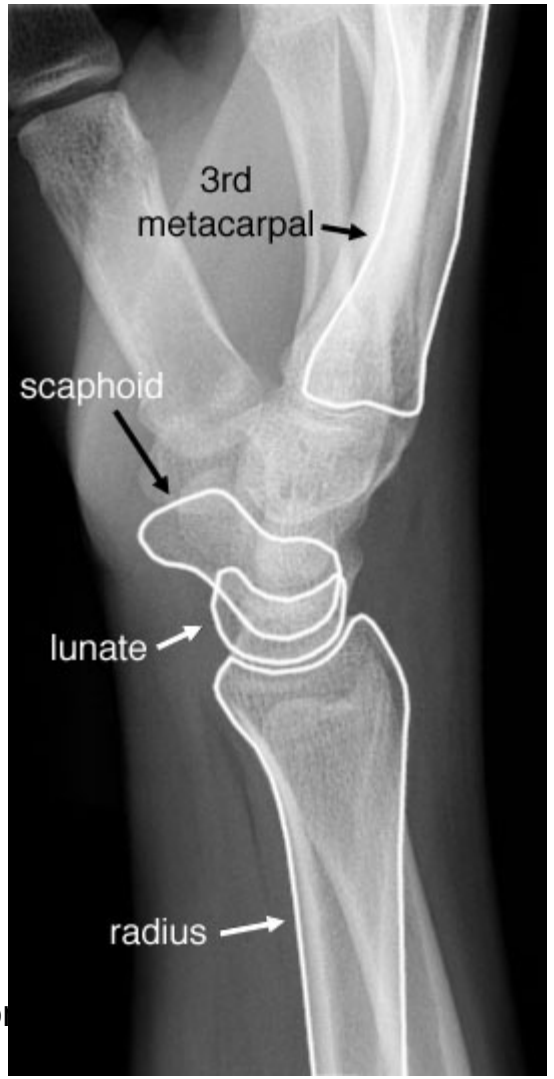


WRIST-PA VIEW

WRIST-PA VIEW

- A lateral projection of the wrist and hand is of great importance because certain fractures may be revealed only in this projection.
- A fall on the outstretched hand may result in fracture of the scaphoid, generally across its narrow part. A radiologist looks for a scaphoid fracture if the physician reported tenderness over the scaphoid in the anatomical snuff box; however, it may not be detectable even in several oblique views until approximately 2 weeks after the injury

WRIST-LATERAL VIEW



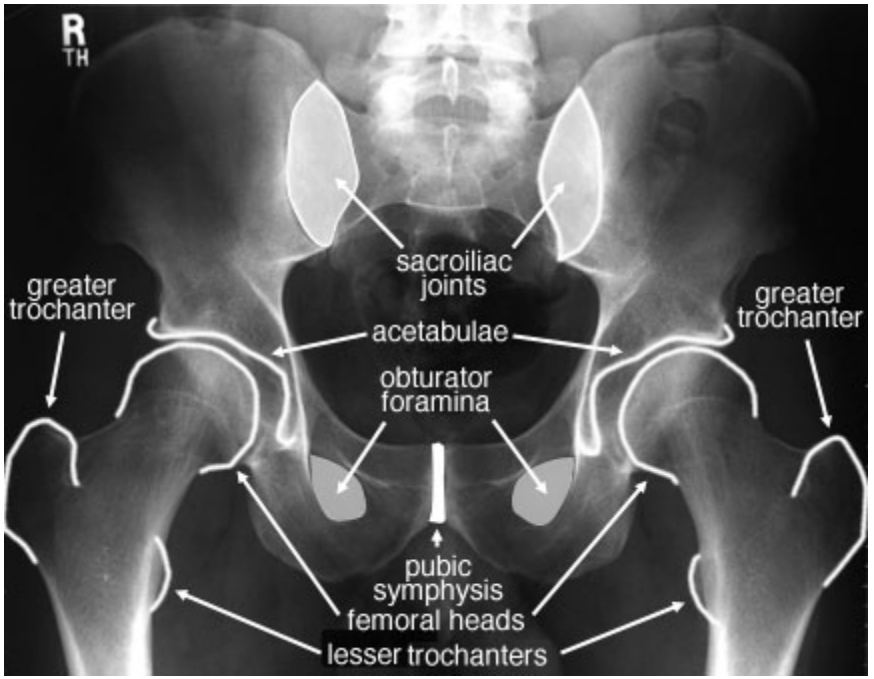
- Radiographs of the wrist and hand are commonly used to assess skeletal age.
- Fusion of the distal radial and ulnar epiphyses is complete radiographically at age 16 in females and at age 18 in males.
- The carpal bones are superimposed on each other; however, when compared with a skeleton of the wrist and hand, the bones can be identified.

- B. The distal end of the forearm and the hand of a 2.5-year-old child are shown. Ossification centers of only four carpal bones are visible. Observe the distal radial epiphysis (R). C, capitate; H, hamate; L, lunate; Tq, triquetrum.
- C. The inferior end of the forearm and hand of an 11-year-old child are shown. Ossification centers of all carpal bones are visible. The arrow indicates the pisiform lying on the anterior surface of the triquetrum. The distal epiphysis of the ulna (U) has ossified but all epiphyseal plates (lines) (i.e., they are still unossified). S, scaphoid; Td, trapezoid; Tz, trapezium.

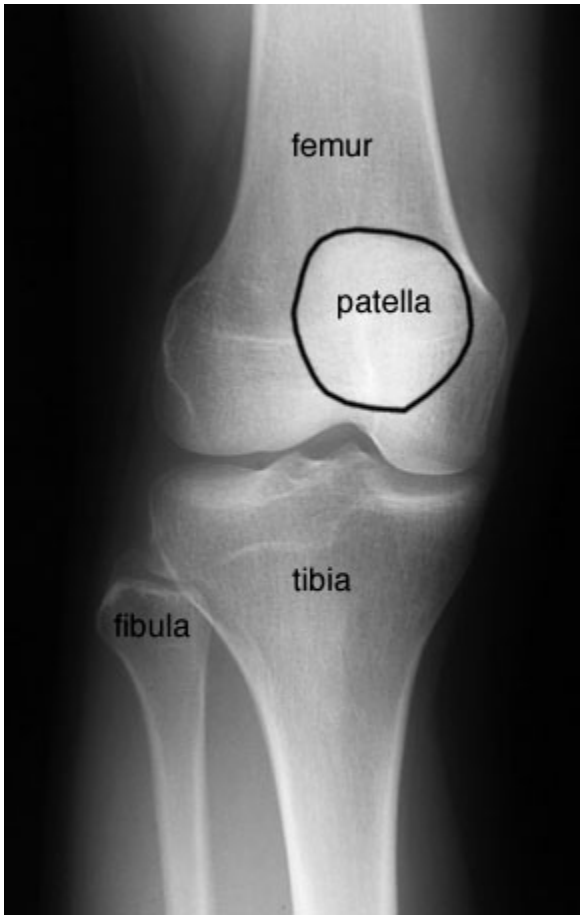
HAND- PA VIEW


distal phalanges (DP)
middle phalanges (MP)
2 DP
3 DP
4 DP
5 DP
2 MP
3 MP
4 MP
5 MP
1st DP
2nd PP
3rd PP
4th PP
5th PP
1st PP
proximal phalanges (PP)
1st MC
2nd MC
3rd MC
4th MC
5th MC
metacarpals (MC)
carpals
carpals
ulna
radius

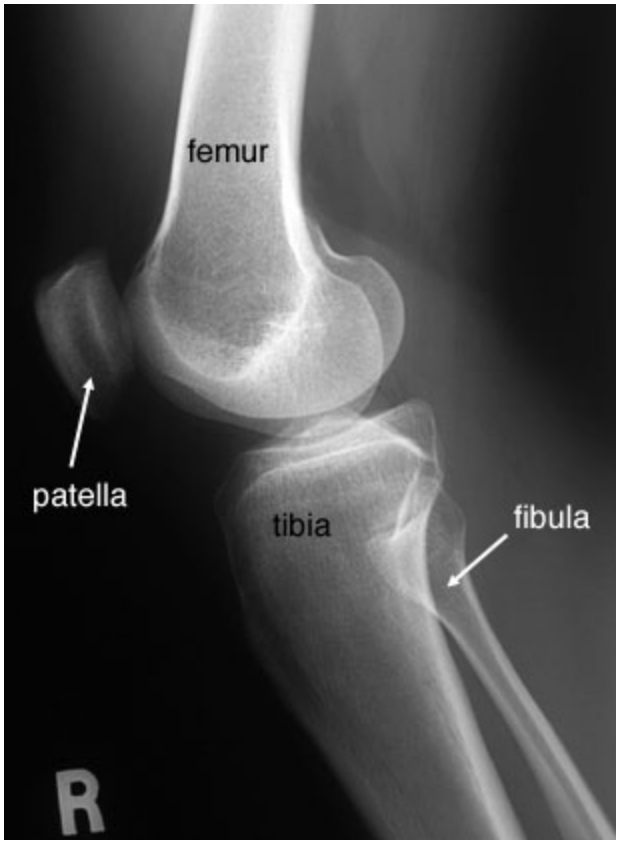
PELVIS-AP VIEW



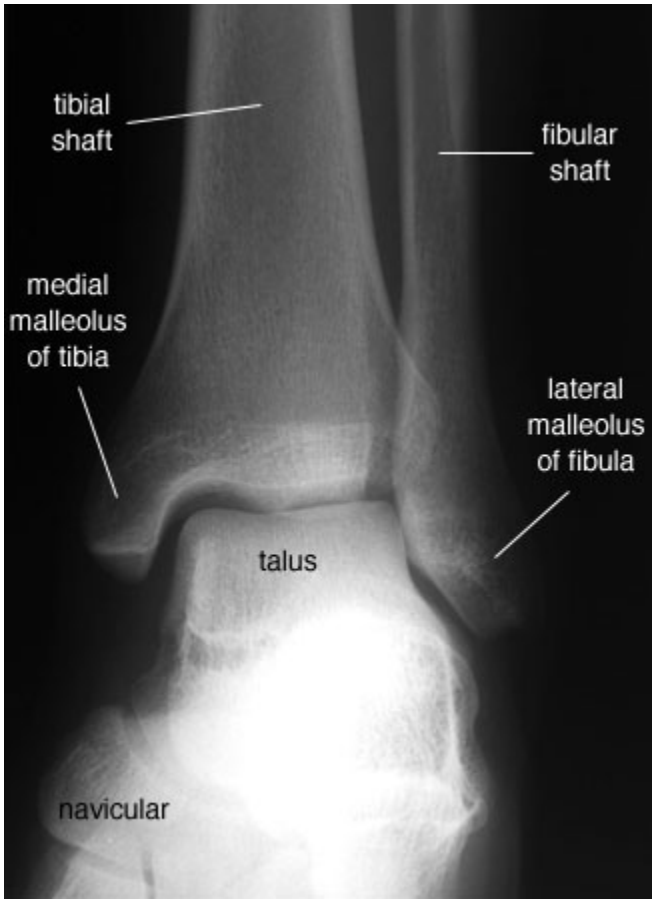
KNEE-AP VIEW



KNEE-LATERAL VIEW

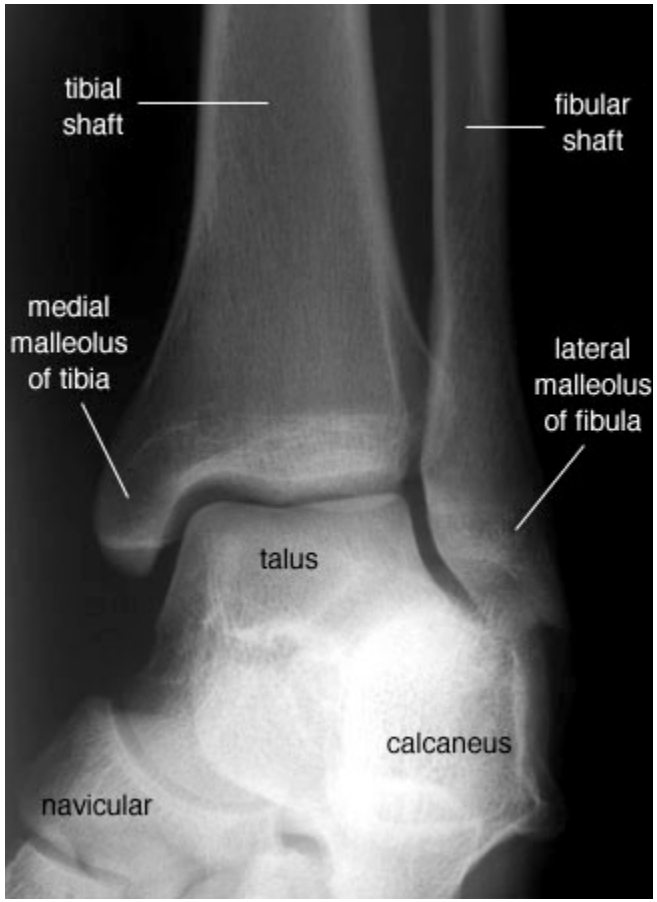


ANKLE-AP VIEW



ANKLE-LATERAL VIEW

ANKLE-MORTISE VIEW

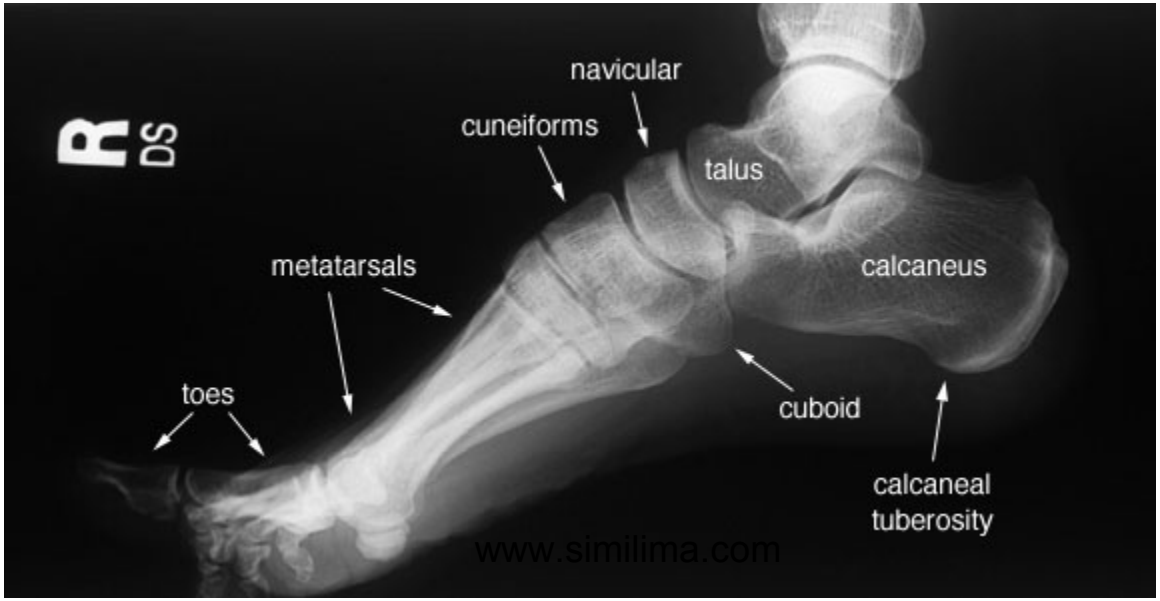



R
DS

FOOT-AP VIEW

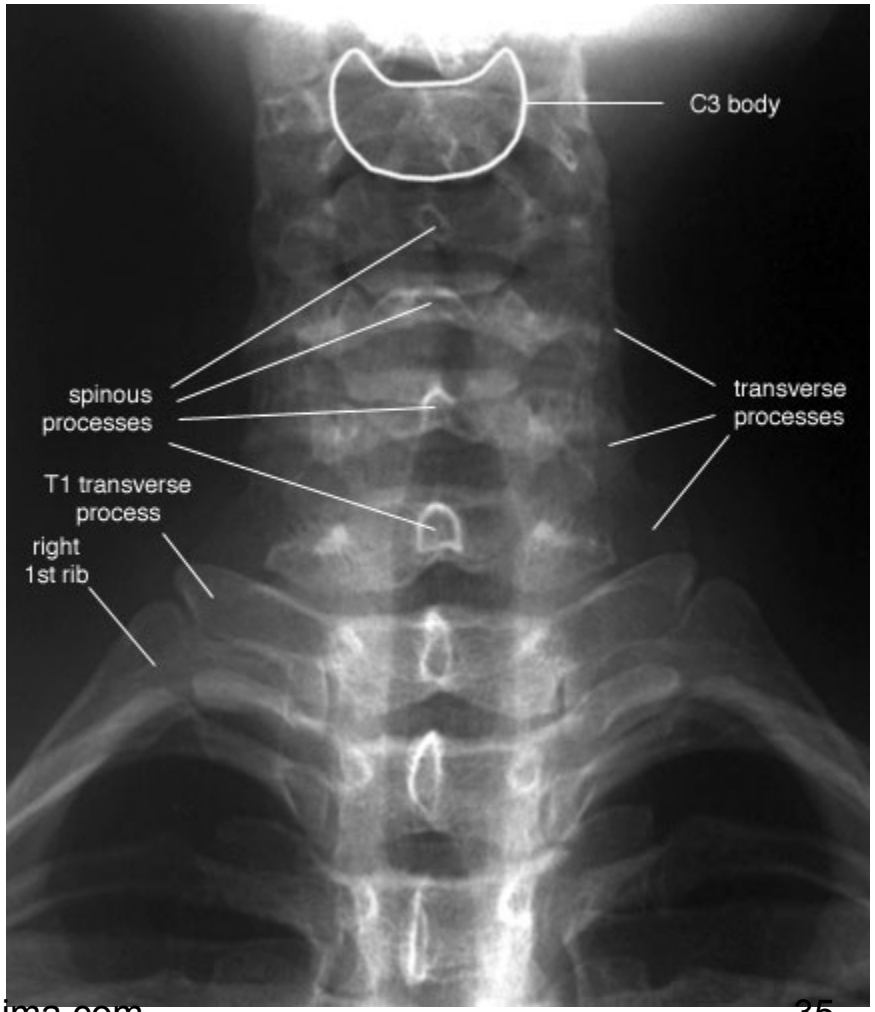

PP = proximal phalanx
MP = middle phalanx
DP = distal phalanx
MT = metatarsal
cun = cuneiform
1st DP
2 DP
2 MP
3 DP
3 MP
4 DP
4 MP
5 DP
5 MP
1st PP
2 PP
3 PP
4 PP
5 PP
sesamoids
1st MT
2nd MT
3rd MT
4th MT
5th MT
1st cun
2nd cun
3rd cun
navicular
cuboid
talus
calcaneus

FOOT-LATERAL VIEW

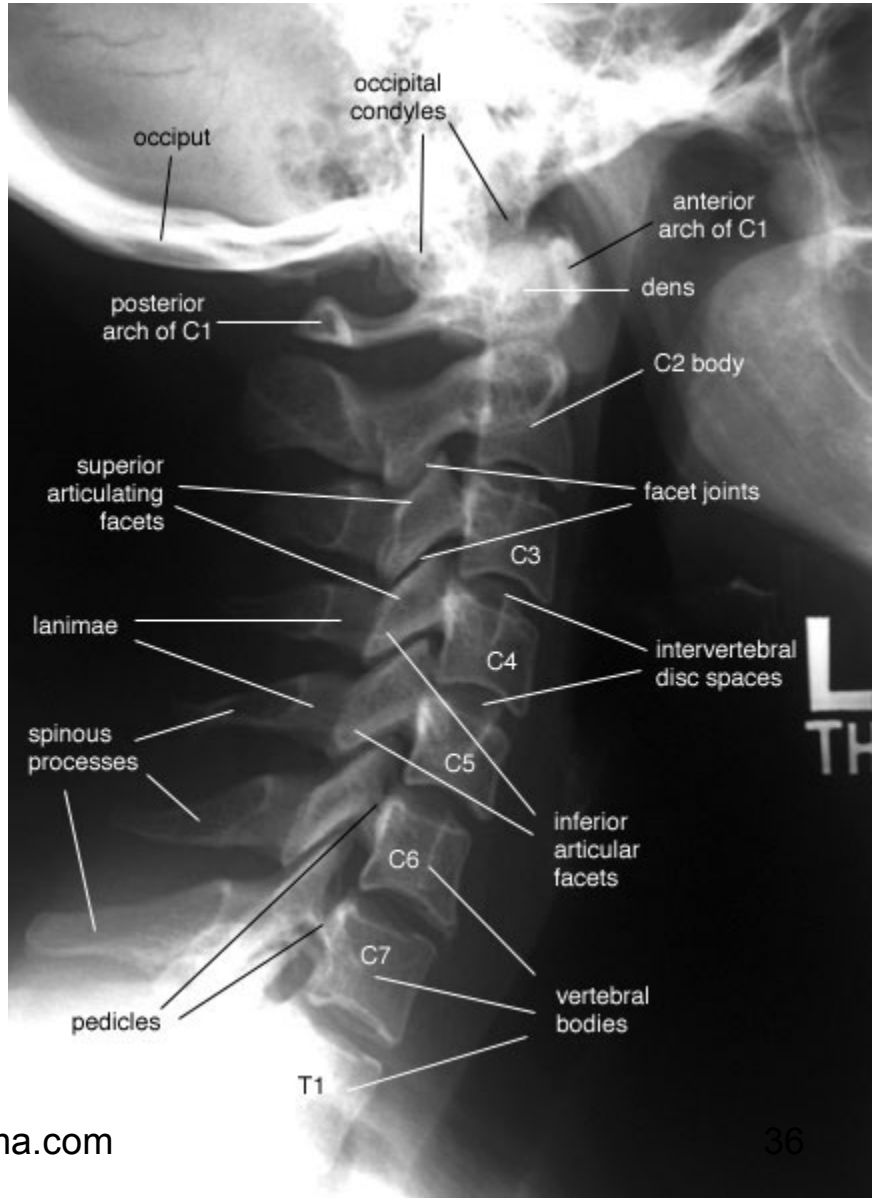


FOOT-OBLIQUE VIEW

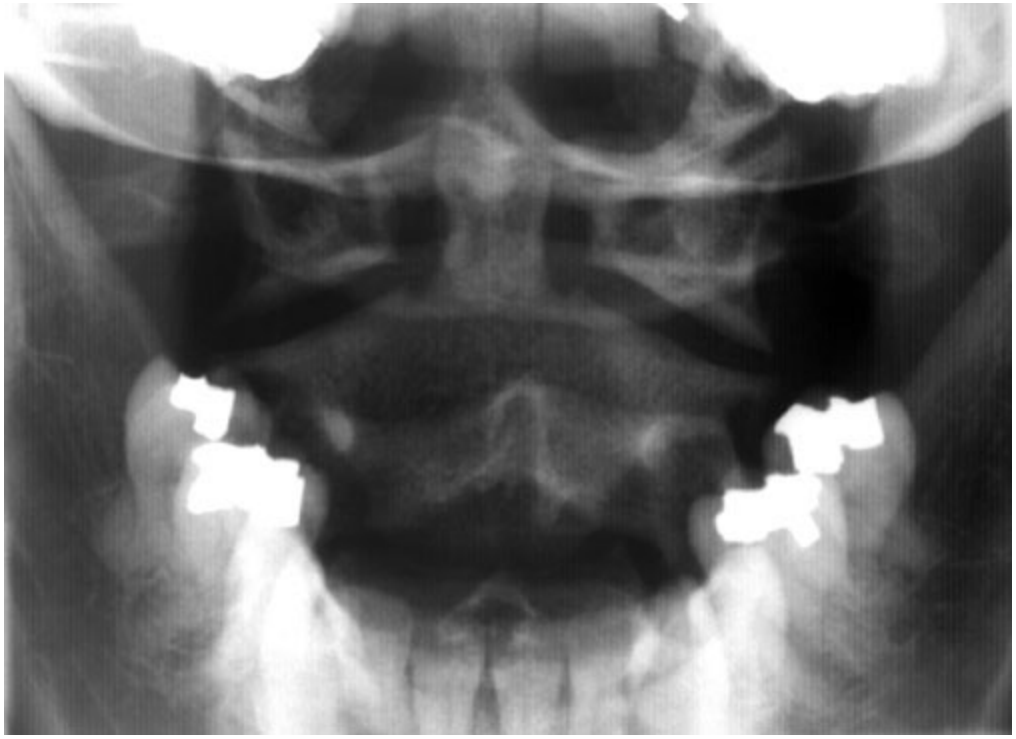
CERVICAL SPINE-AP VIEW



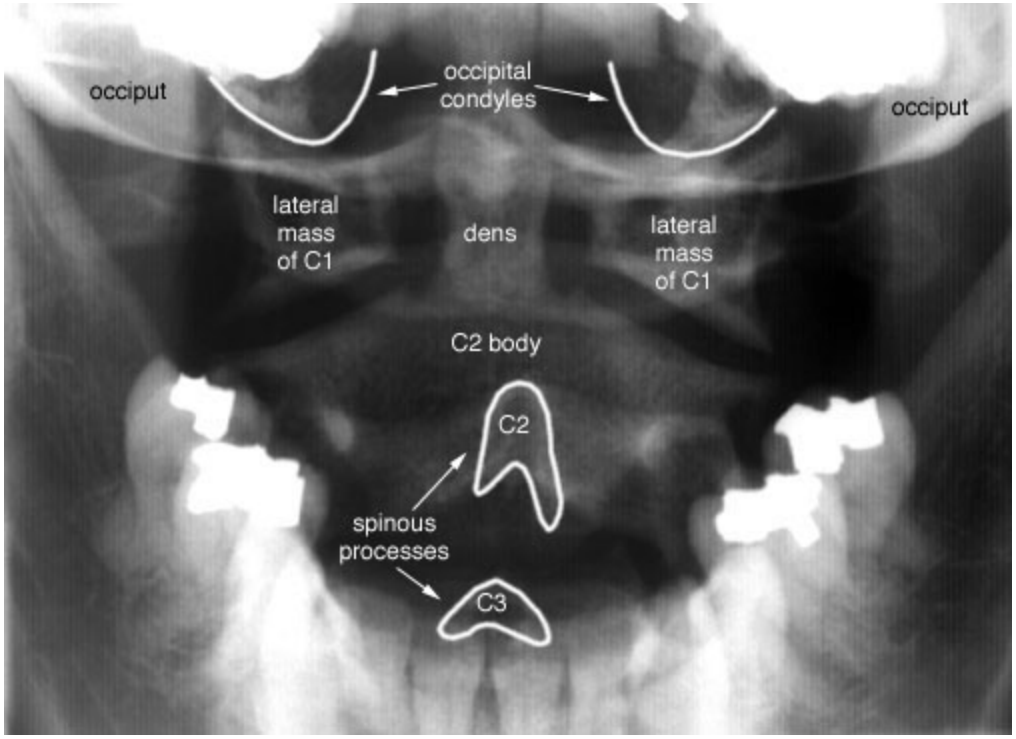
CERVICAL SPINE-LATERAL VIEW



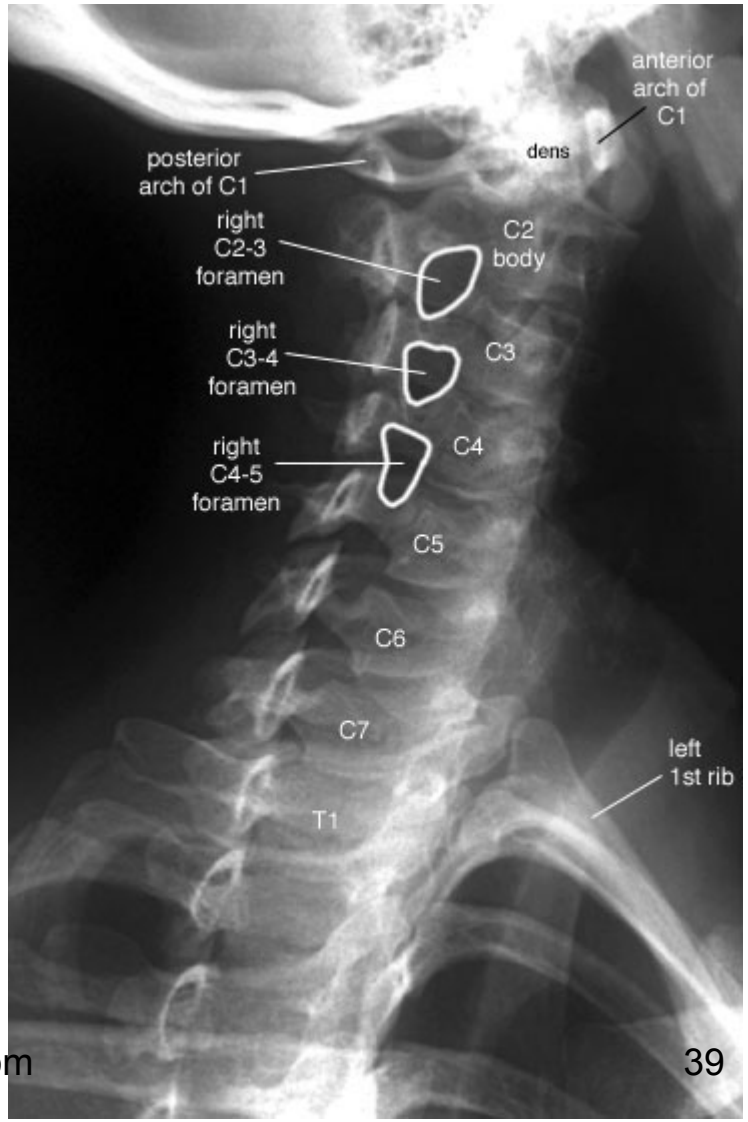
Cervical Spine -- Open Mouth (Dens) View



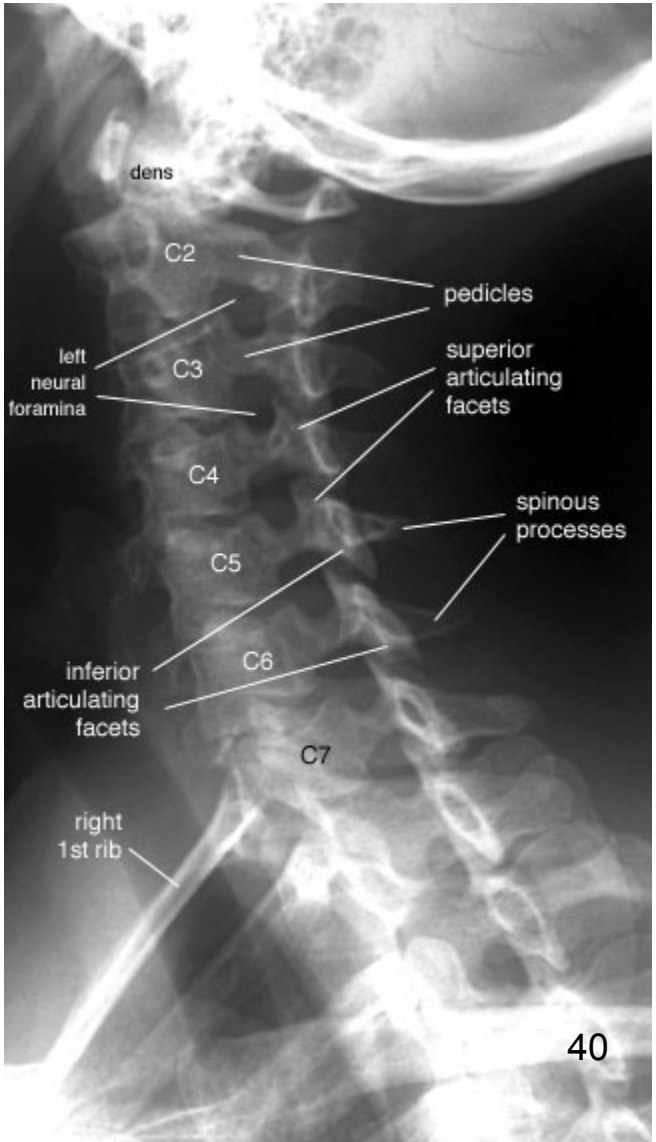
Cervical Spine -- Open Mouth (Dens) View



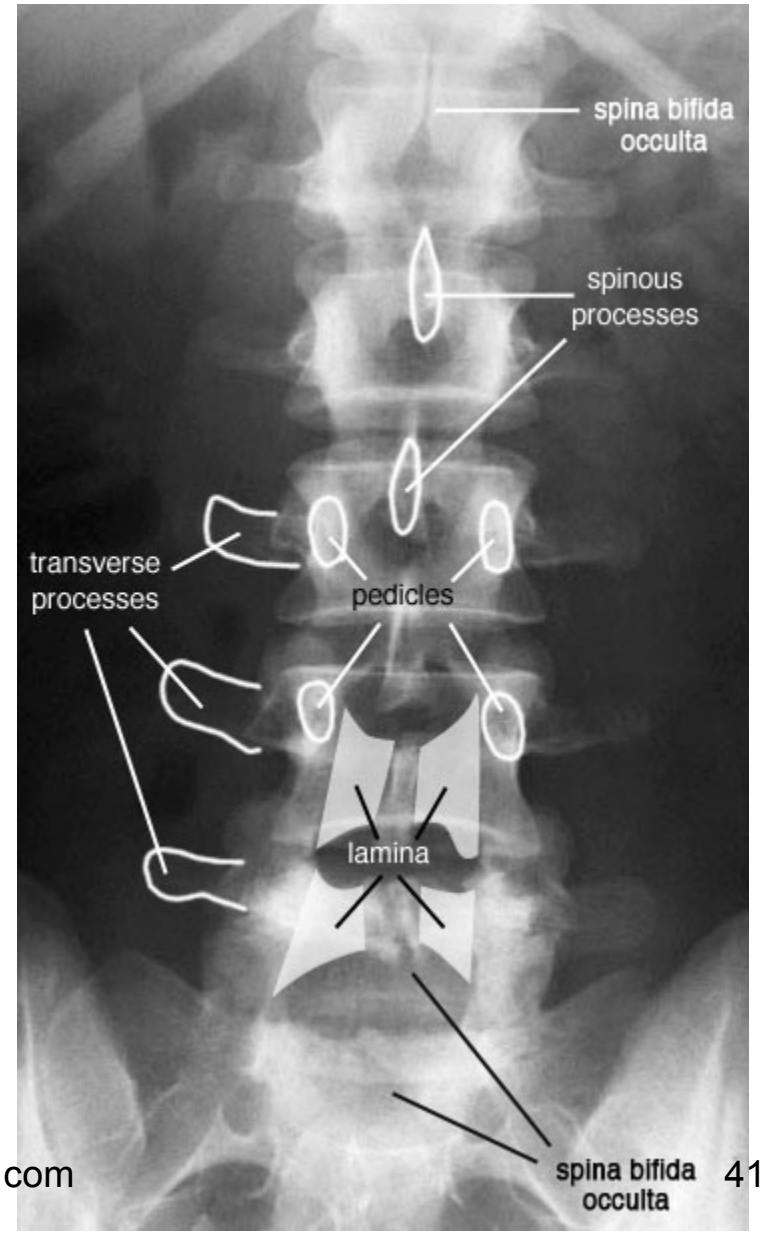
CERVICAL SPINE-RIGHT ANTERIOR OBLIQUE VIEW



CERVICAL SPINE-LEFT ANTERIOR OBLIQUE VIEW



LUMBAR SPINE –AP VIEW



LUMBAR SPINE-LATERAL VIEW