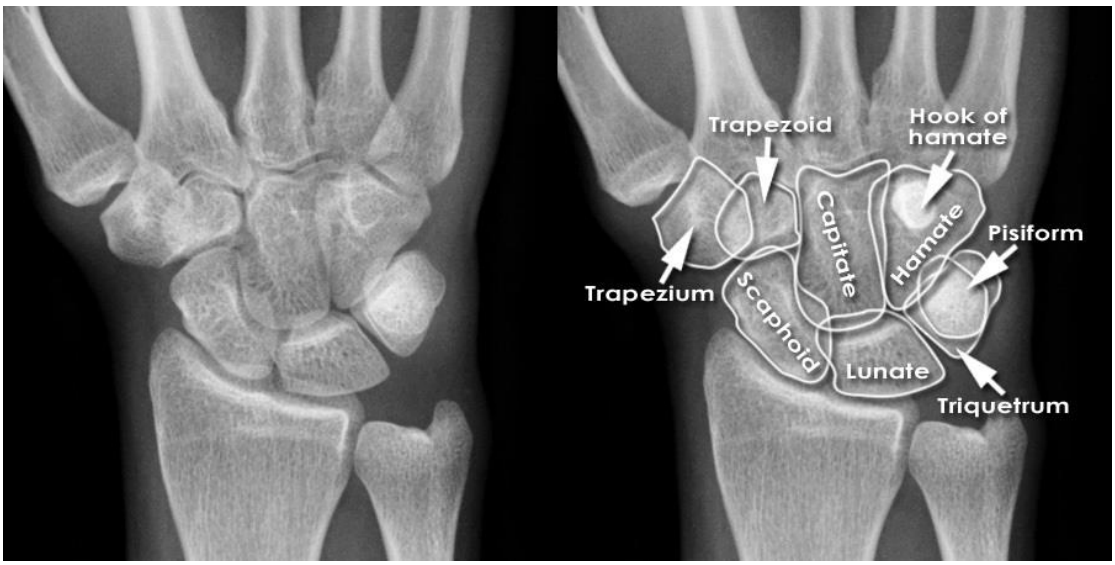
By Layth Kareem

Ms.c in MRI applications

radiographic techniques for upper limbs(lec8)

wrist joint(carpal bones)



scaphoid, lunate, triquetrum, and pisiform (proximal row)

trapezium, trapezoid, capitate, and hamate (distal row)

carpal bones are bones of the wrist that connect the distal aspects of the radial and ulnar bones of the forearm to the bases of the five metacarpal bones of the hand. There are eight carpal bones, which divide into two rows: a proximal row and a distal row

positioning of wrist joint

1. wrist PA

2.wrist lat

3.wrist medial oblique

4.wrist lat oblique

*PA and lateral are basic position of wrist x – ray

PA position of wrist joint

PA position

1. the patient is placed in sitting position

2. place the hand in pronation state on image receptor(IR)

3. Adhere the hand on the IR completely

4. place the wrist joint on the center of the IR

5. lower the shoulder to align wrist joint, elbow joint and shoulder joint

Evaluation

1.All the bones related to the wrist joint need to be included

2. distal radioulnar joint must not overlap

Region

-carpal bone**,**

Pathology

-fracture and osteoarthritis of ulna and radius ,ligament injury of wrist joint

IR size

(8*10 inch)

SID (100 cm)

Central ray

-project perpendicularly toward wrist joint

Respiration

-unrelated

KVP (52)

MAs (2.5)

Anatomy of wrist joint

Lateral position of wrist x ray

1. the patient is placed in sitting position
2. place the hand on image receptor(IR) in true lateral position.

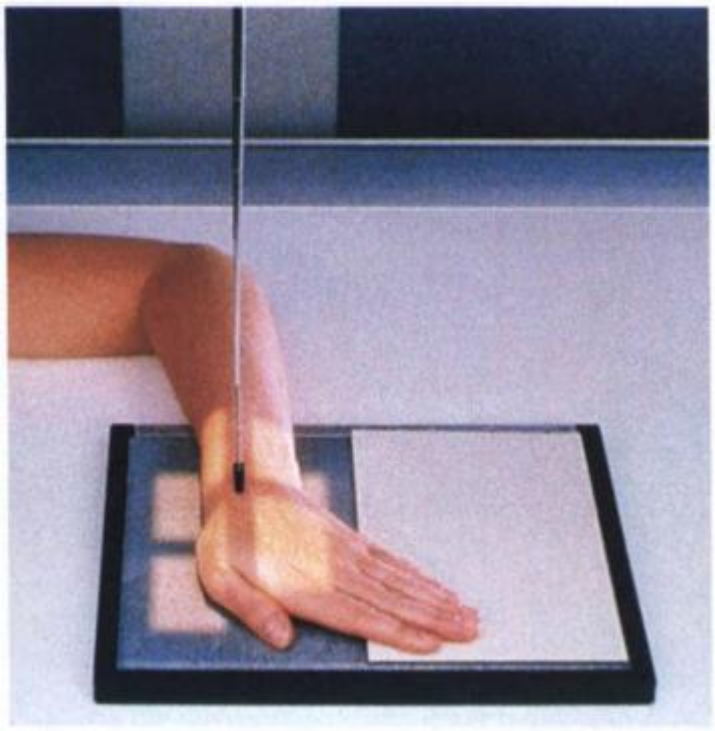
3. place the fingers overlap with each other

Anatomy of wrist joint PA position

Anatomy of wrist joint lateral position

Special position

-ulnar deviation position



Ulnar deviation position

1. the patient is placed in sitting position

2. place the hand in pronation state on image receptor(IR)

3. Adhere the hand on the IR completely and **flexion** the hand towards ulna

Pathology

-Fracture of scaphoid