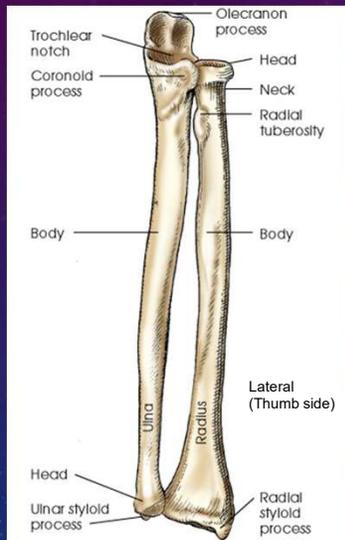


MI 133: CLINICAL SEMINAR II FOREARM & ELBOW

ANATOMY
2021

1

BONY ANATOMY - FOREARM



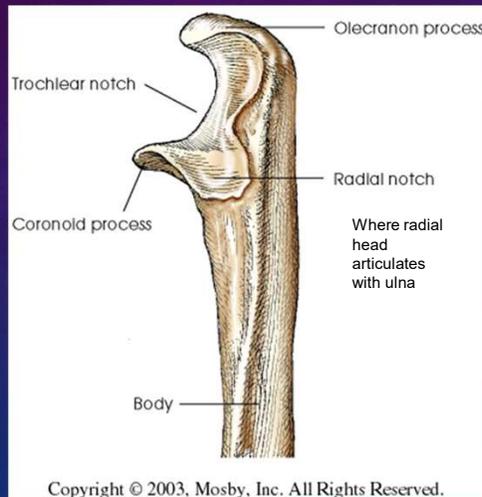
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2

Proximal Ulna

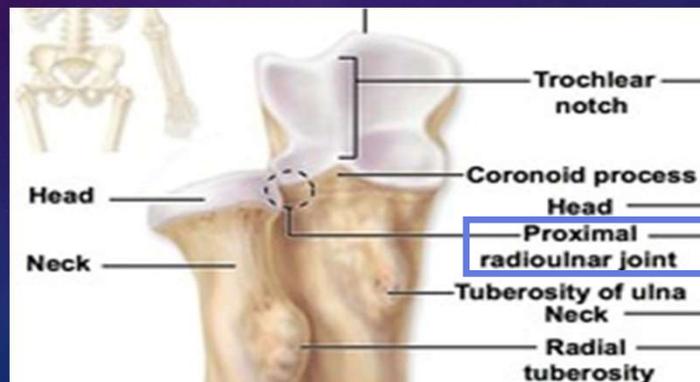


3

ARTICULATIONS

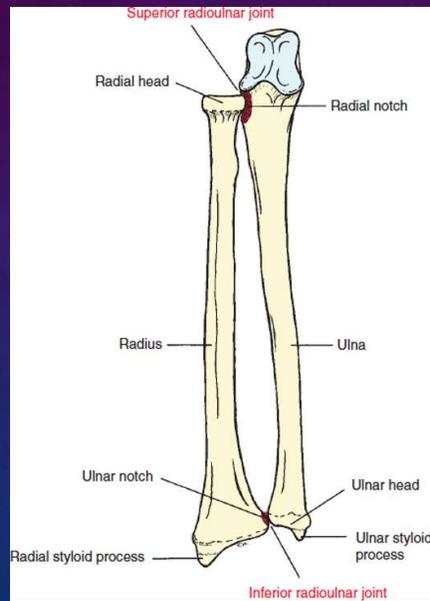
Proximal radioulnar joint (pivot, synovial)

- The head of the radius articulates with the radial notch of the ulna



4

DISTAL AND PROXIMAL RADIOULNAR JOINTS



5

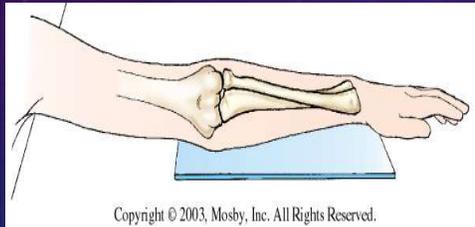
MOVEMENT

- The distal and proximal radioulnar joint make pronation and supination possible.



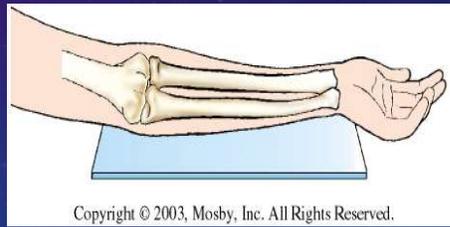
6

Pronation



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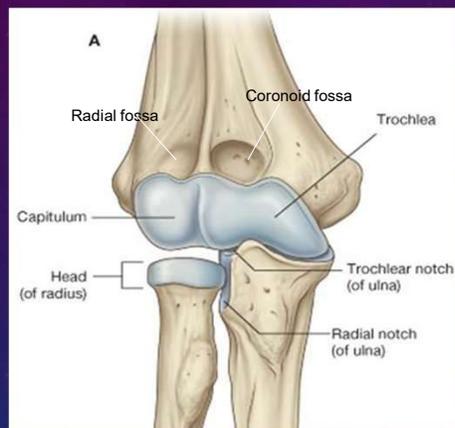
Supination



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7

BONY ANATOMY - ELBOW

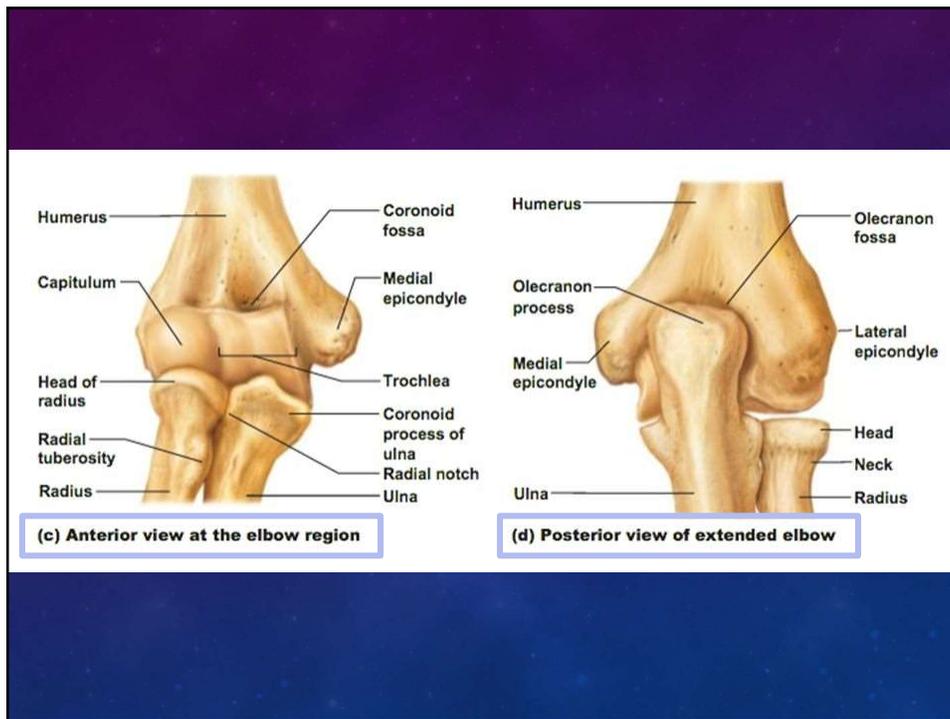


Anterior view



Humeral Condyles – Capitulum and Trochlea

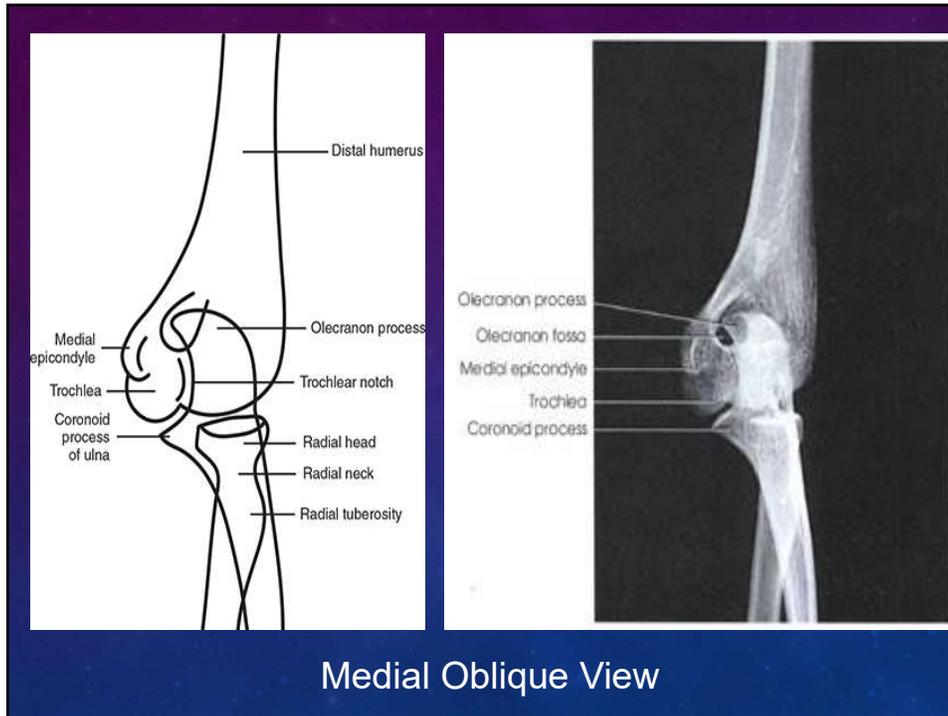
8



9



10



11

ARTICULATIONS

Humeroradial joint (hinge)

- The head of the radius articulates with the capitulum of the humerus

Humeroulnar joint (hinge)

- The trochlear notch of the ulna articulates with the trochlea of the humerus

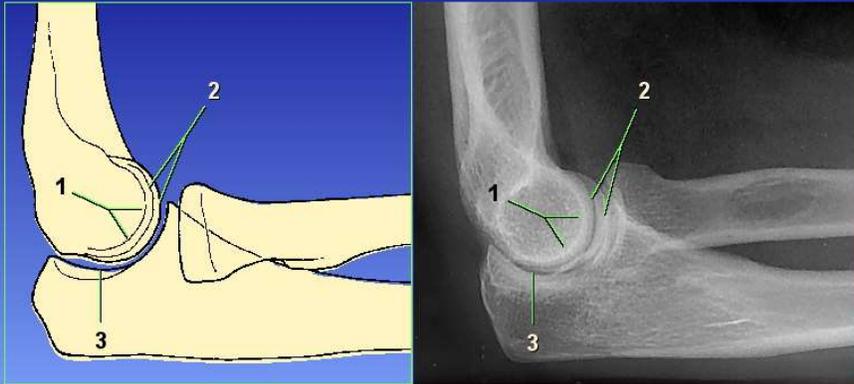
12

Three Concentric Arcs



13

1. Trochlear sulcus 2. Capitulum and trochlea 3. Trochlear notch



14

| JOINT | TISSUE | TYPE | MOVEMENT |
|---------------------|----------|------------------|-----------------|
| Radioulnar | | | |
| • Proximal | Synovial | Pivot (trochoid) | Freely moveable |
| • Distal | Synovial | Pivot (trochoid) | Freely moveable |
| Humeroulnar | Synovial | Hinge | Freely moveable |
| Humeroradial | Synovial | Hinge | Freely moveable |

Synovial

- Freely moveable and permit wide range of movements
- Capsule surrounds joint – thick yellow fluid called synovial fluid fills joint for lubrication between bones

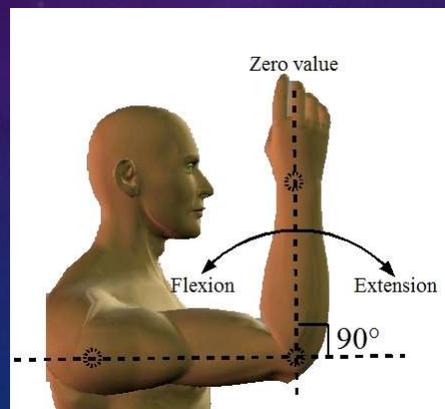
Type:

- Pivot (trochoid) – uniaxial movement/ rotation in 1 direction
- Hinge – flexion and extension only

15

MOVEMENTS

- Hinge joint - Flexion / Extension only



16

FAT PADS

- 3 areas of fat around elbow joint - anterior and supinator seen best - on lateral view
 - Can be displaced with fluid after injury and become more visualized; indicator of fracture or pathology.

