

Skeleton of the upper extremity

SKELETON OF THE UPPER EXTREMITY

I. Upper extremity girdle bones (cingulum)

clavicle– *clavicula*

shoulder blade – *scapula*

II. Bones of free upper extremity (extremitas libera)

arm bone– *humerus*

radial bone– *radius*

ulna– *ulna*

carpal bones– *ossa carpi*

metacarpal bones– *ossa metacarpi*

phalanges– *ossa digitorum manus*

clavicle– *clavicula*

- Long bone
- bone which ossified earliest
- body is S-shaped
- cranial surface- smooth
- Caudal surface- rough

Extremitas sternalis

(facies articularis sternalis)

Extremitas acromialis

(facies articularis acromialis)

- **extremitas sternalis** (*facies articularis sternalis*)
impressio ligamenti costoclavicularis
sulcus subclavius
- **extremitas acromialis** (*facies articularis acromialis*)
tuberositas coracoidea (tuberculum conoideum et
linea trapezoidea)

clavicle

Shoulder blade – scapula

- In height of 2nd to 7th rib
- **margo superior**
(**incisura scapulae**, processus coracoideus)
- **margo medialis**
- **margo lateralis**
(cavitas glenoidalis, tuberculum supraglenoidale,
tuberculum infraglenoidale, collum scapulae)
- **angulus**: superior, inferior, lateralis

- **facies dorsalis**

- spina scapulae – protrudes laterally as acromion with facies articularis acromii
- fossa supraspinata
- fossa infraspinata

- **facies costalis**

- fossa subscapularis (lineae musculares)

Arm bone– *humerus*

- **Proximal end (caput):**

caput humeri

collum anatomicum

tuberculum majus et minus

crista tuberculi majoris et minoris

sulcus intertubercularis

collum chirurgicum

- **Corpus:**

tuberositas deltoidea

sulcus nervi radialis

- **Distal end (condylus):**

epicondylus medialis (sulcus n. ulnaris)

epicondylus lateralis

trochlea humeri (fossa coronoidea)

capitulum humeri (fossa radialis)

fossa olecrani

Radial bone – *radius*

- **Proximal end:**

caput radii

(fovea capitis radii,
circumferentia articularis)

- **collum radii**

- **corpus:**

tuberositas radii

margo interosseus

- **Distal end:**

processus styloideus radii

facies articularis carpea radii

incisura ulnaris radii

sulci tendinum musculorum extensorum

ulna – *ulna*

• **Proximal end:**

olecranon ulnae

incisura trochlearis

processus coronoideus

tuberositas ulnae

incisura radialis ulnae

crista musculi supinatoris

• **corpus:**

margo interosseus

margo posterior

• **Distal end:**

caput ulnae

circumferentia articularis

processus styloideus ulnae

Hand bones– Ossa manus

Carpal bones– *ossa carpi*

Metacarpal bones– *ossa metacarpi*

Phalanges– *ossa digitorum manus (phalanges)*

Carpal bones– ossa carpi (8)

- Proximal row (from thumb):

Scaphoid bone– **os scaphoideum**

(tuberculum ossis scaphoidei)

Lunate bone– **os lunatum**

Triquetral bone– **os triquetrum**

Pisiform bone– **os pisiforme**

- Distal row (from thumb):

trapezium– **os trapezium**

(tuberculum ossis trapezii)

trapezoidium– **os trapezoidium**

capitate– **os capitatum**

(caput ossis capitati)

hamate– **os hamatum**

(hamulus ossis hamati)



The bones are arranged in that way, they form an arch which is convex dorsally = sulcus carpi, bounded by eminentia carpi radialis et ulnaris

Ossification of carpal bones

Metacarpal bones– ossa metacarpi

ossa metacarpi I. – V.
(from thumb)

basis

corpus

caput

The 3rd metacarpal
bone has processus
styloideus

phalanges– ossa digitorum manus

Phalanges

2nd– 5th finger: phalanx proximalis, media et distalis

thumb: phalanx proximalis et distalis

basis

corpus

caput (trochlea)

•On the distal phalanx

tuberositas phalangis

distalis

Ossa sesamoidea manus

- within metacarpophalangeal joints of the thumb: lateral and medial ones
- They develop in muscle insertions and tendons (they protect the joint)
- *os pisiforme*

Thank you for your attention.