

ULNA

- The ulna is the medial bone of the forearm
- it is homologous with the fibula of the lower limb.
- It has upper end, shaft and a lower end.
- It is important to note that the head of the bone is in the lower end

Side Determination the upper end is large and irregular, while the lower end is small

1. The upper end is hook-like, with its concavity directed forwards.
2. The lateral border of the shaft is sharp and thin, while medial side is rounded.
3. Pointed styloid process lies posteromedial to the rounded head of ulna at its lower end.

Upper end

- The upper end of the ulna is large and consists of two prominent projections called the olecranon and coronoid processes, and the trochlear and radial notches
- The olecranon process projects upwards from the shaft.
- It has superior, anterior, posterior, medial and lateral surfaces. .
- The anterior surface is articular, it forms the upper part of the trochlear notch .
- The posterior surface forms a triangular subcutaneous area which is separated from the skin by a bursa.

- The medial surface is continuous inferiorly with the medial surface of the shaft.
- The lateral surface is smooth, continues as posterior surface of shaft. .
- The superior surface in its posterior part shows a roughened area.

- The coronoid (Greek like crow's beak) process projects forwards from the shaft just below the olecranon and has four surfaces, namely superior/ anterior, medial and lateral.
- The superior surface forms the lower part of the trochlear notch.
- The anterior surface is triangular and rough. Its lower parts shows a rough projection called tuberosity of the ulna .
- The upper part of its lateral surface is marked by the radial notch for the head of the radius.
- A depression is seen just below the radial notch the posterior border of this depression is formed by a ridge called the supinator crest
- Medial surface is continuous with medial surface of the shaft

- The **trochlear notch** forms an articular surface that articulates with the trochlea of the humerus to form the elbow joint
- The **radial notch** articulates with the head of the radius to form the superior radioulnar joint

Shaft

- The shaft has three borders and three surfaces
- The **interosseous** or lateral border is sharpest in its middle two-fourths. Inferiorly, it can be traced to the lateral side of the head. Superiorly, it is continuous with the supinator crest.
- The **anterior border** is thick and rounded. It begins above on the medial side of the ulnar tuberosity terminates at the medial side of the styloid process

The **posterior border** is subcutaneous. It begins, above, at the apex of the triangular subcutaneous area at the back of the olecranon, and terminates at the base of the styloid process

Surface

The anterior surface lies between the anterior and interosseous border A nutrient foramen

The medial surface lies between the anterior and posterior borders.

3 The posterior surface lies between the posterior and interosseous borders. It is subdivided into three areas by two lines. An oblique line divides it into upper and lower parts. The lower part is further divided by a vertical line into a medial and a lateral area

Lower End

- The lower end is made up of the head and the styloid process.
- The head articulates with the ulnar notch of the radius to form the inferior radioulnar joint.
- It is separated from the wrist joint by the articular disc. Ulnar artery and nerve lie on the anterior aspect of head of ulna.
- The styloid process projects downwards from posteromedial side of lower end of the ulna. between the head and the styloid process, there is groove for the tendon of the extensor carpi ulnaris

- Madelung's deformity is dorsal subluxation (displacement) of the lower end of the ulna, due to retarded growth of the lower end of the radius

