

Muscle Actions for Pronation and Supination

- **Supinators:**

- Biceps brachii (prime supinator).
- Supinator muscle (located in the posterior forearm).

- **Pronators:**

- Pronator teres (from the medial epicondyle).
- Pronator quadratus (helps with wrist and forearm pronation).

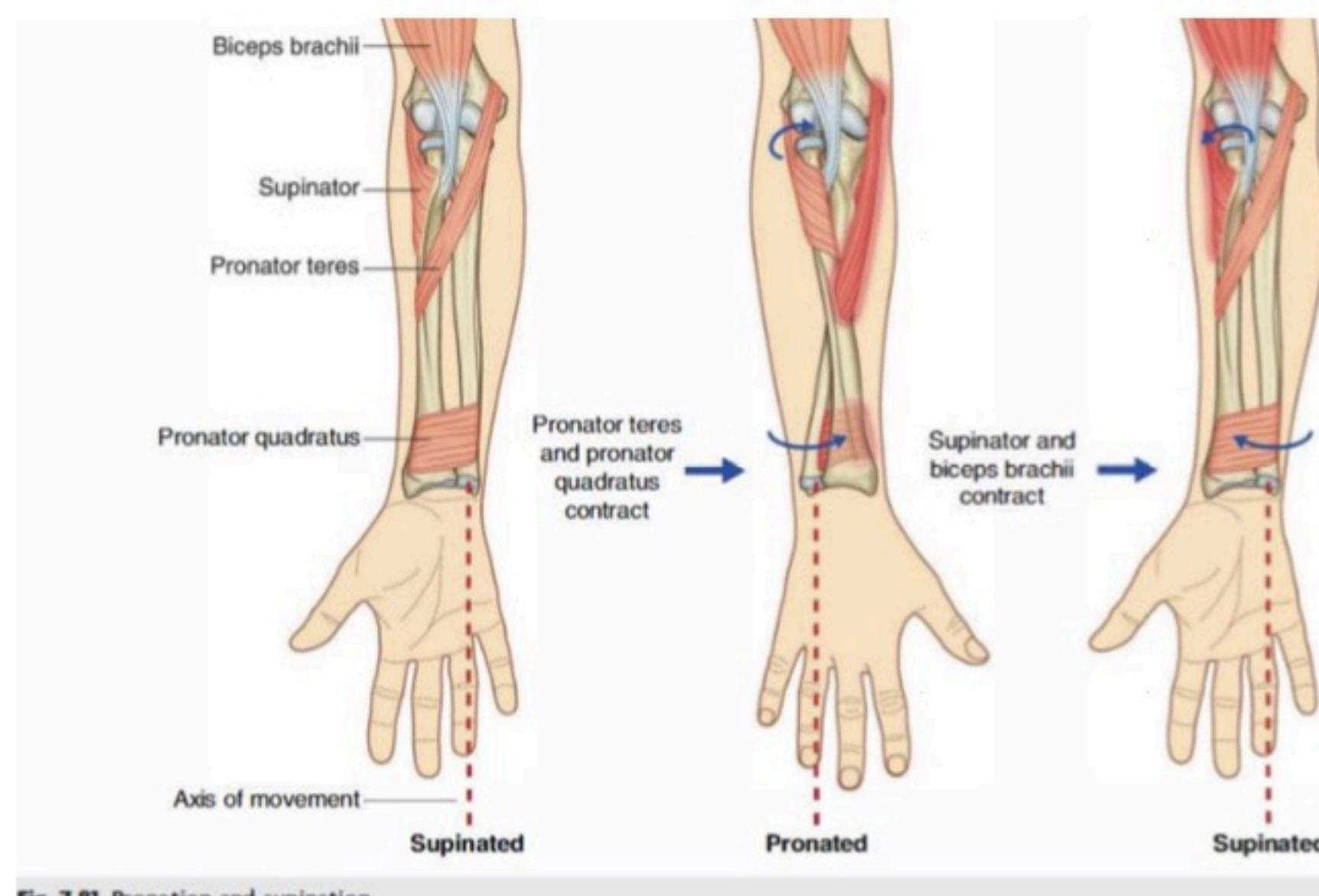
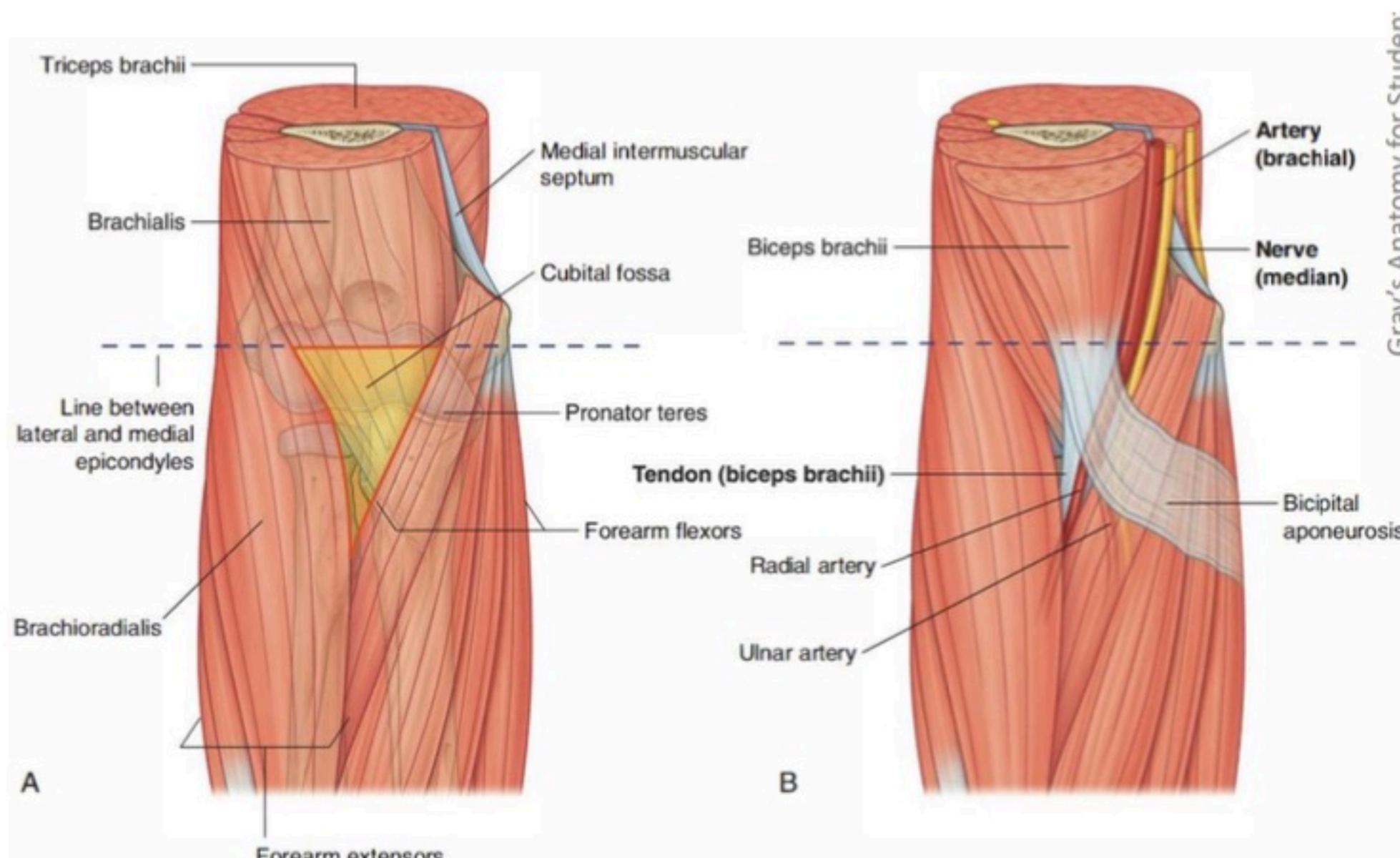


Fig. 7.81 Pronation and supination.

Cubital Fossa

The fossa can be compared to the popliteal fossa at the back of the knee. The cubital fossa is an anatomical region located at the anterior elbow, shaped like an upside-down triangle. The apex of the triangle points downward, while the base is formed by an imaginary line drawn between the medial and lateral epicondyles of the humerus.



Boundaries of the Cubital Fossa

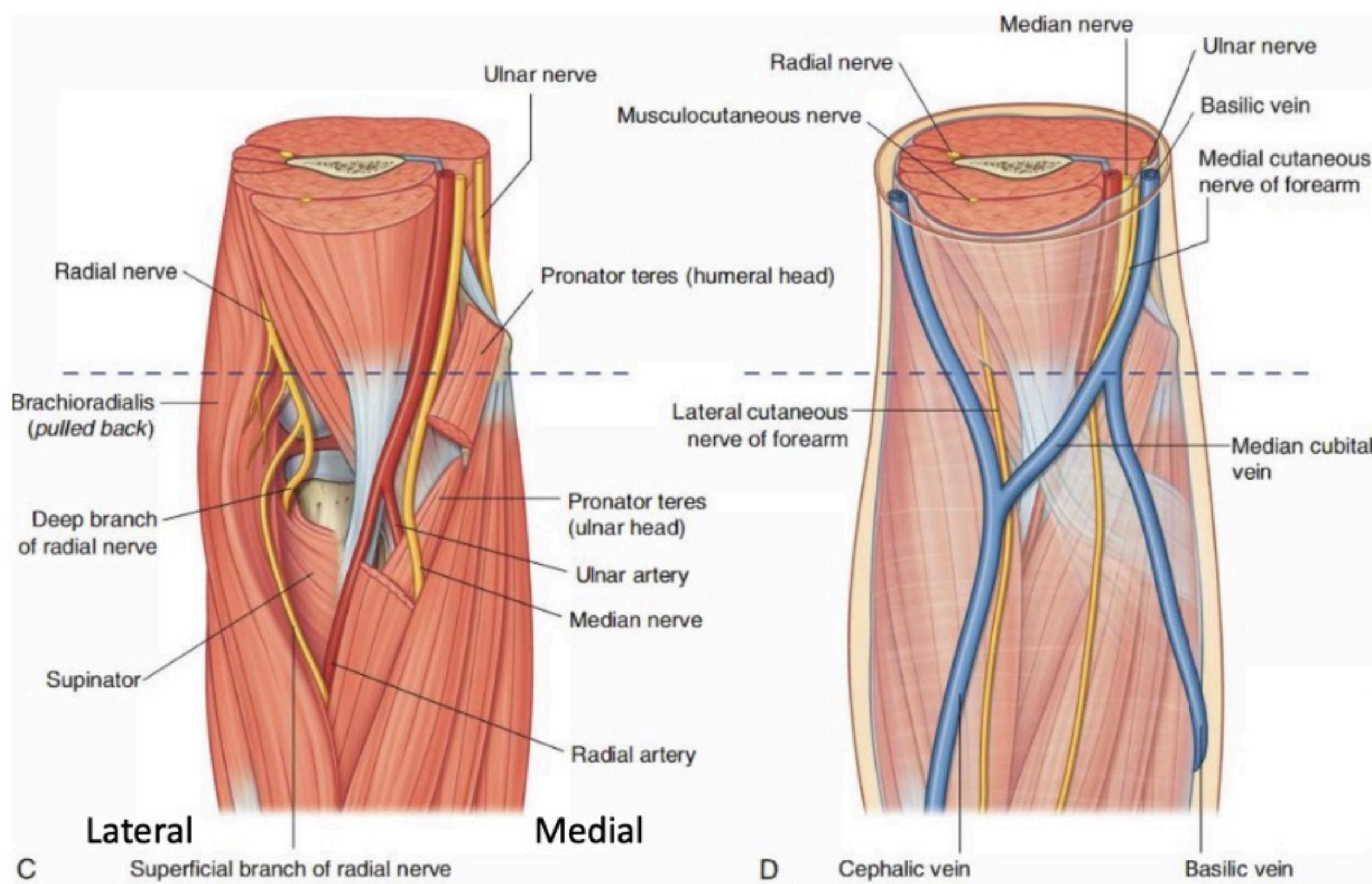
- **Floor:** Brachialis muscle
- **Superior border:** Line between epicondyles
- **Medial Border:** Pronator teres muscle, originating from the medial epicondyle.
- **Lateral Border:** Brachioradialis muscle.
- **Roof:** Skin, superficial fascia and bicipital aponeurosis

Contents of the Cubital Fossa

The contents of the cubital fossa can be remembered using the acronym "RBAN," which stands for:

- **R:** Radial nerve (lateral most structure)
- **B:** Biceps brachii tendon
- **A:** Brachial artery
- **N:** Median nerve (medial most structure)

The brachial artery bifurcates (divides) into its radial and ulnar branches within the cubital fossa. The median nerve passes between the two heads of the pronator teres muscle.



Superficial Structures

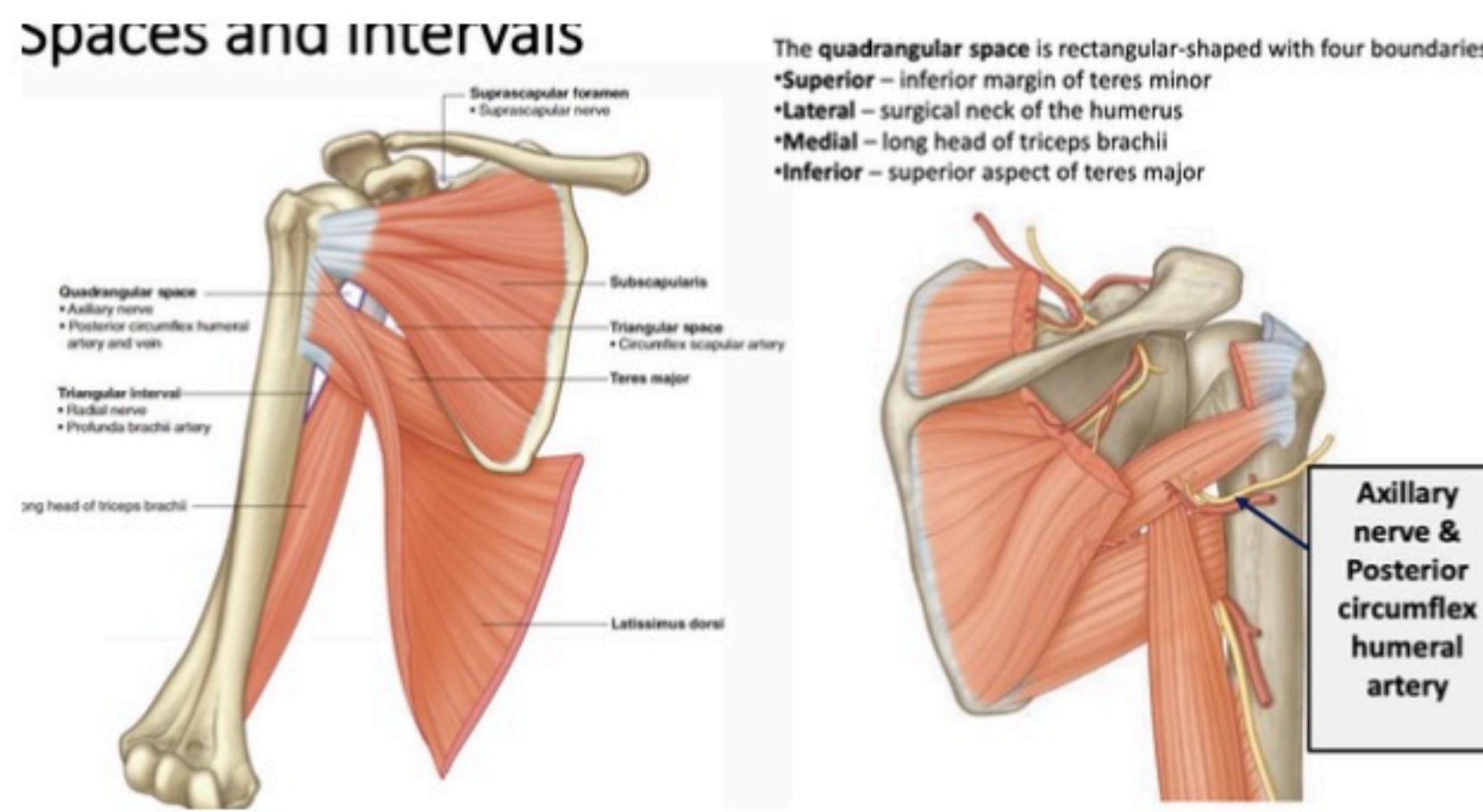
In addition to the deeper structures, the median cubital vein is located superficially in the cubital fossa. This vein is commonly used for venipuncture, such as for blood tests.

Quadrangular Space

Above the cubital fossa lies the quadrangular space, which is formed by the following structures:

- **Muscles:** Teres minor (superior), Teres major (inferior), and the long head of the triceps (forming the vertical walls).
- **Bone:** Humerus.

The quadrangular space contains the axillary nerve and the posterior circumflex humeral artery. Damage to these structures can occur due to muscle injuries or fractures in the surrounding bones.



Triangular Interval

Located just below the quadrangular space is the triangular interval, which is defined by:

- **Muscles:** Teres major (superior), long head of the triceps (medial), and the humerus (lateral).

The contents of the triangular interval include the radial nerve and the deep brachial artery. It is important to differentiate this space from the triangular space, which is a separate anatomical area.

