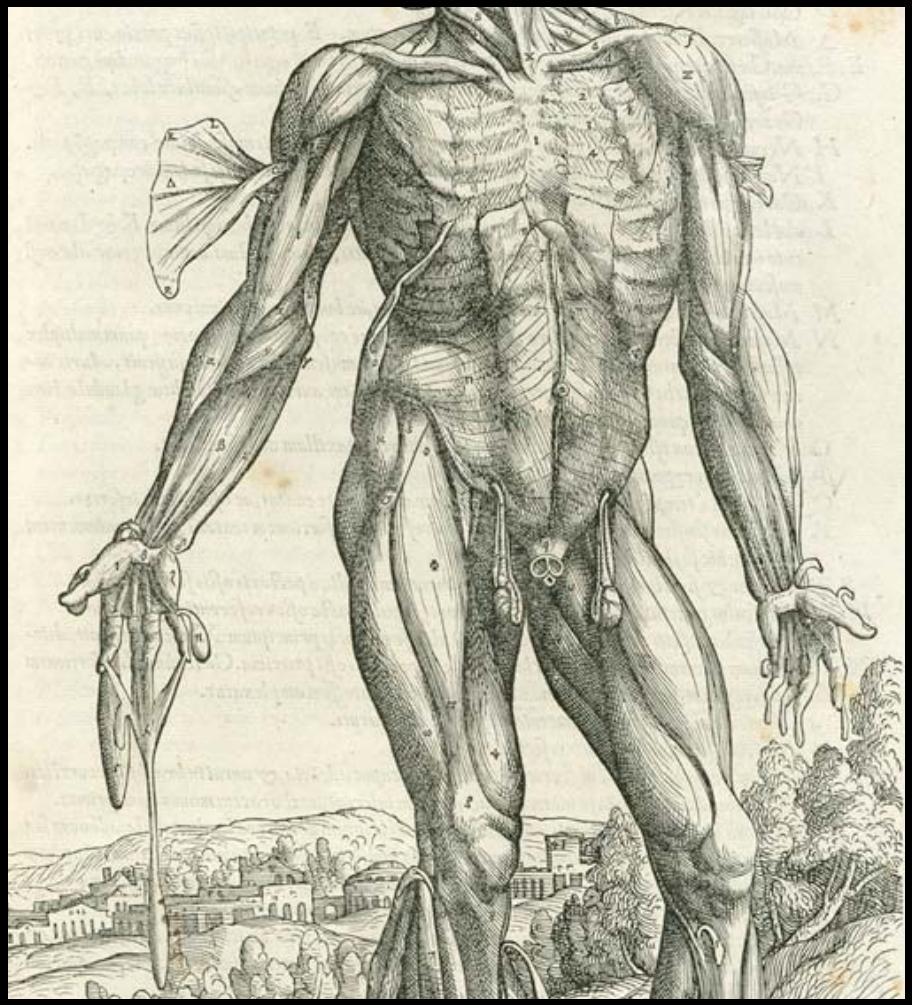
G26: Forearm and Wrist



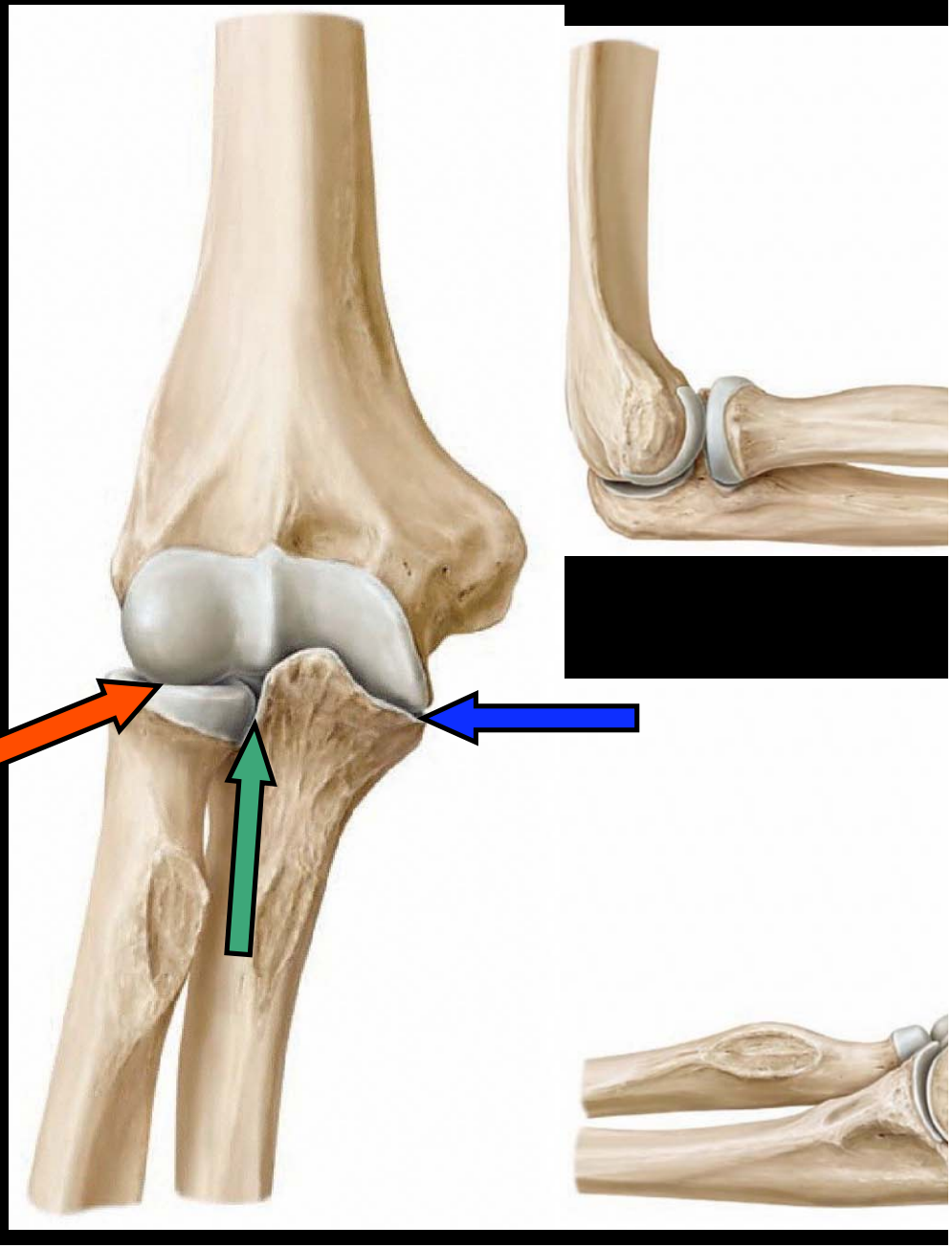
Pg.

4) Elbow Joint

Elbow joints

- Humeroradial joint
- Humeroulnar joint

- Prox. radioulnar joint

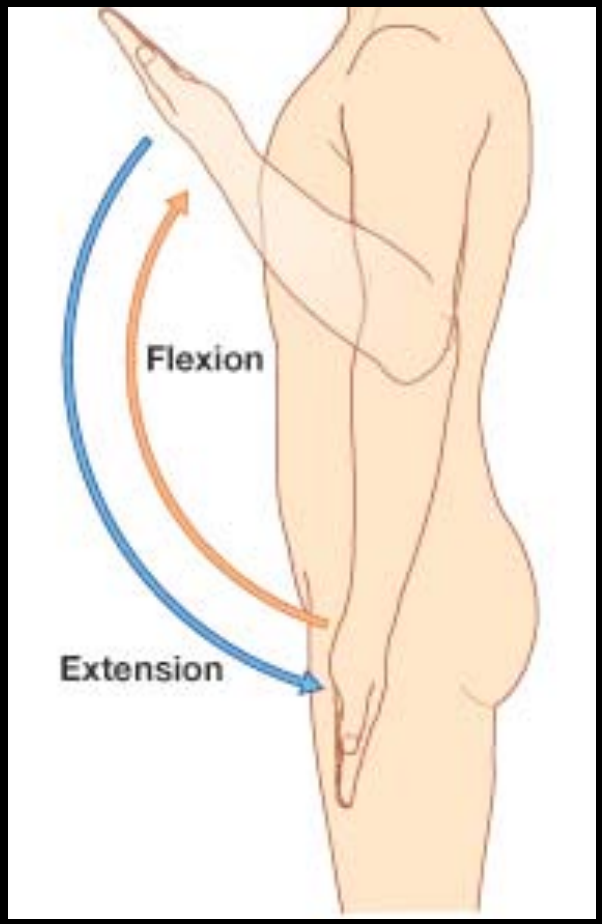


Supine
(supination)

Prone
(pronation)

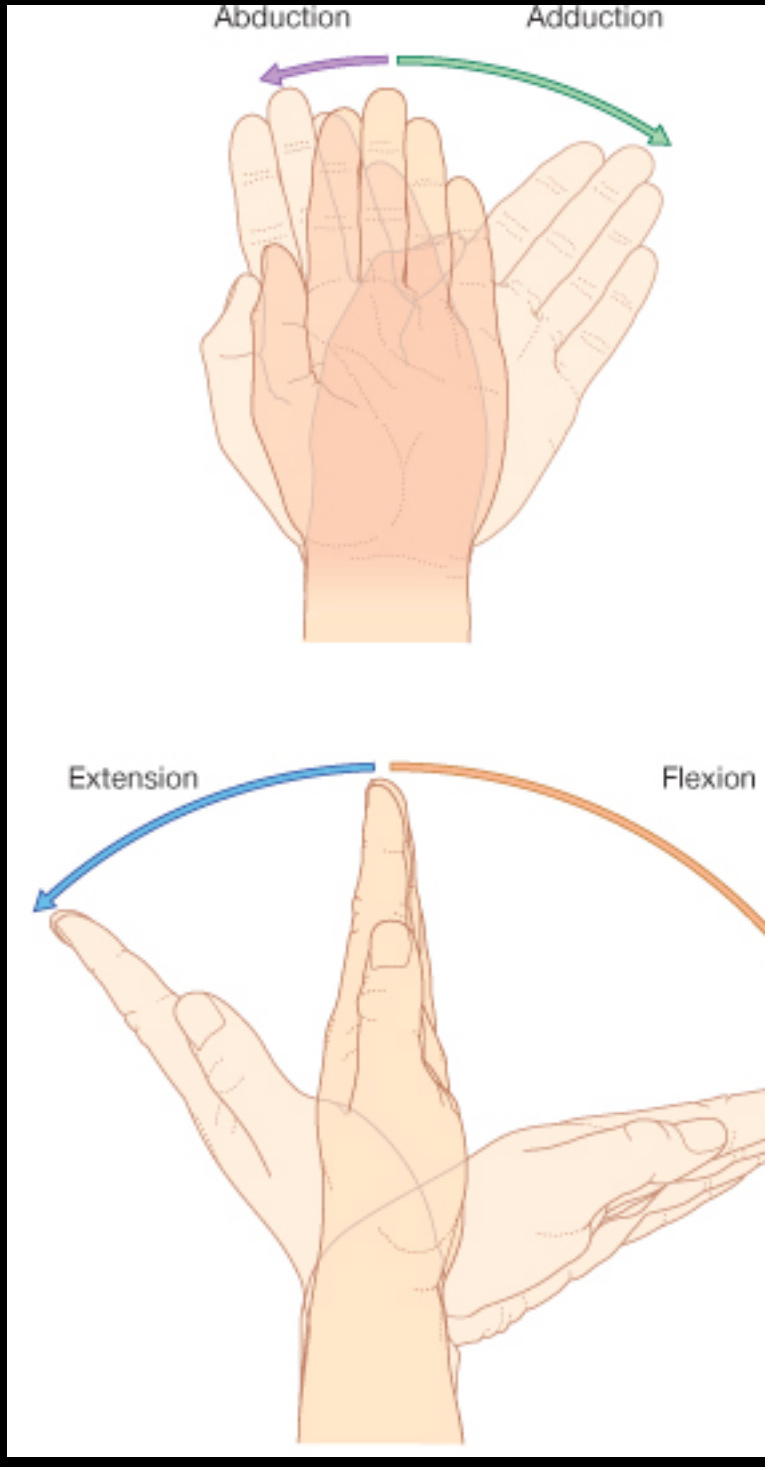
Elbow

- Flexion
- Extension



Wrist

- Adduction (ulnar deviation)
- Abduction (radial deviation)
- Flexion
- Extension

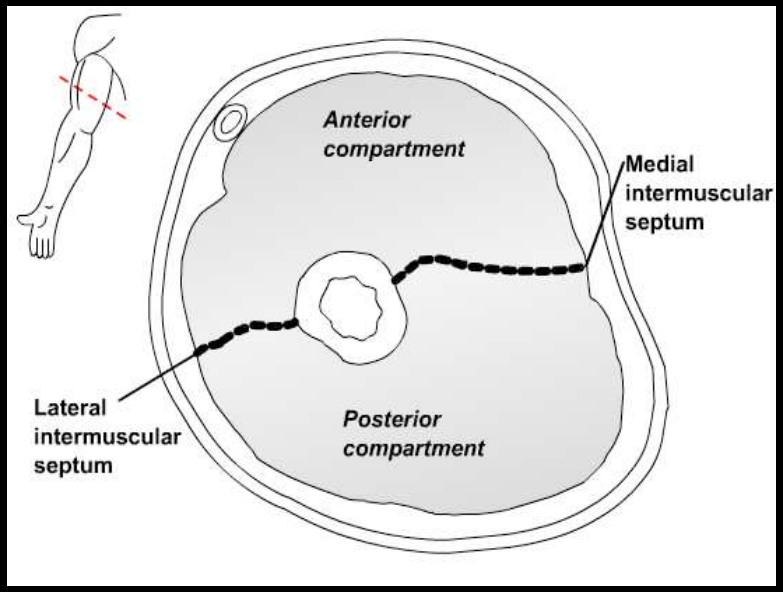


Right upper limb
- Glenohumeral joint
- Elbow (2)
- Wrist

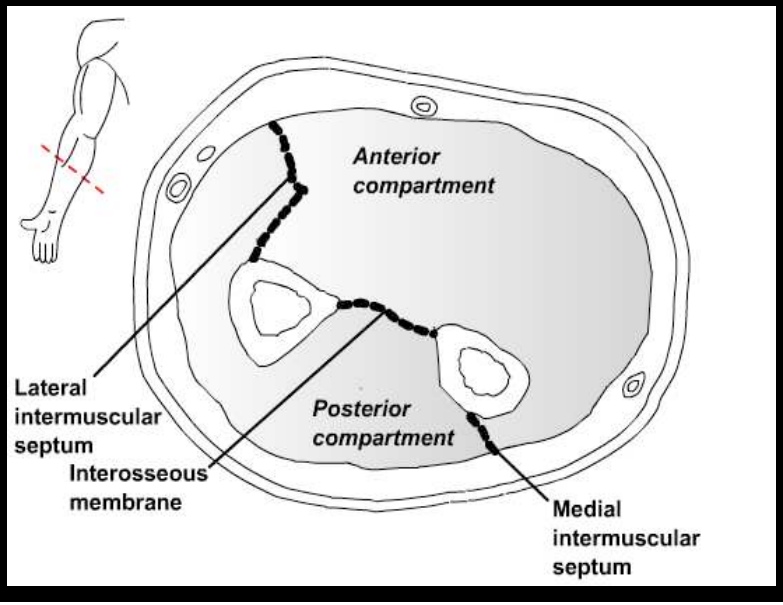
Left upper limb
- Glenohumeral joint
- Elbow (2)
- Wrist

1) Muscles of the Antebrachium

Arm

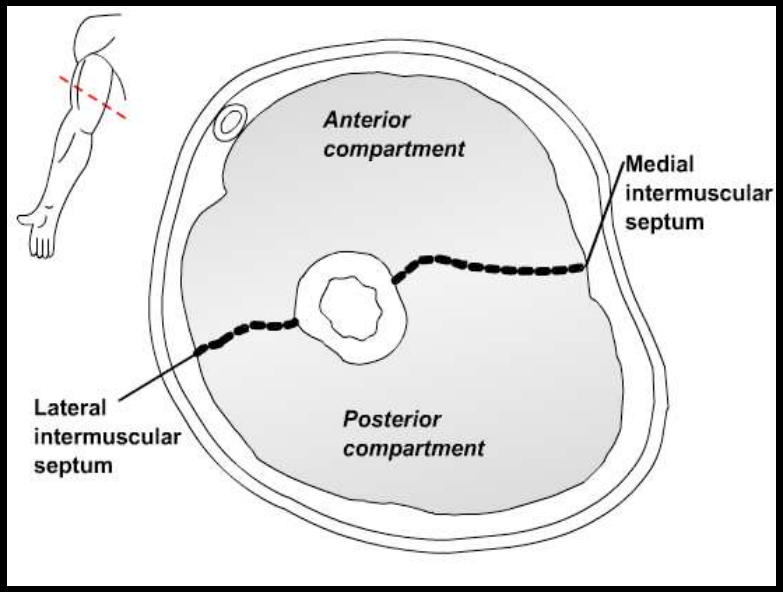


Forearm



1) Muscles of the Antebrachium

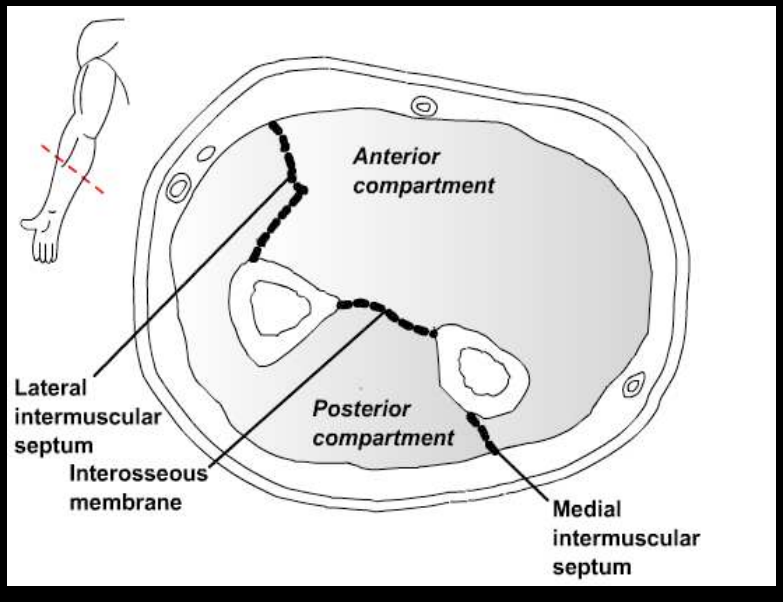
Arm



A: Flexion
N: Musculocutaneous

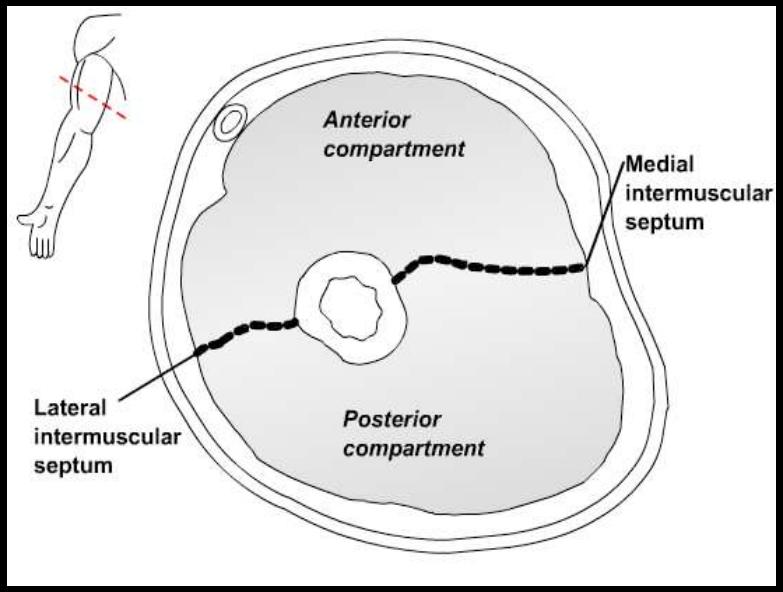
A: Extension
N: Radial

Forearm



1) Muscles of the Antebrachium

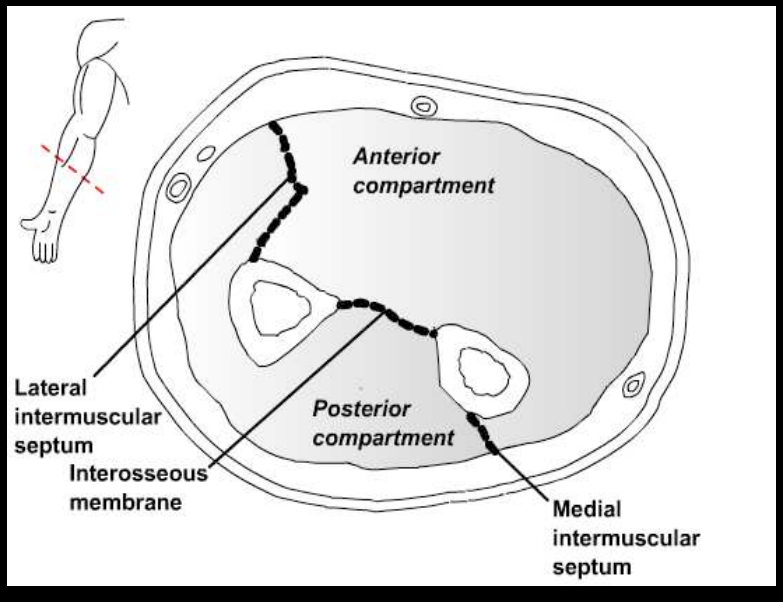
Arm



A: Flexion
N: Musculocutaneous

A: Extension
N: Radial

Forearm



A: Flexion
N: Median and Ulnar

A: Extension
N: Radial

1) Forearm Muscles - Anterior

- Pronator teres
- Flexor carpi radialis
- Palmaris longus
- Flexor digitorum superficialis

Median Nerve

1) Forearm Muscles - Anterior

Flexor digitorum superficialis

Median Nerve

Flexor digitorum profundus

1) Forearm Muscles - Anterior

Flexor digitorum profundus (1/2)

Flexor pollicis longus

Pronator quadratus

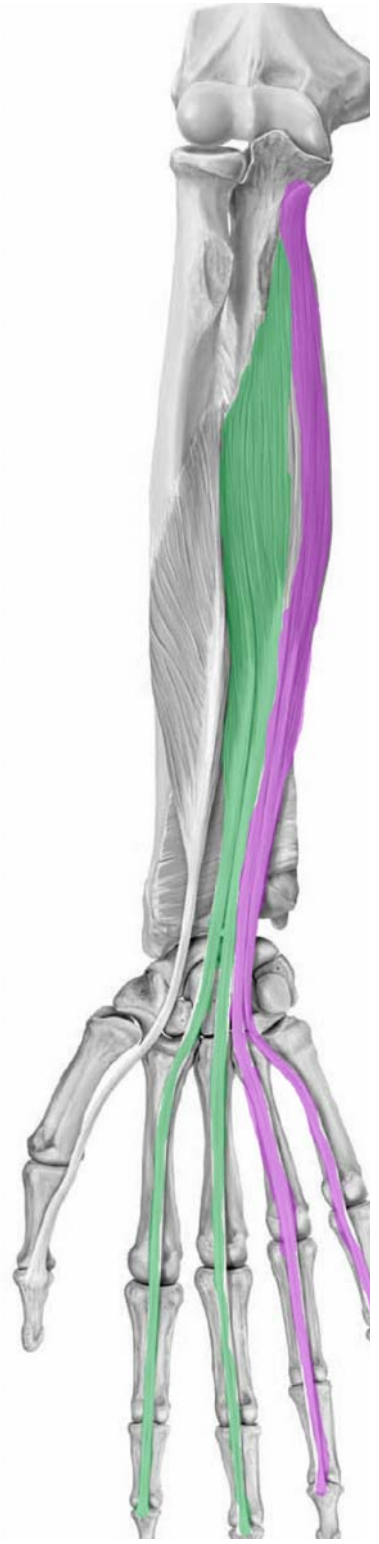
Median Nerve

(Anterior interosseous nerve)

1) Forearm Muscles - Anterior

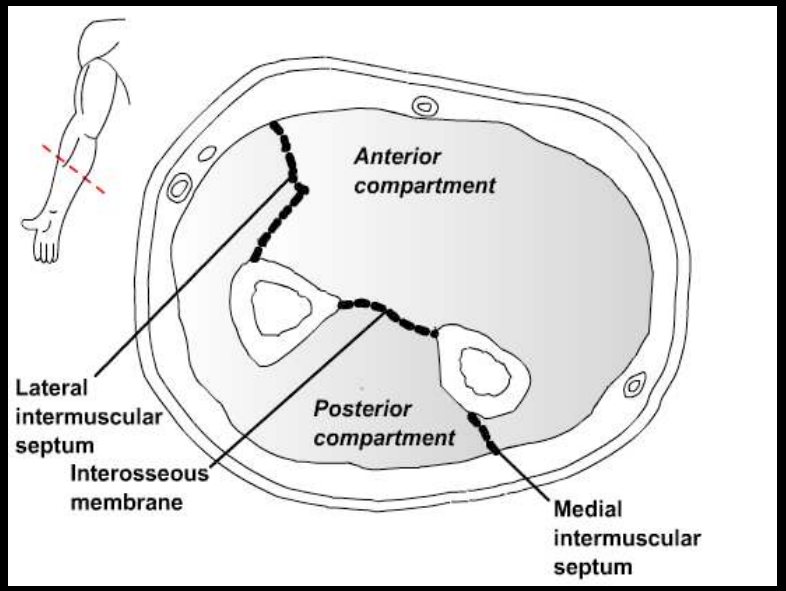
Flexor digitorum profundus

- Median n.
- Ulnar n. (flexor carpi ulnaris m.)



1) Forearm Muscles - Anterior

Forearm



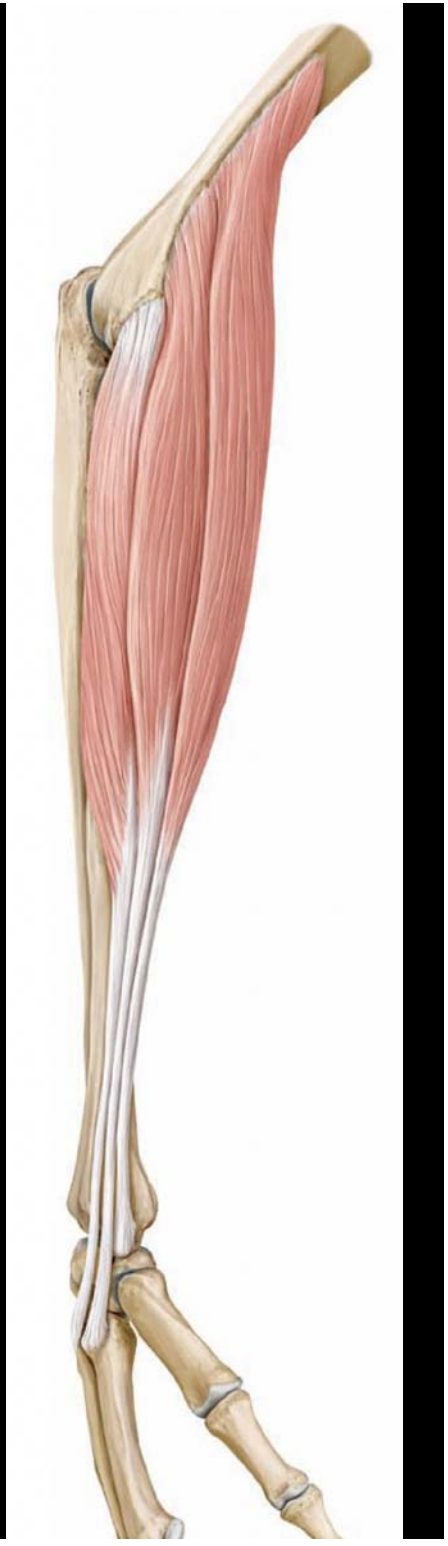
A: Flexion

Nerve:

- Median (superficial)
  - Ant. Interos. (deep
- Ulnar (Flex carpi ulnaris and ulnar half of flex dig prof)

1) Forearm Muscles - Posterior

- Brachioradialis
- Ext carpi rad longus
- Ext carpi rad brevis



1) Forearm Muscles - Posterior

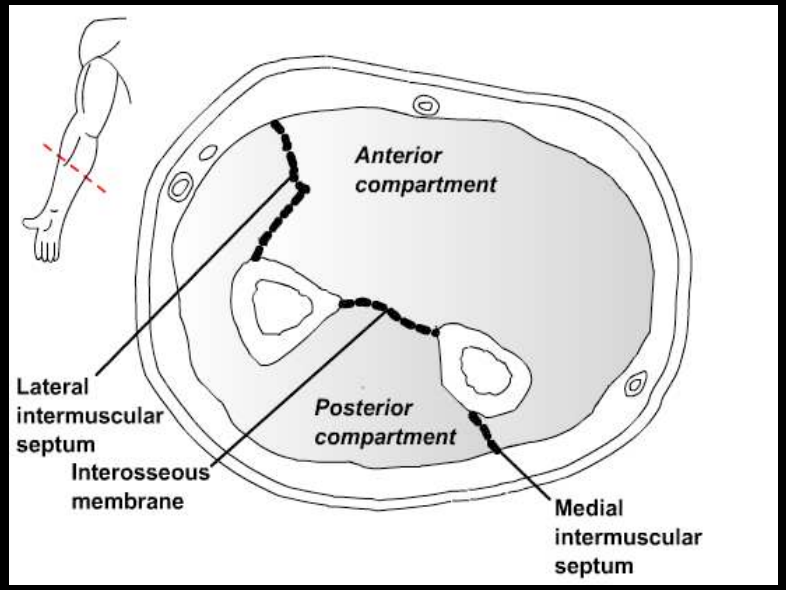
- Brachioradialis
- Ext carpi rad longus
- Ext carpi rad brevis
- Ext digitorum
- Ext digiti minimi
- Ext carpi ulnaris

1) Forearm Muscles - Posterior

- Abd pollicis longus
- Ext pollicis brevis
- Ext pollicis longus
- Ext indicis
- Supinator
- Anconeus

1) Forearm Muscles - Posterior

Forearm

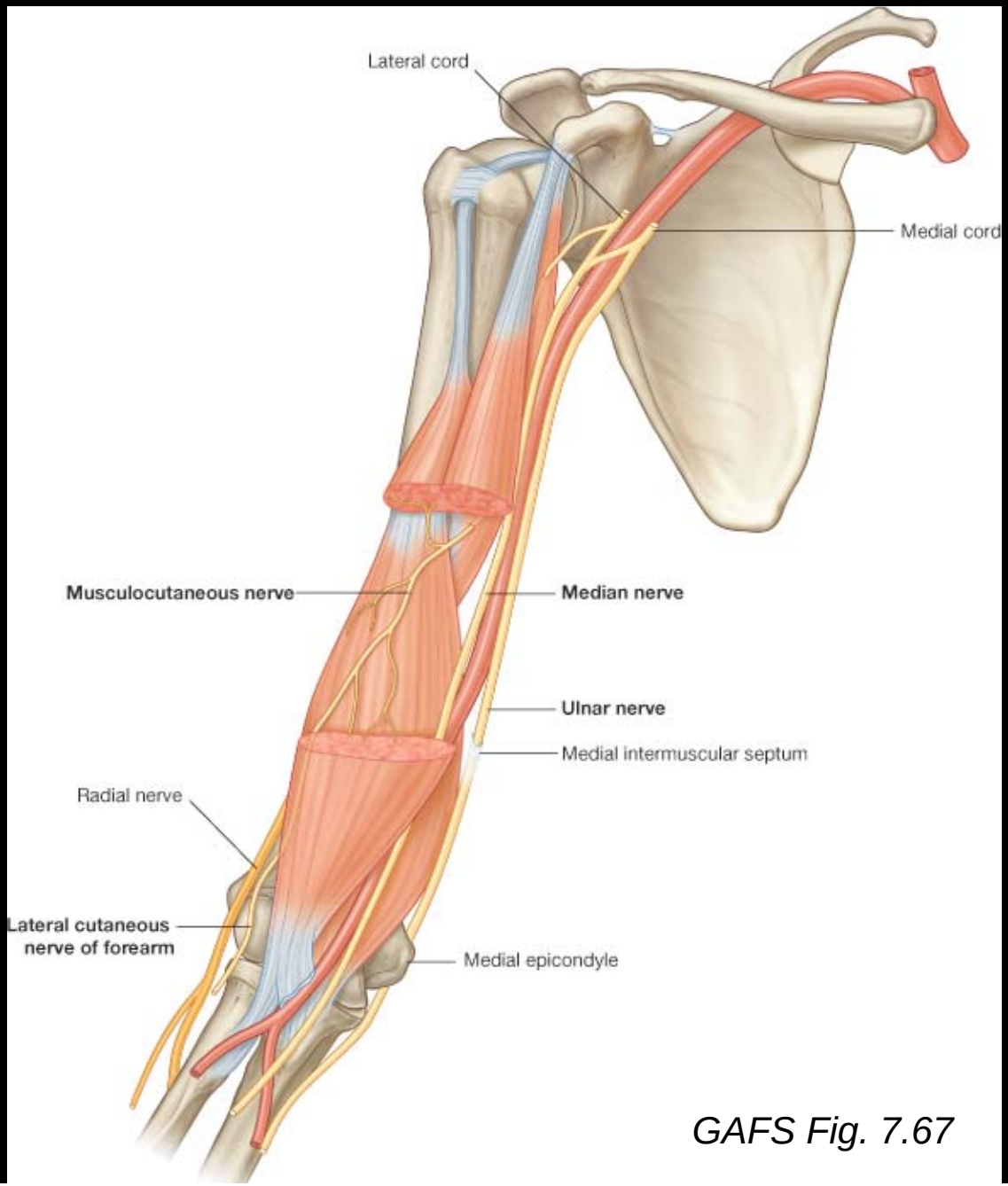


A: Extension

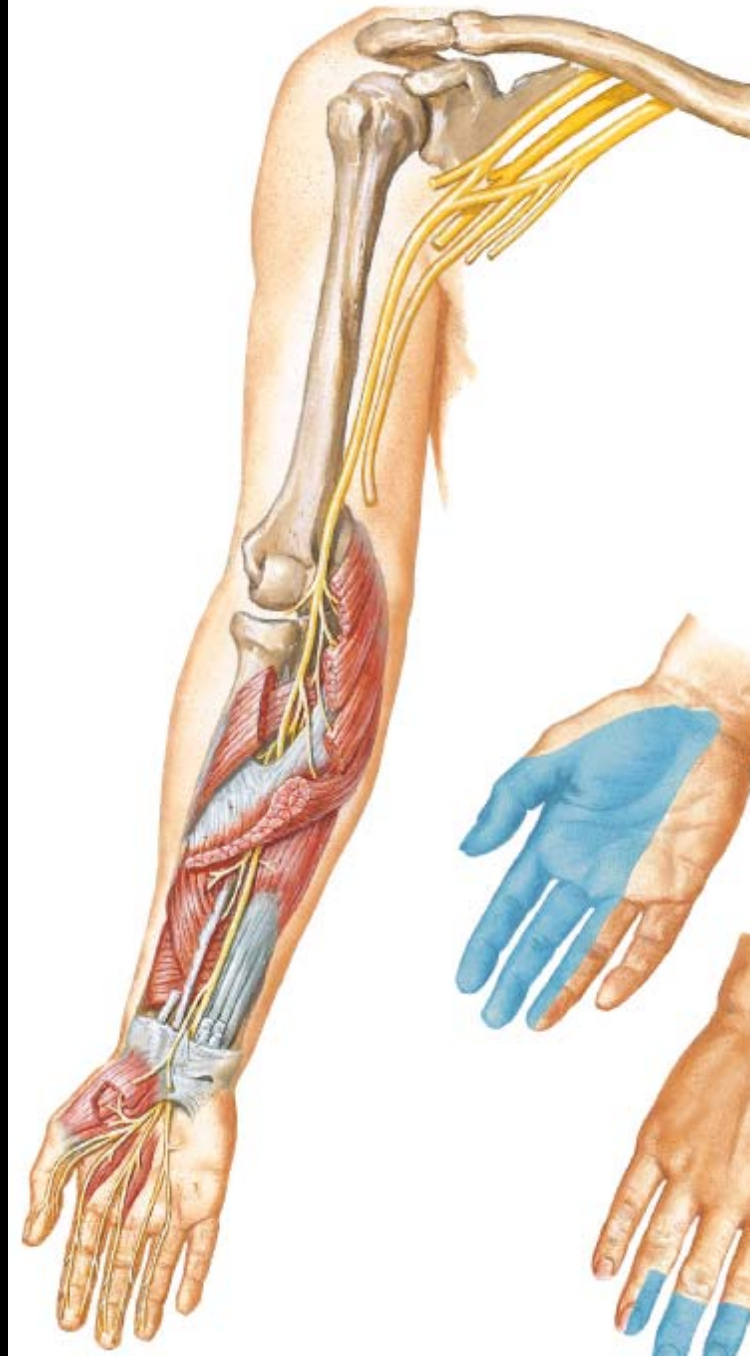
N: Radial

- Radial (brachioradialis, carp ulnaris, anconeus)
    - Post interos n. (the rest)

Median Nerve

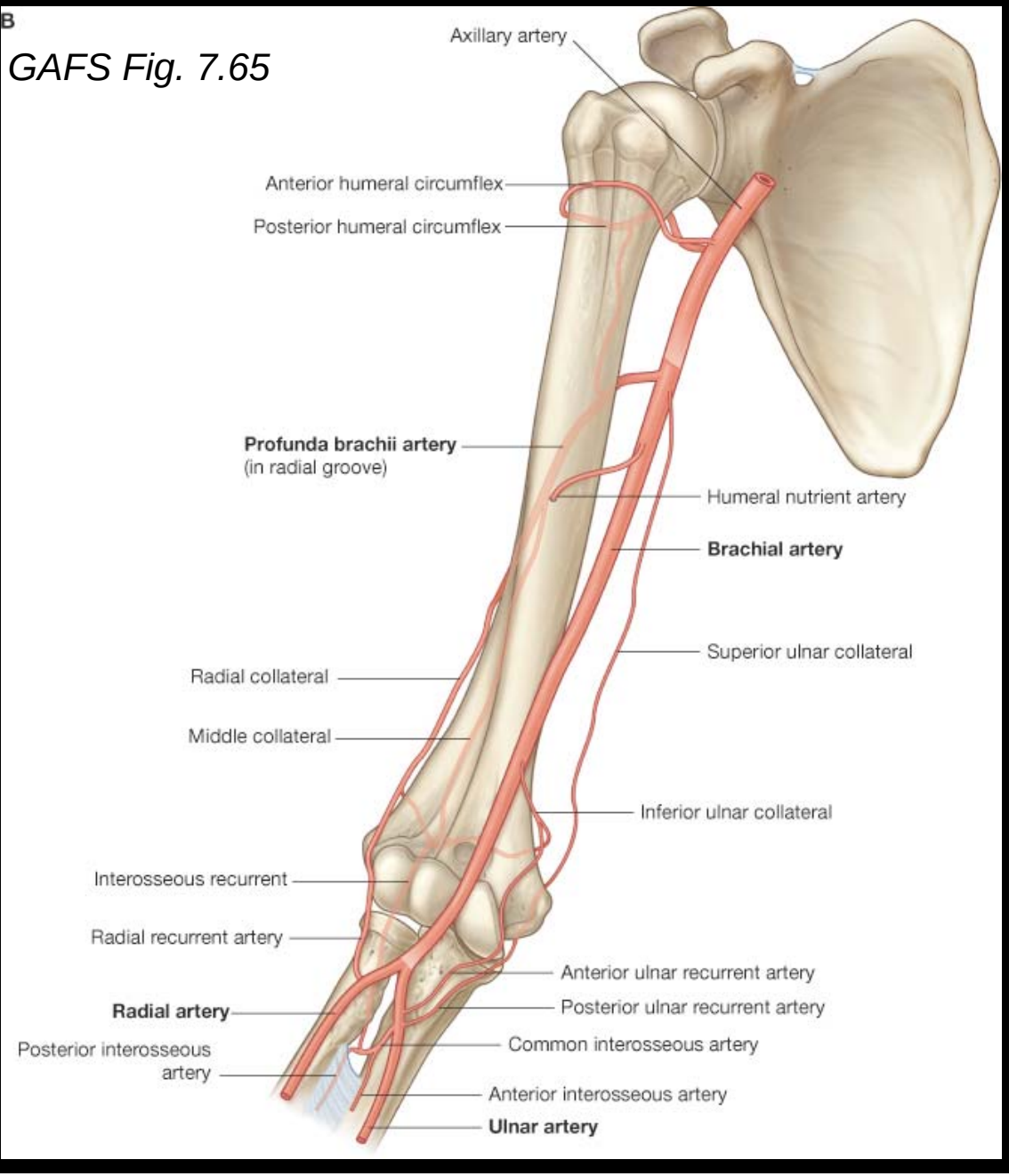


GAFS Fig. 7.67

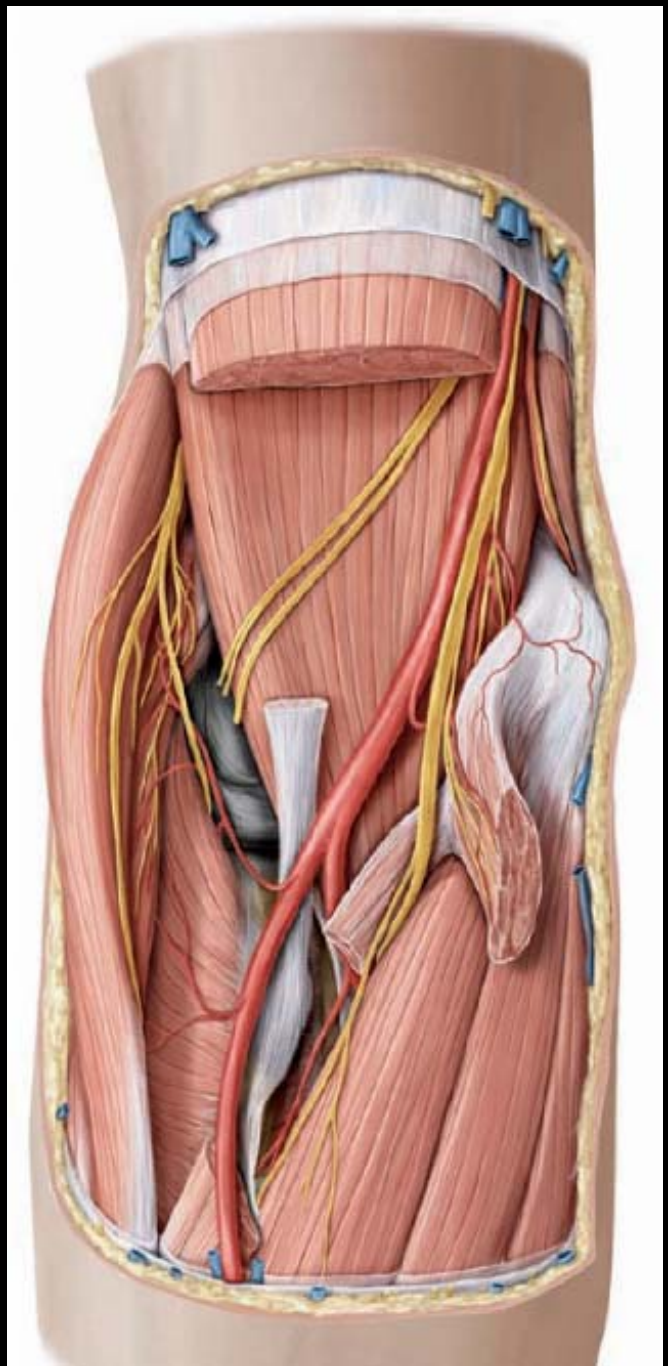


Ulnar Nerve

GAFS Fig. 7.65



Radial Nerve



Claw hand is a hand characterized by curved or bent fingers, making the hand appear claw-like. What nerve damaged resulting in this condition?

A. Axillary nerve
B. Median nerve
C. Musculocutaneous nerve
D. Radial nerve
E. Suprascapular nerve
F. Ulnar nerve

Claw hand of the first and second finger

A patient complains that while trying to make a fist, he can flex digits 4 and 5 but has difficulty manipulating his thumb and digits 2 and 3. He presents with a "hand of benediction" deformity. What nerve is lesioned?

A. Axillary nerve
B. Median nerve
C. Musculocutaneous nerve
D. Radial nerve
E. Suprascapular nerve
F. Ulnar nerve

This picture shows wrist drop. What nerve is damaged resulting in this condition?

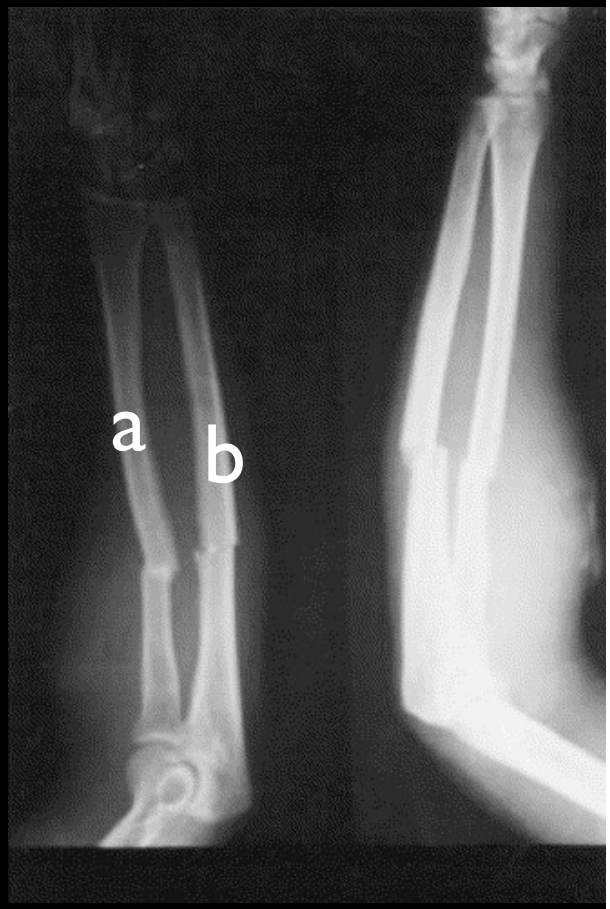
A. Axillary nerve
B. Median nerve
C. Musculocutaneous nerve
D. Radial nerve
E. Suprascapular nerve
F. Ulnar nerve

A 53 year-old man presents in the emergency room with an open fracture (when the bones penetrate the skin) of the radius and ulna that he incurred when his fishing boat tipped over.

What letter properly designates the radius?

a.

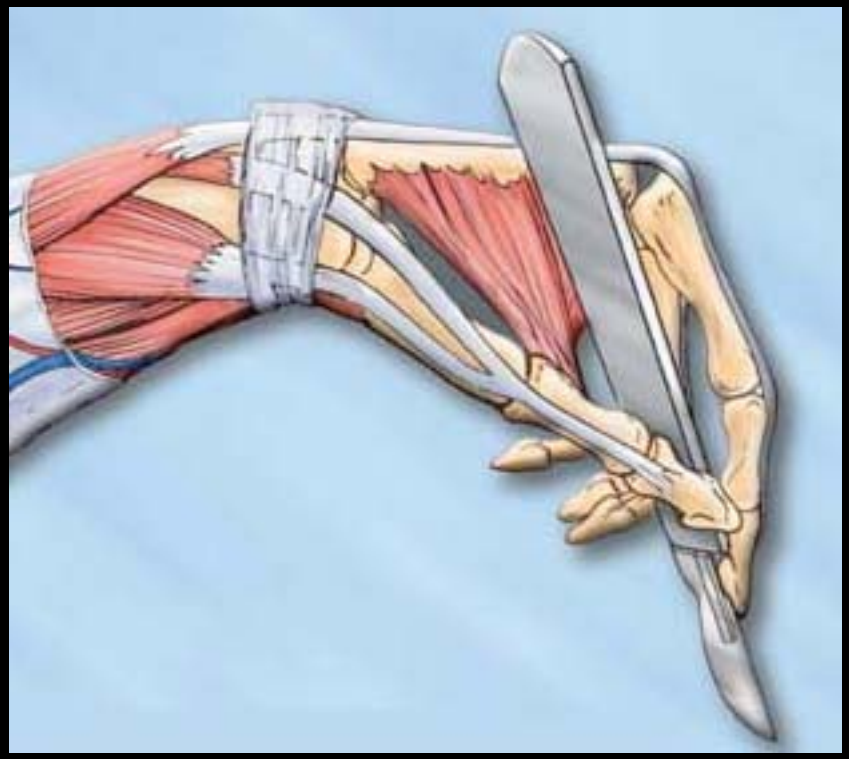
b.



Three weeks after the surgical repositioning of the ulna and radius, patient displayed abnormal findings in the left hand when asked to mimic the right hand position (Injury Extra, Vol. 37, Issue 1, January 2006, Pages 4-7).

The lesion of what nerve is responsible for this finding?

a. Anterior interosseous nerve
b. Deep branch of the radial nerve
c. Deep branch of the ulnar nerve
d. Palmar branch of the median nerve
e. Posterior interosseous nerve



THANK-YOU