Upper Limb - Anterior Forearm Muscles

The anterior forearm muscles are divided into superficial, intermediate, and deep muscles. The flexor carpi radialis, palmaris longus, flexor carpi ulnaris, and pronator teres are superficial muscles. The flexor digitorum superficialis is an intermediate muscle while the flexor digitorum profundus, flexor pollicis longus, and pronator quadratus are deep muscles. The anterior forearm muscles arm each have individual functions but collectively work to flex the wrist, digits, and pronate the forearm.

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Superficial Muscles

Pronator Teres
Primate Teary
The pronator teres has two heads, a humeral head and an ulnar head. The humeral head originates from just superior to the medial epicondyle of the humerus while the ulnar head originates from the coronoid process of the ulna. Both heads join to insert onto the lateral side of the radius. The muscle functions to pronate the forearm and assists in elbow flexion. It is innervated by the C6-C7 median nerve.

Palmaris Longus
Palm-tree Long
The palmaris longus muscle originates from the medial epicondyle of the humerus and inserts to the flexor retinaculum and palmar aponeurosis. The muscle functions to increase tension on the palmar fascia and to flex the wrist. It is innervated by the C7-C8 median nerve.

Flexor Carpi Radialis
Flexing Car-pea Radio-Alice
The flexor carpi radialis originates from the medial epicondyle of the humerus and inserts into the 2nd and 3rd metacarpals. The muscle functions in flexion and radial deviation of the hand and wrist and assists in some elbow flexion and forearm pronation. It is innervated by the C6-C7 median nerve.

Flexor Carpi Ulnaris
Flexing Car-pea Underwear
The flexor carpi ulnaris has two heads, a humeral head and an ulnar head. The humeral head originates from the medial epicondyle of the humerus and the ulnar head originates from the olecranon process of the ulna. Both heads join to insert to the pisiform bone, hamate bone, and 5th metacarpal. The flexor carpi ulnaris functions to ulnar deviation and flexion of the wrist. It is innervated by the C7-T1 ulnar nerve.

Intermediate Muscles

Flexor Digitorum Superficialis
Flexing Digital-man Super-fish-Alice
The flexor digitorum superficialis has two heads, a humeral-ulnar head and a radial head. The humeral-ulnar head originates from the medial epicondyle of the humerus and the collateral ligament and coronoid process of the ulna. The muscle had four tendons which are arranged in two pairs, one is the superficial pair which inserts to the 3rd and 4th fingers middle phalanges and the deap pair inserts to the 2nd and 5th middle phalanges. This muscle functions to flex the PIP joints of digits 2 to 5. It is innervated by the C7-T1 median nerve.

Deep Muscles

Flexor Pollicis Longus
Flexing Police in Long-johns
The flexor pollicis longus originates from the middle shaft of the radius and inserts to the distal phalanx of the thumb. The muscle functions to flex the thumb. It is innervated by the C8-T1 median nerve.

Flexor Digitorum Profundus

Flexing Digital-man Profoundly-deep-thinker

The flexor digitorum profundus originates from the upper two thirds of the ulna and inserts to digits 2 to 5 distal phalanges. The muscle functions to flex the DIP joints of digits 2 to 5, assisting in flexion of the wrist and fingers. Digits 2 and 3 are innervated by the C8-T2 median nerve, and digits 4 and 5 are innervated by the C8-T1 ulnar nerve.

Pronator Quadratus

Primate Quad-rat

The pronator quadratus muscle originates from the distal ¼ of ulna and aponeurosis and inserts to the anterior distal ¼ of the radius. The muscle functions to pronate the forearm. It is innervated by the C8-T1 median nerve.
