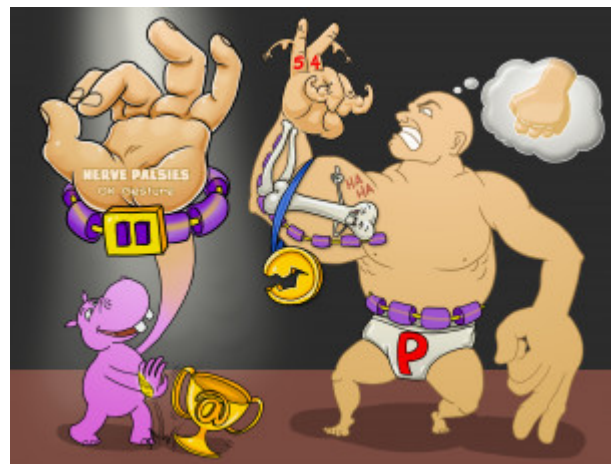


Nerve Palsies - OK Gesture

The OK gesture resulting from a proximal ulnar nerve injury is due to the inability of the medial flexor digitorum profundus to flex the 4th and 5th digits when trying to make a fist. Proximal ulnar nerve injuries are commonly caused by medial epicondyle fractures, which may occur if a patient falls on an outstretched hand with the elbow in extension or a posterior elbow dislocation. Other associated features that may accompany proximal ulnar nerve injuries and the OK gesture include hypothenar eminence atrophy and radial deviation of the wrist upon flexion.



PLAY PICMONIC

Nerve

Proximal Ulnar Nerve

P-proximal Underwear Nerve

Comprised of C8 and T1 nerve roots, it originates in the brachial plexus at the axilla, and it courses along the medial aspect of the upper limb and past the medial epicondyle of the humerus. It innervates flexor carpi ulnaris and the medial half of flexor digitorum profundus. From there it courses down the medial forearm to innervate the flexors of digits 4 and 5.

Causes

Fracture Medial Epicondyle of Humerus (proximal injury)

Fractured Medial on Epicondyle of Funny-bone

The proximal ulnar nerve courses across the medial epicondyle of the humerus and may be damaged with a fracture to this region.

Deficit

Unable to Flex 4th and 5th Digits

Flexing all but 4th and 5th Digits

The proximal ulnar nerve innervates the medial half of flexor digitorum profundus, which facilitates flexion of digits 4 and 5. When making a fist with a proximal ulnar nerve injury, digits 4 and 5 are unable to flex and face unopposed flexion by extensor digitorum. This hand position resembles an "OK" sign.

Presentation

Trouble Making a Fist

Trouble Making a Fist

The proximal ulnar nerve innervates the medial half of flexor digitorum profundus, which facilitates flexion of digits 4 and 5. When making a fist with a proximal ulnar nerve injury, digits 4 and 5 are unable to flex and face unopposed flexion by extensor digitorum. This hand position resembles an "OK" sign.

Resembles OK gesture

Okay Hand

The proximal ulnar nerve innervates the medial half of flexor digitorum profundus, which facilitates flexion of digits 4 and 5. When making a fist with a proximal ulnar nerve injury, digits 4 and 5 are unable to flex and face unopposed flexion by extensor digitorum. This hand position resembles an “OK” sign.

Complication

Hypothenar Atrophy

Hippo with Hypothenar @-trophy

Without innervation from the ulnar nerve, muscle wasting of the opponens digiti minimi, abductor digiti minimi, and flexor digiti minimi brevis may occur.