

Ulnar nerve palsy

The most common cause of ulnar nerve palsy is its **damage**. It occurs in several typical places.

Damage Locations

Nervus ulnaris passes through several straits.

1. In the place of the *septum intermusculare brachii mediale*, where it enters from the *sulcus bicipitalis medialis*.
2. Behind the medial epicondyle of the humerus it passes in the *sulcus nervi ulnaris*.
3. In canalis cubitalis – canal between the olecranon and the beginning of the m. flexor carpi ulnaris.
4. In the *ulnar tunnel* (Guyon canal on the hand).

Injuries to the ulnar nerve most often occur with a cut on the volar side of the wrist, where the nerve is located superficially.



The course of the nerve.

Image of polio

- Inability to flex II.-V. of the finger in the metacarpophalangeal joints (mm. interossei).
- Inability to adduct and abduct II.-V. finger (mm. interossei).
- Inability to flex in the distal interphalangeal joint IV. and V. finger (m. flexor digitorum profundus).
- Severe adduction of the thumb - a novel symptom.
- **Claw-like hand** - metacarpophalangeal joints extended (predominance of extensors), interphalangeal joints in flexion (predominance of flexors), thumb abducted.
- Sensitivity disorders in the innervation area.

Causes of paralysis

1. **Syndrome cubital tunnel** - chronic microtraumatization during exertion in the elbow.
2. **Compression in Guyon's canal** - mainly motor disability, hypothenar is usually spared; atrophy of the 1st interosseus dominates.
3. **Chronic compressive syndromes** - rheumatological diseases, arthritic disfigurements, external compression when leaning on a mat (*eg: glass grinders*).
4. **Axillary lesion** - very rare (*eg: compression with high crutches*).
5. **Trauma** - fractures in the elbow area (*eg: dislocations and displaced fractures*), cuts in the wrist area.
6. **Soft tissue tumors** - lipoma, fibroma.

Links

Related Articles

- Ulnar nerve
- Examination of the ulnar nerve
- Peripheral nerve involvement syndromes
- Canalis cubitalis
- Humerus
- Guyon Channel
- Cubital landscape
- Mm. interossei manus
- Upper Extremity Bones

Source

- PASTOR, Jan. *Langenbeck's medical web page* [online]. [cit. 2009]. <<https://langenbeck.webs.com/>>.

References

- AMBLER, Zdeněk – BEDNAŘÍK, Josef. *Klinická neurologie : část speciální. II.* 1. edition. Triton, 2010. ISBN 978-80-7387-389-9.