

## Carpal Tunnel Syndrome - Treatment

**In early stages of the disease we can concentrate on preventive treatment. If that fails, we go on to surgical treatment, which is the treatment of choice for this disease. The preventive methods are as follows:**

- wrist cast to keep the wrist in neutral position/slight extension,
- corticosteroid injections into the wrist tunnel,
- exercises improving nerve excursion,
- modification of the way we perform actions,
- periodic physiotherapy.

Surgical treatment is recommended when preventive treatment was ineffective in reducing ailments or the symptoms are far more advanced. The aim of the surgery is to enlarge the tunnel by cutting the transverse ligament which is beneath the skin. There is a possibility of nerve decompression during an open surgery – anatomical structures are well visible, possible anatomical anomalies are easily noticed. Arthroscopic procedure allows for quicker return to everyday activity and it's less traumatic for the patient. Two most common arthroscopic methods are: a double approach according to Chow method and a single approach according to Agee method. However, the risks of iatrogenic damage are higher in the discussed method. Correctly performed surgical procedure, be it open or arthroscopic, guarantees like results in reducing pain ailments. It's worth to remember that surgical procedure only gives a chance of nerve regeneration, which may last even over a dozen of months, depending on how advanced the disease.

[Carpal Tunnel Syndrome \(find out more\)](#)

## De Quervain's disease - Treatment

Conservative treatment is of help only at the early stages of the disease. In the first place patient needs to stop perform activities that intensify pain ailments. Then immobilization of the wrist and thumb in a cast for about 3-4 weeks is recommended. To improve the results, the immobilization can be combined with corticosteroid injections into the synovial vagina and with physiotherapy. Advanced cases require a surgical procedure which includes retinaculotomy and partial excision of tendons' vaginas and post inflammatory adhesions.

[De Quervain's disease \(find out more\)](#)

## Triangular Cartilage Complex Tear - Treatment

Initial treatment includes rest, immobilization and anti inflammatory drugs. If symptoms hold, surgical, most often arthroscopic, procedure is recommended. The triangular cartilage complex tear is treated arthroscopically. The instable fragment is

removed, like any other articular cartilage damages. In some cases it is possible to repair the damaged cartilage.

[Damage, degeneration of the triangular cartilage complex \(find out more\)](#)

## **Saphenous bone fracture - Treatment**

In the case of diagnosed or suspected saphenous bone fracture, cast immobilization of the thumb (the glove cast) is recommended for about 6-12 weeks, sometimes longer. Frequency of anatomical adhesion after conservative treatment is 60-90%. Surgical treatment of saphenous bone fractures is recommended when:

- dislocated fracture,
- multi fragmental fracture,
- proximal end fracture,
- diagnostic and treatment delay,
- increase of the intrasaphenous angle  $>35^\circ$ ,
- height-length bone ratio  $> 0.65$ ,
- and fracture with perilunar damage occurs.

Surgery can be performed through either volar or dorsal approach or with a transcutaneous method. The fracture is stabilized with various kinds of implants (most frequently Herbert's screws) that guarantee proper interfragmental compression.

If there's no adhesion, surgical procedures that aim at re-vascularization of the damaged bone are performed. The most frequent is Zaidenberg's method, where cortico-spongious vascularized graft is harvested from the distal dorso-lateral extremity of the radial bone and implanted in the fracture.

In 97% of diagnosed pseudo-arthritis cases degenerative changes appear after 5 years. Thus "safety procedures" are recommended:

- radialstyloid process removal,
- wrist denervation,
- saphenous bone removal and tetragonal arthrodesis (of capital, hamular, lunar and triangular bones),
- graft harvested from the rib cartilage,
- proximal wrist bone line removal,
- total wrist arthrodesis.

[Saphenous bone fracture \(find out more\)](#)

## **Wrist and Area Fracture - Treatment**

Adjacent joints need to be immobilized in the wrist fracture treatment. The arm is put into a cast from the wrist up to the elbow for 3-6 weeks, depending on the kind of fracture. The patient is required to use a sling to decompress the shoulder and avoid swelling.

The cast may not be too tight as circulation underneath is weakened – there's the risk of haemostasis and oxygen deficiency in tissues. The arm and fingers in the cast may not swell. If the patient feels "there's something wrong" (pain, swelling or discomfort), they should see a doctor.

If someone doesn't want to use the traditional but heavy cast, they may choose lighter plastic mass.

### Rehabilitation

We can start rehabilitation with the cast on. At the beginning it's enough to move fingers, exercise the shoulder by reaching with the hand behind the head. The arm needs to be supported with the healthy one.

The most frequent procedures are:

- ionophoresis – recommended to treat inflammatory processes and chronic pain; a drug is being injected through skin with direct current, it works for 24-48 hours, reaching the affected and damaged tissues.
- cryotherapy – enables doing exercises by applying low minus temperature to the treated area; the temperature is obtained from liquid nitrogen vapor or condensed carbon dioxide; works against pain and swelling.
- magnetotherapy – it facilitates the ossification and healing processes by using the magnetic field activity of low frequency.
- laser therapy – improves skin blood supply, stimulates metabolic changes.

Apart from classic rehabilitation exercises, everyday manual activity (screwing with a screwdriver, knitting or making dough) that begins after a few weeks after taking off the cast is as important.

Full recovery: a year after taking the cast off. It happens, however, that the arm is not as efficient as it was before the fracture.

[Wrist and Area Fracture \(find out more\)](#)

## **Ulnar canal syndrome (Guyon's canal) - Treatment**

The Guyon's canal is treated by means wrist immobilization, physiotherapy and analgesic drugs. This treatment however is often ineffective as it brings about short-term relief. Surgical nerve decompression is the most effective method of treatment.

[Ulnar canal syndrome \(find out more\)](#)

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