

mediroyal 

Orthoses are our passion

TFCC Wrist orthosis and Elbow unit



BROTHERS IN ARMS
INNOVATION



HANDCENTER
EN DEL AV ATLEVA

TFC101 · Wrist Short – 25 cm



TFC102 · Wrist Mid – 28 cm



TFC103 · Wrist Long – 31 cm

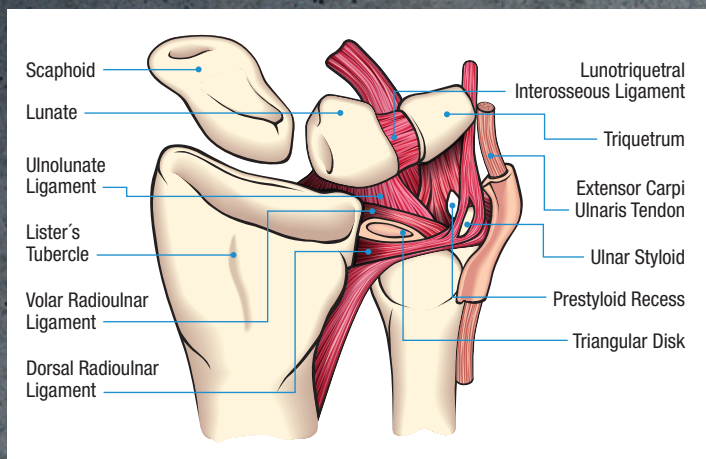


TFCC105 · Elbow Unit



TFCC Wrist orthosis and Elbow unit

Triangular Fibrocartilage Complex (TFCC) Injuries



Injuries to the Triangular fibro cartilage complex; TFCC, are common after distal radius fractures. Up to 40% of these patients have injuries to the ligament complex. TFCC injuries are also common in rotational and fall injuries without a present fracture. Many of these patients get permanent disabilities after the fracture has healed with pain, clicking and

popping over the joint and instability. These injuries require a surgical intervention to improve. For the post-operative phase it's important to control pronation and supination of the forearm as well as wrist stability during several weeks. So far the alternative for these patients have been plaster casts, synthetic casts or thermoplastic immobilization.

The TFCC system – a result of development work between Mediroyal, Handcenter and Brothers in Arms Innovation



Mediroyal and Brothers in Arms Innovation started the development work in 2015 together with Hand Center in Sweden. The aim was to develop an orthotic system for post-operative treatment of TFCC that would be easy to use, fast to apply without having to use heat or hot water, cost effective and with high patient compliance. The result is our new TFCC-system that has been protected in several countries around the world. The system consists of a wrist orthosis made in three different lengths. The three different lengths make it possible to individually adapt the stability and the lever arm in order

to stabilize the axis of rotation. As a complement to reach more stability and safety an elbow extension part can be attached to the wrist orthosis in order to provide more axis rotation. The elbow part is used during the first 2–3 weeks after the initial one week cast in order to control pronation/supination. After that period, the elbow part is removed and the patient will only use the wrist orthosis during the remaining rehab.

The wrist orthosis is available in three lengths:
TFC101 – 25 cm, TFC102 – 28 cm och TFC103 – 31 cm





TFCC Wrist orthosis

The TFCC wrist orthosis has been designed with three elastic straps that have an integrated Boa® system. The straps have numbers in order to apply them biomechanically correct. The center strap where the Boa®-system is placed should be applied first to provide support and compression of the central part of radius and ulna in order to control rotation. The second strap is placed directly over the area of the TFCC-ligament in order to stabilize the distal radioulnar joint (DRUJ) and the radiocarpal joint (RCJ). The third strap is placed proximal, close to the edge of the brace to provide as long lever arm as possible over the surface of the orthosis. The wrist orthosis is available in three lengths in order to fit most patients individually and in five sizes; XS-XL. The proximal part of the orthosis has a rounding to not disturb flexion in the elbow joint. A longer design provides a longer lever arm which provides better rotation stability of radius and ulna.

The Boa®-system has been integrated to provide an individual support over the ulnar side in the orthosis. The combination of the elastic straps and the Boa®-system provides a unique possibility to combine both elasticity and individually adjusted stability. The patient can adjust the support after the individual need.

The orthosis has a volar wide metal splint that can be adjusted individually. On the dorsal side there are two flexible metal splints to provide support in dorsal extension.

TFC101 · TFCC Wrist Orthosis Short, 25 cm length, XS–XL, Left or Right

TFC102 · TFCC Wrist Orthosis Mid, 28 cm length, XS–XL, Left or Right

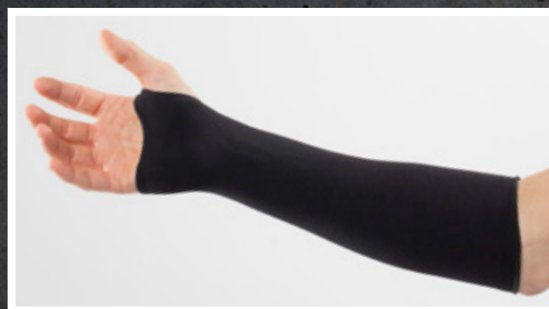
TFC103 · TFCC Wrist Orthosis Long, 31 cm length, XS–XL, Left or Right

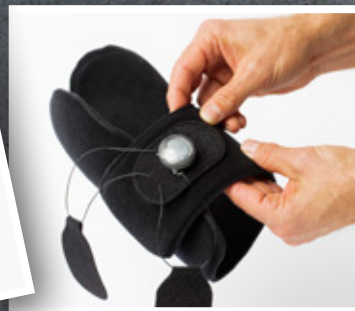
Compression Hand Sleeves

Patients with distal radius fractures have often problems with swelling over the wrist area. The edema can get worse during long term immobilization since the lower arm muscle pump function is reduced. The compression hand sleeves are available in two different lengths; short and long. The compression sleeves are made in compression class 2 over the wrist and are graded with a lower compression class proximal. The compression hand sleeves provide a higher wearer comfort and can also reduce skin irritation over the friction surfaces in the wrist orthosis.

TFC107 · Compression Hand Sleeve Short, S-M-L
(Fits TFC101)

TFC108 · Compression Hand Sleeve Long, S-M-L
(Fits TFC102 and TFC103)





TFC105 kompletterad med NRX®-band



TFCC Elbow unit

The Elbow Part has been constructed in a thermoplastic polymer with natural cork to reduce the weight. The design provides support over the elbow condyles and has an overlap with a Boa®-system to make application easy for the patient. The Boa®-system is applied with a low profile hook and can be positioned individually on the surface. The elbow unit is applied over the proximal part of the wrist orthosis and extends the lever arm to provide more axial rotation stability in pronation and supination without restricting flexion or extension in the elbow joint. The elbow unit has no separate function and only works together with the TFCC wrist orthosis. Over the condyle areas, pad can be applied with hook to provide more support over the elbow joint. The pads can be used bilateral or unilateral. To provide more compression a 5 cm

NRX® strap can be applied over the elbow joint to provide more individual compression and support. The elbow unit is available in three sizes: 1-2-3 and in left and right version.

If you are intending to use the elbow unit in conjunction with the TFCC wrist orthosis we recommend not using a too long wrist orthotic since the elbow part should overlap the proximal part of the wrist orthosis. The optimal overlap is about 3 cm. The elbow unit can be applied either from behind the elbow or over the wrist. The Boa®-system has to be removed from the overlap and then reapplied.

TFC105 · TFCC Elbow unit, Size 1-2-3,
Left and Right

TFCC Boa®-system

The Boa®-system for the elbow unit can also be purchased separately.

TFC104 · Boa®-system for TFCC Elbow part, Universal



Measurement chart

We always recommend individual testing of the wrist orthosis and elbow unit. The measurement chart is only a help to find the most appropriate size. For patients with proximal swollen lower arm, a larger size might be needed.



TFCC Wrist orthosis

Indications: Conservative or post-operative treatment of TFCC injuries, distal radius fractures, metacarpal fractures, wrist instability after fractures.

TFC101 · TFCC Wrist orthosis Short, 25 cm length, Left or Right

TFC102 · TFCC Wrist orthosis Mid, 28 cm length, Left or Right

TFC103 · TFCC Wrist orthosis Long, 31 cm length, Left or Right

Size	XS	S	M	L	XL	
cm	12–14	14–16	16–18	18–20	20–23	

The measurement is taken around the wrist



Compression Hand Sleeves – Compression class 2

Indications: Edema of the wrist after fracture immobilization.

TFC107 · Compression Hand Sleeve Short (Fits TFC101, left and right)

TFC108 · Compression Hand Sleeve Long (Fits TFC101 and TFC103, left and right)

Size	S	M	L	
cm	12–15	14–18	17–23	

The measurement is taken around the wrist



TFCC Elbow unit

TFC105 · Elbow unit, Left or Right

Size	1	2	3	
cm	19–23	23–28	28–34	

The measurement is taken circularly about 5 cm below the elbow joint

TFCC wrist orthosis and the TFCC elbow unit are design protected in several countries around the world by Brothers in Arms Innovation.

Boa® is a registered trademark of Boa Technology Inc.

Mediroyal is a registered trademark of Mediroyal Nordic AB.

BOA®



Orthoses are our passion

mediroyal 

Mediroyal Nordic AB
Box 7052, Staffans väg 6B · SE-192 07 Sollentuna, Sweden
info@mediroyal.se · www.mediroyal.se