





# MF unit of an-ca

**Site of pain or CP:** Along the flexor carpi radialis tendon - compensatory cysts may form here due to anomalous muscle tension; sometimes the patient complains of thumb pain, similar to writer's cramp.

*Origin or centre of coordination*: in the antebrachial fascia, in the point where the monoarticular (flexor carpi radialis) and biarticular (flexor pollicis longus) muscle fibres unite.

Test force of flexor carpi radialis against resistance. Alternatively, ask patient to place both hands palms down on the table and then to push down forcefully patient is asked to then indicate the most painful area (flexor carpi radialis tendon).



## An-ca

Patient supine, therapist places knuckle, or elbow, over muscle belly of flexor carpi radialis to manipulate the antebrachial fascia. Here the fascial alteration is often chronic, requiring more time to dissolve; hence, use of the elbow is advisable.







# MF unit of re-ca

Site of pain or CP: while tendinitis of extensor carpi ulnaris is relatively rare, hypersensitivity of the ulnar styloid process or the fifth finger may manifest at times.

Origin of dysfunction or CC: nflammation of the tendon or the joint is a consequence of anomalous traction of the muscular fibres. Restoration of gliding between these fibres eliminates tendon friction.

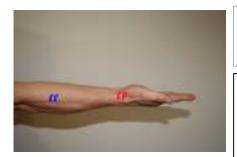
**Movement verification:** Therapist blocks the patient's forearm with one hand and applies a counter resistance to the extensor carpi ulnaris with the other hand.



# Re-ca

Patient prone with arm along side; the therapist positions their knuckle over the myotendinous junction of the extensor carpi ulnaris and manipulates this point until the underlying fascia glides perfectly.





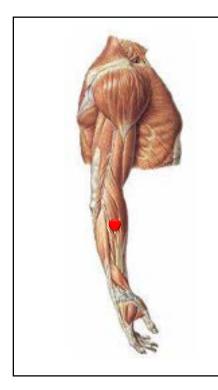


# MF unit of la-ca

Site of pain or CP: pain and inflammation may present in the extensor and abductor pollicis longus or in the two extensor carpi tendons (longus and brevis).

*Origin of dysfunction or CC:* tenovaginitis of the extensor carpi tendons indicates densification in the fasciae of the muscle bellies.

Movement verification: The therapist blocks the patient's forearm with one hand and resists abduction of the wrist with the other. In acute cases, crepitus along the tendons themselves may be present along with the pain.



#### La-ca

The cc of this mf unit is located immediately below that of latero-cubitus. In fact, the proximal fibres of the two extensor radialis muscles act on the lateral stability of the elbow, whereas the distal fibres intervene in lateromotion of the wrist.







## MF unit of me-ca

**Site of pain or CP:** when the flexor carpi ulnaris tendon is painful, the pisiform is sensitive even to light touch.

**Origin of dysfunction or CC:** the tendon and its insertion are hypersensitive because incorrect tensioning of the muscle fibres causes traction that is non-physiological.

Movement verification: Verification consists in tensioning the flexor carpi ulnaris muscle; pain accentuates either during contraction, or by passive stretch and, at times, during unguarded movements. It is useful if the patient can demonstrate the specific daily activity that aggravates their pain.



## Me-ca

Patient supine; therapist manipulates the distal third of the flexor carpi ulnaris muscle, until fascial gliding is totally restored.







# MF unit of er-ca

**Site of pain or CP:** cysts over the extensor tendons, pain on extension-extrarotation of the wrist.

*Origin of dysfunction or CC:* extensor digitorum and extensor pollicis longus participate in extrarotation of the wrist; manipulation over their muscle bellies aims at improving the tendinous trajectories;

Ask patient to extrarotate their wrists against a manual resistance or to press the dorsum of their hands onto the table, indicating which tendons are the more painful; at times, it is the extensor digitorum and pollicis tendons (extra), other times extensor ulnaris tendon (retro), or, yet again, the extensor radialis tendon (latero).



## Er-ca

Patient prone with palm of hand resting on table; the therapist uses their knuckle or elbow halfway on the forearm over the muscle bellies of the extensor muscles; if the patient does not tolerate this position then they can rest their arm above their head.







## MF unit of ir-ca

**Site of pain or CP:** dysfunction of this mf unit causes referred pain in the fingers rather than the wrist.

*Origin of dysfunction or CC:* the superficial and deep flexor muscles of the fingers and pronator quadratus have their myotendinous junctions in the distal third of the forearm; dysfunctional pronation of the carpus can originate from this region.

#### Movement verification:

Intrarotation of the carpus and fingers is actuated, in part, by the flexor pollicis longus and flexor digitorum. Applying resistance to intrarotation of the hand can test elasticity of these muscles.



#### Ir-ca

Patient supine, arm resting on table; therapist uses elbow halfway on patient's forearm, over muscle bellies of flexor digitorum etc., slowly shifting distally until pins and needles or pain in the wrist and fingers is provoked.

