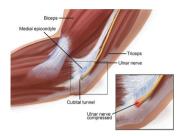
Peripheral Nerve Compression of the Ulnar Nerve

Ulnar Nerve

Cubital Tunnel Syndrome

- Second most common peripheral nerve compression neuropathy
- Cubital tunnel formed by FCU fascia & Osborne's ligament anteriorly, posterior & transverse bands of MCL and elbow joint capsule posteriorly while the sides are formed by medial epicondyle & olecranon
- Most common site b/w 2 heads of FCU/aponeurosis
- Presents with parasthesia in small finger, 1/2 ring finger and ulnar dorsal hand
- Exacerbated by prolonged elbow flexion, leaning on the elbow and sleeping with elbow flexed
- Ulnar nerve irritable in groove at elbow on palpation
- May have wasting thenar web space, weakness of finger abduction and /or clawing of ring & small fingers
- Other motor signs include abduction posture of small finger (Wartenburg sign), excessive use of IP flexion with pinch (Froment sign)
- Mild symptoms night splint elbow at 45° forearm neutral, discussion of aggravating activities
- Nerve conduction studies helpful in confirming diagnosis and degree of compression
- Surgical options include ulnar nerve decompression, with or without transposition

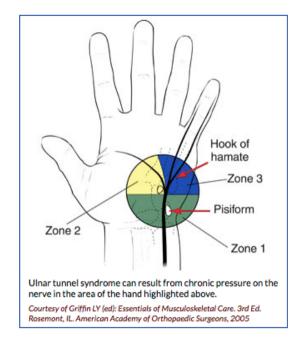
References: Allen D., <u>Cubital Tunnel Syndrome</u>, <u>www.orthobullets.com</u>, <u>www.moveforwardpt.com</u>, <u>www.orthoinfoaaos.org</u>



Peripheral Nerve Compression of the Ulnar Nerve

Ulnar Tunnel Syndrome

- Caused by compression in Guyon's canal at wrist
- Often caused by ganglion, but also from repetitive trauma, hook of hamate fractures, ulnar artery thrombosis or aneurism
- Presentation depends on location of compression within Guyon's canal and may be motor only, sensory only or both
- Symptoms often pain/parathesia ulnar digits but not on dorsum of hand
- Treatment depends on the cause of the compression
- Splints & activity modification may be appropriate if the condition is posture-related
- Surgical decompression, removal of ganglion or growth would be surgical management



References: Allen D., <u>Cubital Tunnel Syndrome</u>, <u>www.orthobullets.com</u>, <u>www.moveforwardpt.com</u>, www.orthoinfoaaos.org