

Carpal Tunnel Syndrome

What is it, anyway?

Feeling Young and Staying Active

Public Forum

Tahoe Forest Hospital 17 April 2010

Amy L. Ladd MD

Professor & Chief, Chase Hand & Upper Limb Center

Stanford University Medical Center & Packard Children's Hospital

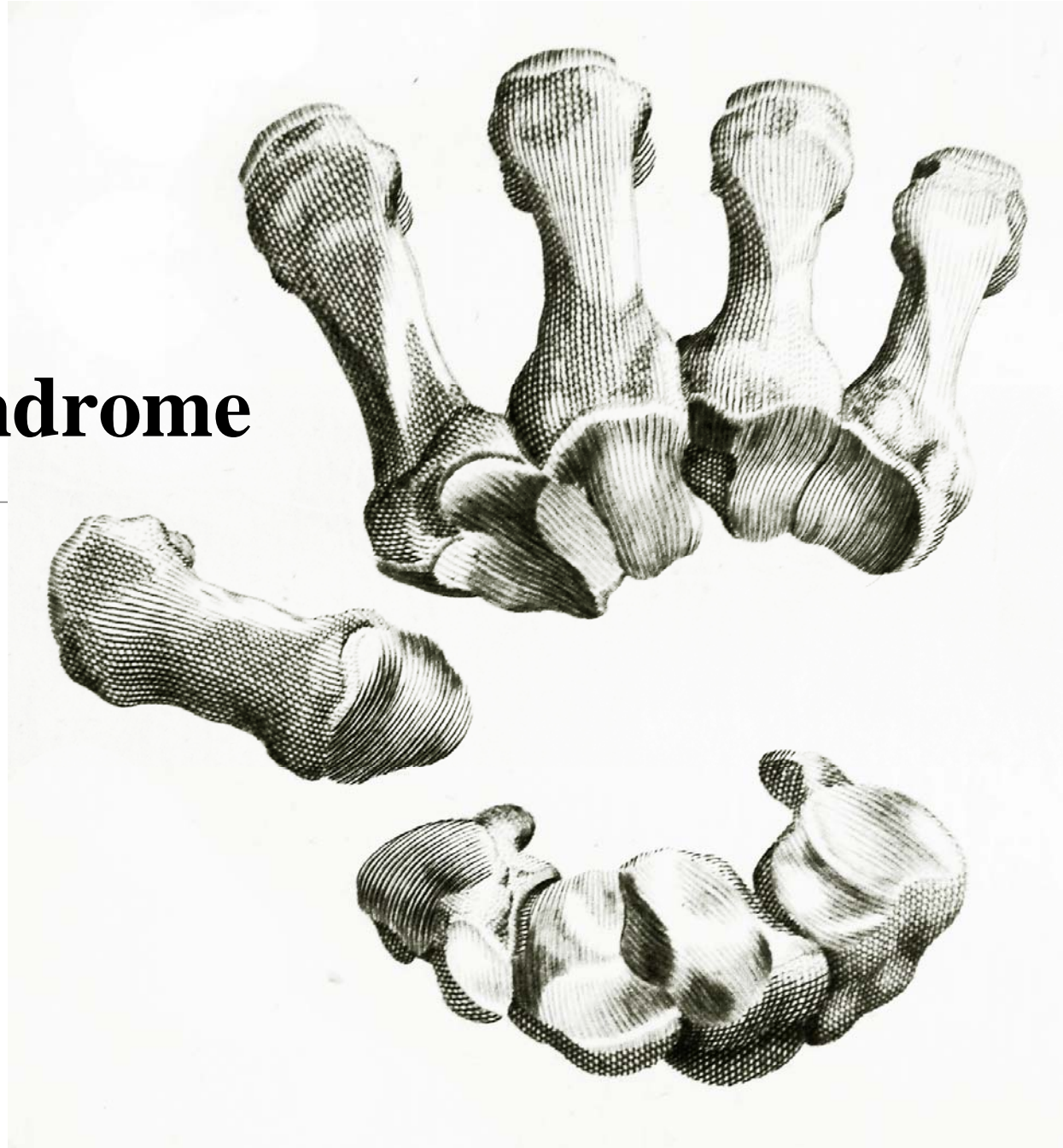


Carpal Tunnel Syndrome

Who gets it?

How can I avoid it?

How is it treated?



Hands are pretty awesome

- **Everyday activity**
- **Exquisite capability**



When hands don't work

- Numbness
 - Tingling, pins and needles
- Weakness
 - Clumsiness
- Pain



Who gets carpal tunnel syndrome (CTS)?

- **Women - Hormonal**
 - **Pregnancy**
 - **Contraceptives**
 - **Menopause**
- **Women - Anatomy**



Who gets carpal tunnel syndrome (CTS)?

- Men and women
- Activity
- Accidents / Trauma
- Disease



Why?

- **Median Nerve pinched**
 - **Activity with wrist flexed or extended**
 - **Sleep**
 - **Driving**
 - **Bad habits**



What else?

- Forceful repetitive activity
 - Heavy equipment
 - Sports
 - Vibration
 - Tendinitis

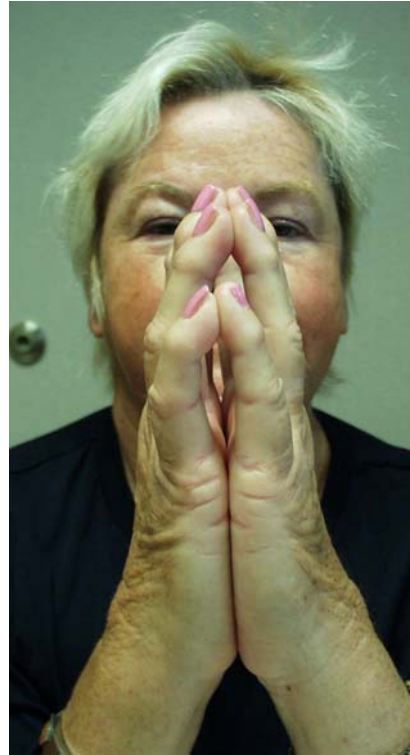


Other things?

- **Disease**

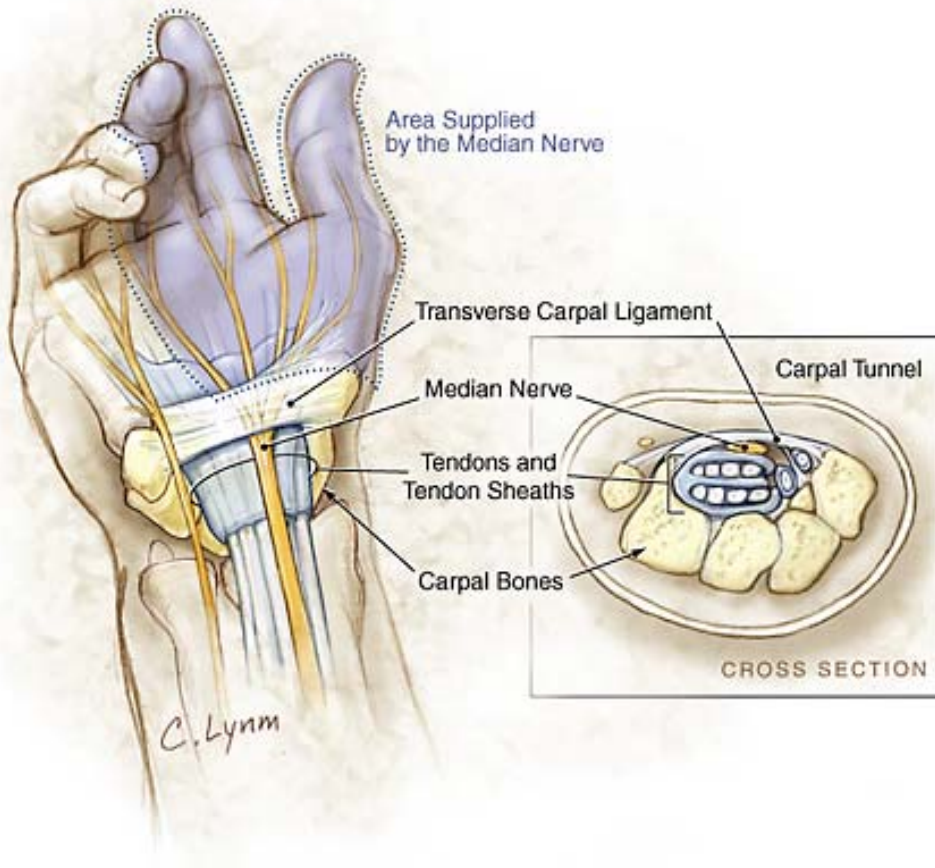
- **Thyroid**

- **Diabetes**



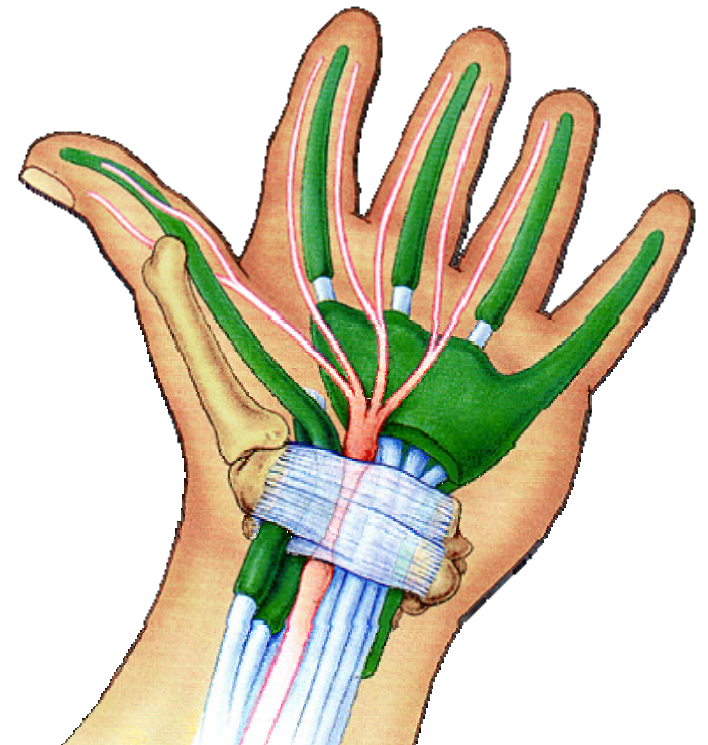
- **Inflammatory conditions (rheumatoid arthritis)**

What is the carpal tunnel, anyway?



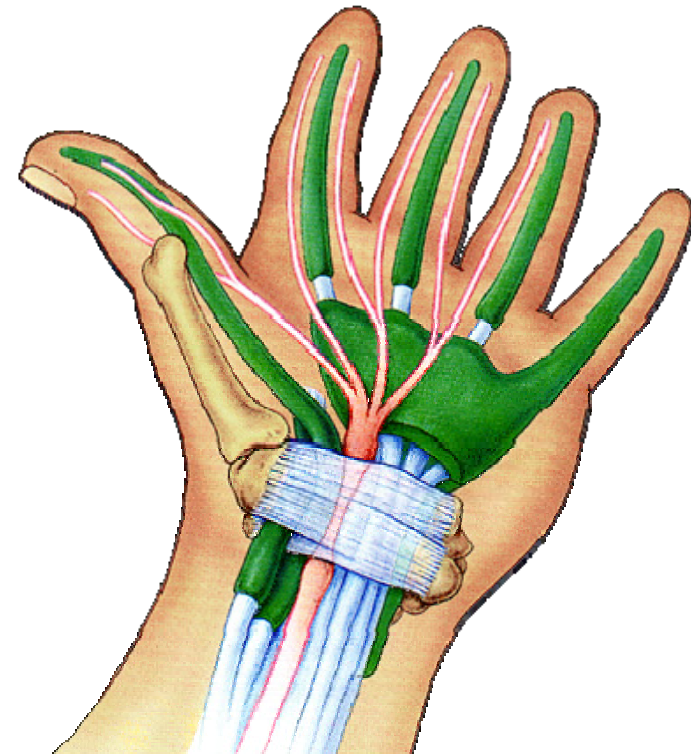
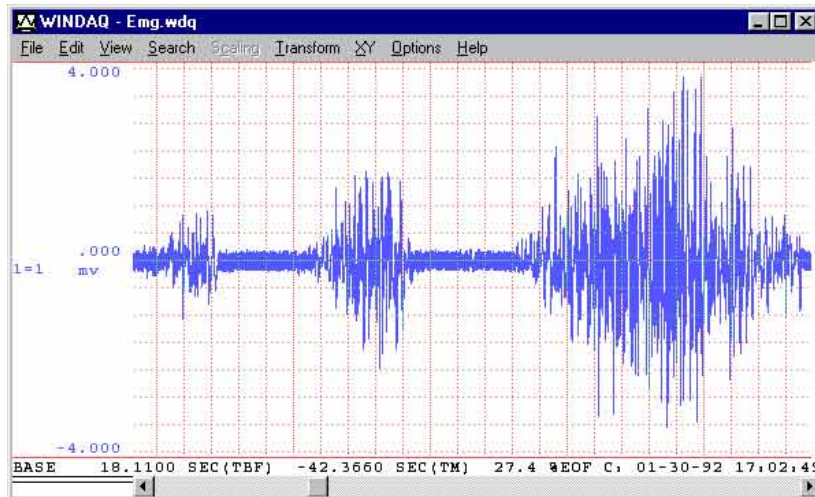
How bad is it? - Diagnosis

- Doctor's office
- “Signs and symptoms”
 - Nerve irritability
 - Muscle weakness



How bad is it?

- Nerve studies
 - Electrodiagnostic, EMG
- Response to treatment



How is it treated?

- Simple measures to complex
 - Splints to Surgery



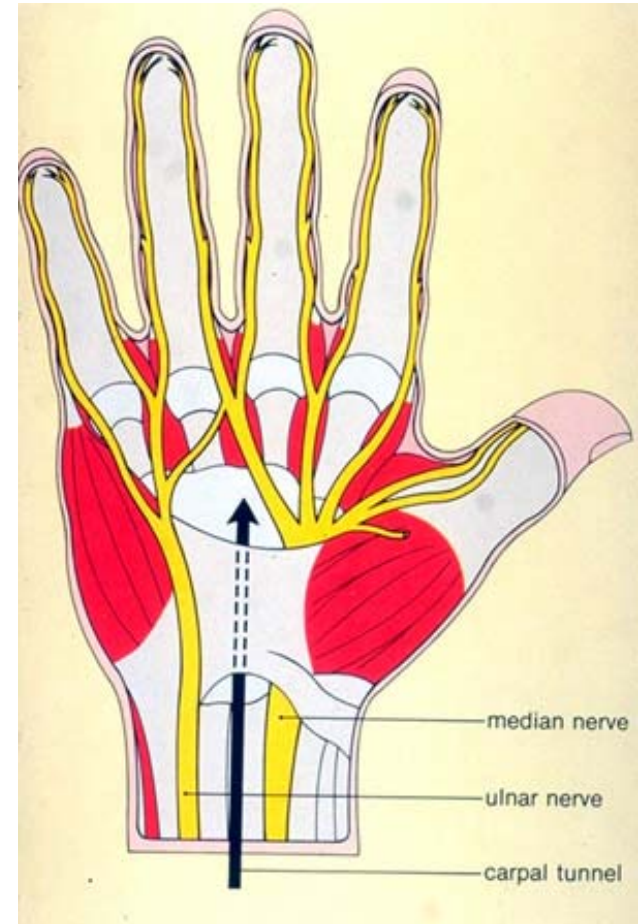
How is it treated?

- **Night splints**
 - **Take pressure off nerve**
- **Change activity**
- **Medicines**
 - **Vitamin B6, diuretics, steroids**
- **Injections (steroid)**
- **Surgery**



What does surgery do?

- Cut the ligament (transverse carpal)
- Gives the nerve more room



What type of surgery?

- Varying incisions and techniques

- They all work

- By a surgeon –

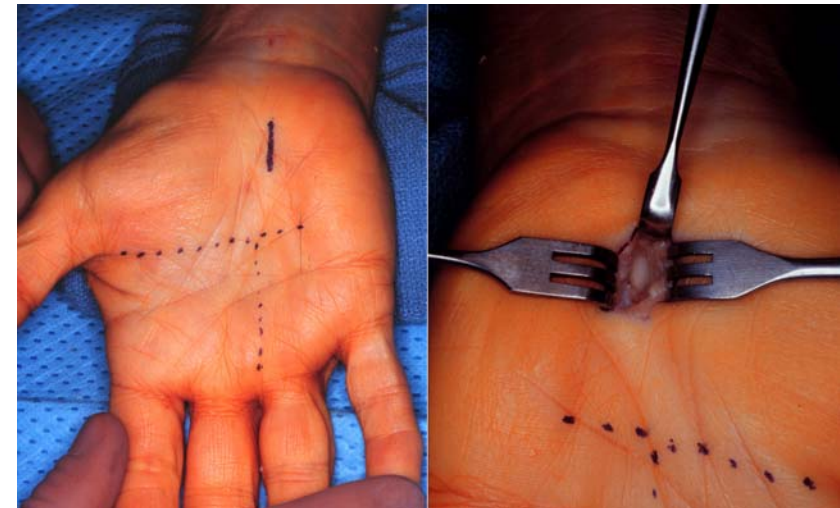
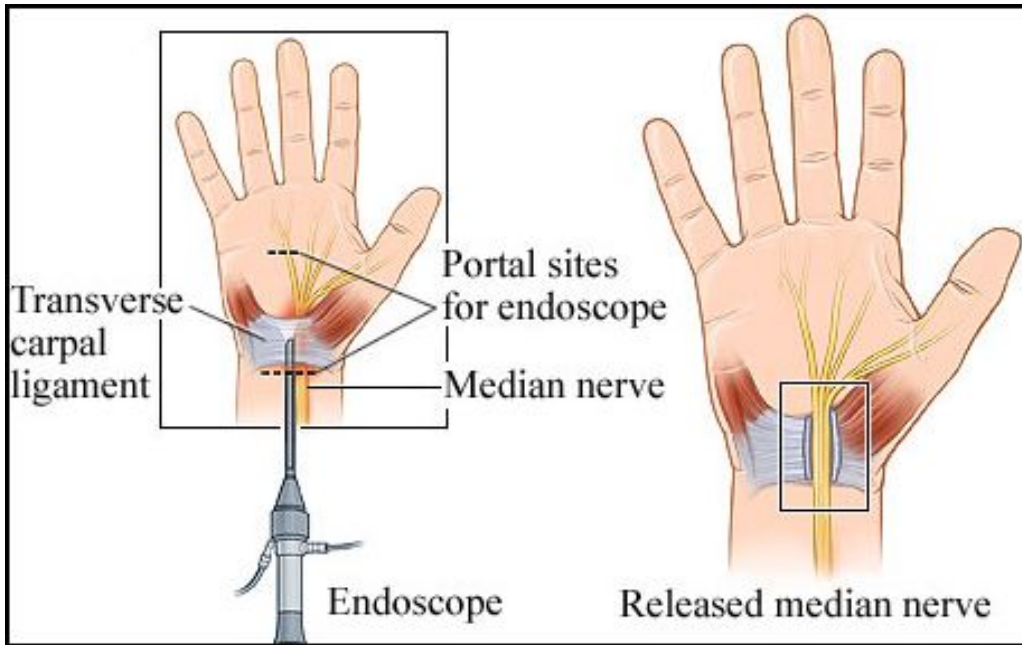
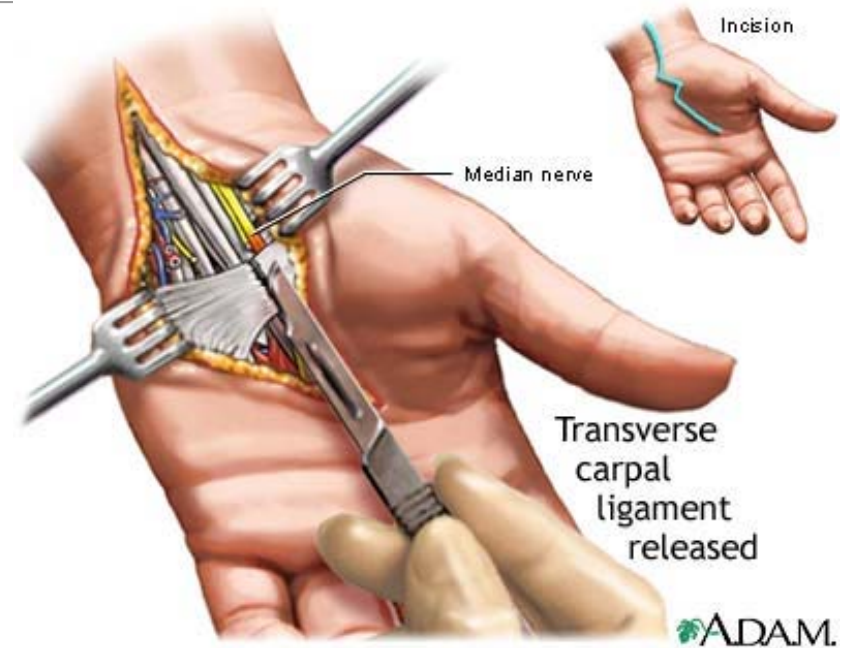
- Orthopaedic surgeon

- Hand surgeon (orthopaedic, plastic, neurosurgeon)



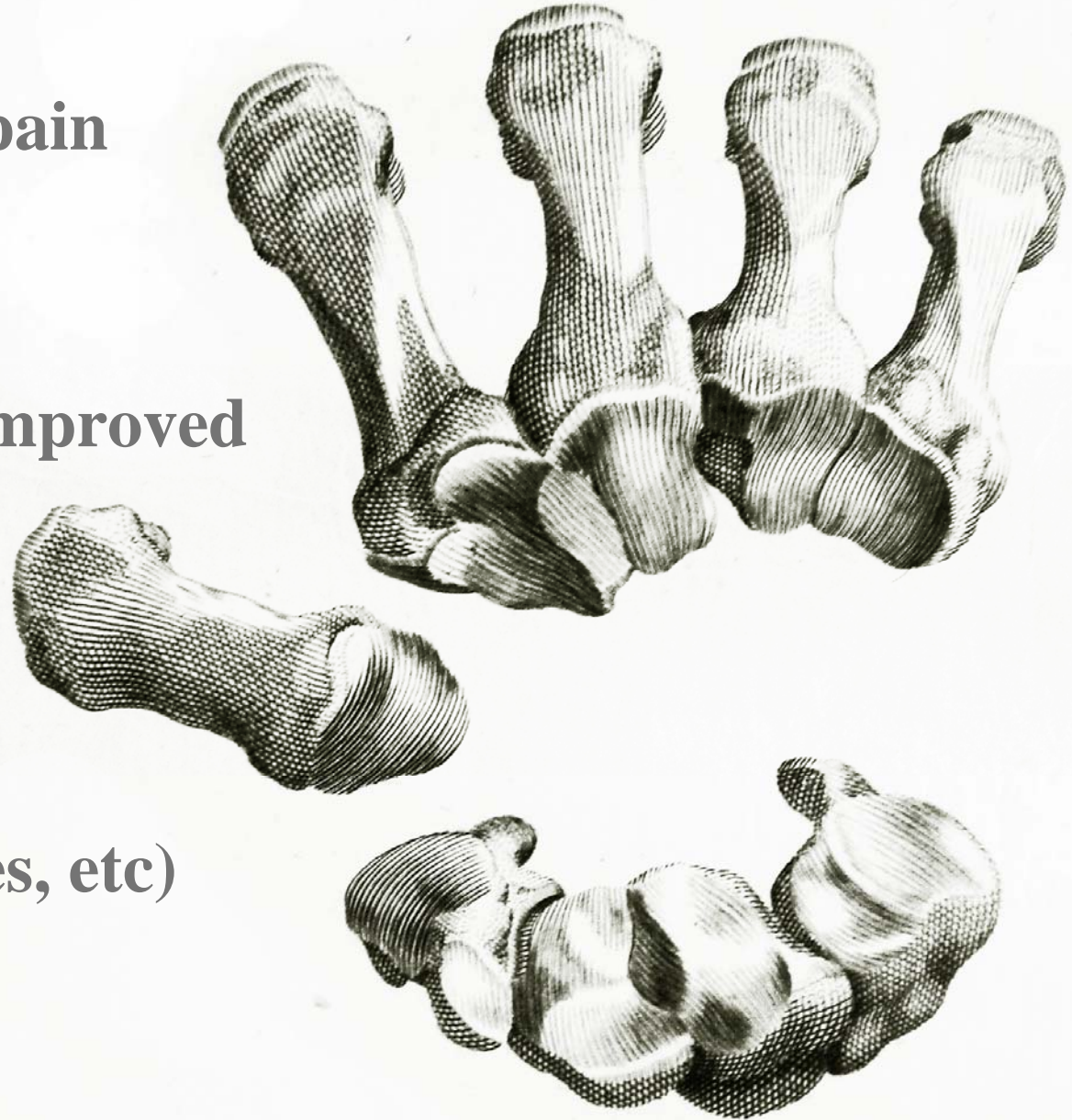
Types of releases

- Extended incision
- Limited incision(s)
- Endoscopic



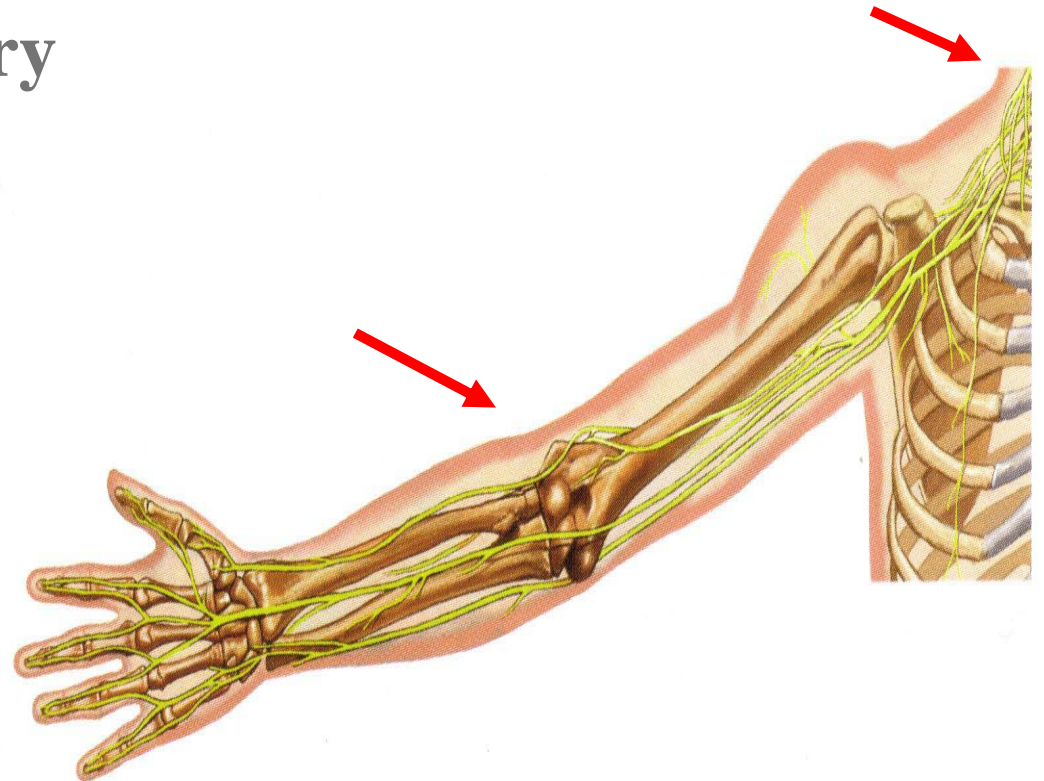
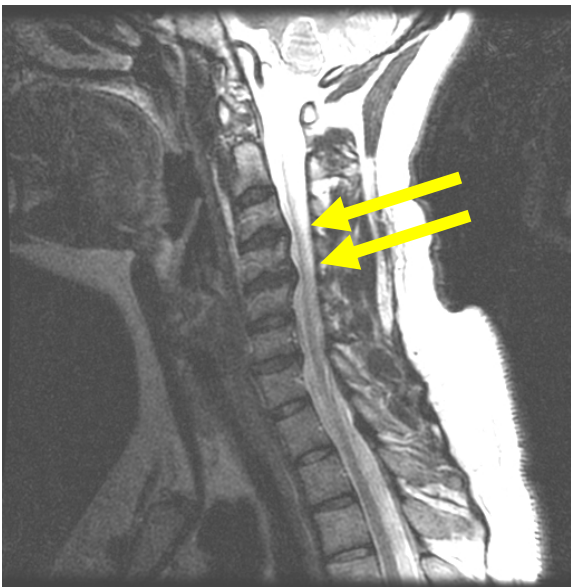
Symptom relief with surgery?

- Numbness, weakness, pain
 - Mild - cure
 - Moderate – cure to improved
- Severe
 - Varies
- Other diseases (diabetes, etc)
 - Varies



When is it **NOT** carpal tunnel syndrome?

- Other sites of compression
- Chronic tendinitis (repetitive stress)
- Doesn't respond to surgery



Thank you

