

***OPEN CARPAL TUNNEL RELEASE
USING A PROXIMAL UNIPORTAL
TECHNIQUE: EVALUATION OF THE
RESULTS***

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Purpose of the Study



To evaluate the efficiency and efficacy of a proximal uniportal minimally invasive technique of CTS release

Carpal Tunnel Syndrome

- ✓ The most common entrapment neuropathy affecting 1% of the general population
- ✓ 70 % of patients report being satisfied with the results of carpal-tunnel surgery

Carpal Tunnel Syndrome

- Pain in hand, forearm, arm
- Numbness in median nerve distribution
- Symptoms aggravated by wrist flexion
- Positive Tinel sign at the wrist
- Thenar atrophy in advanced stages



CTS: Methods of Surgical Treatment

- ✓ Open
- ✓ Arthroscopic
 - Proximal Uniportal
 - Distal Uniportal
 - Two Incisions
- ✓ Minimally Invasive:
 - Two incisions



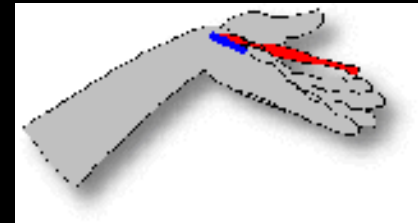
CTS: Methods of Surgical Treatment

✓ **Open CTS Release:**

increased morbidity, scar problems

✓ **Endoscopic CTS release:**

successful, decreased morbidity,
less scar tenderness, significant
complications, faster recovery



✓ **Minimally Invasive Techniques:**

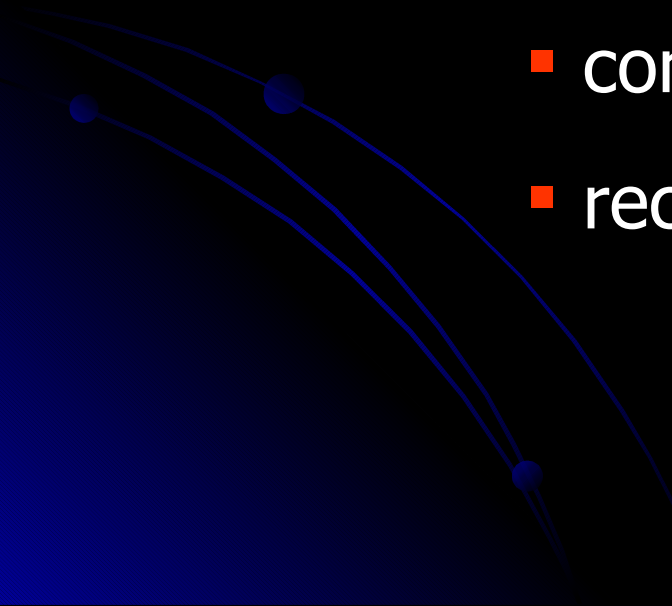
combine the advantages of both methods
along with small morbidity

Patients - Methods

- Prospective study
- 87 patients treated for idiopathic carpal tunnel syndrome
- Age 47 to 91 years (mean 56)
- Proximal, uniportal technique
- Mean follow up 18 months

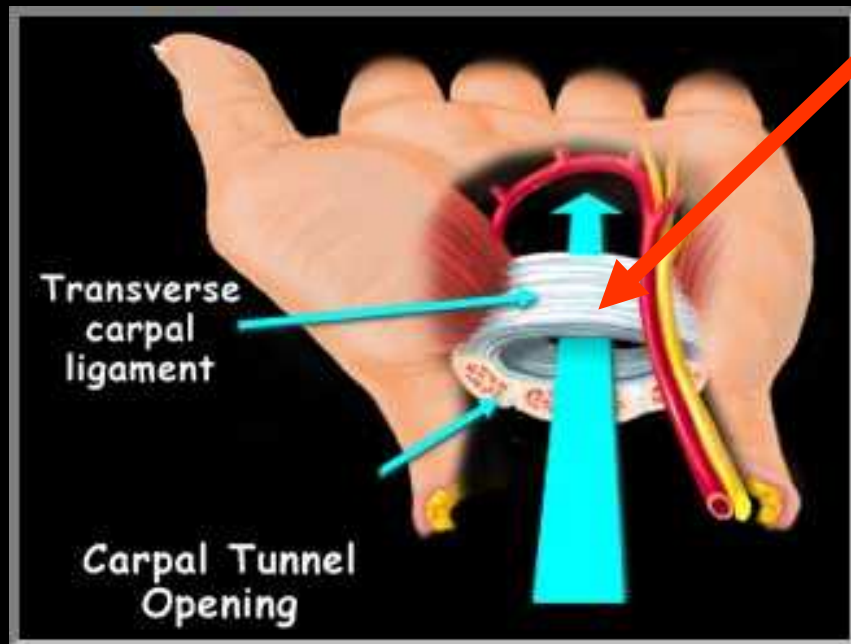
Patients - Methods

Assessment:

- scar tenderness
 - relief of symptoms
 - complications
 - recurrence
- 

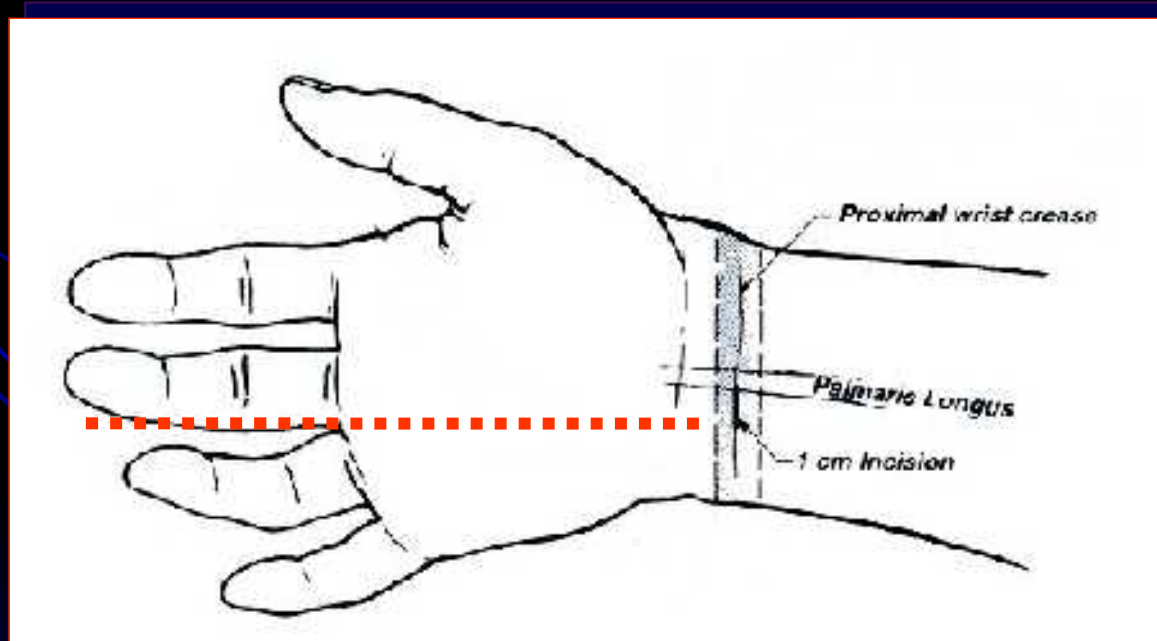
Operative Procedure

- 1.5 cm transverse or longitudinal incision
at distal forearm under LA and Tourniquet
- Identification of proximal border of transverse ligament

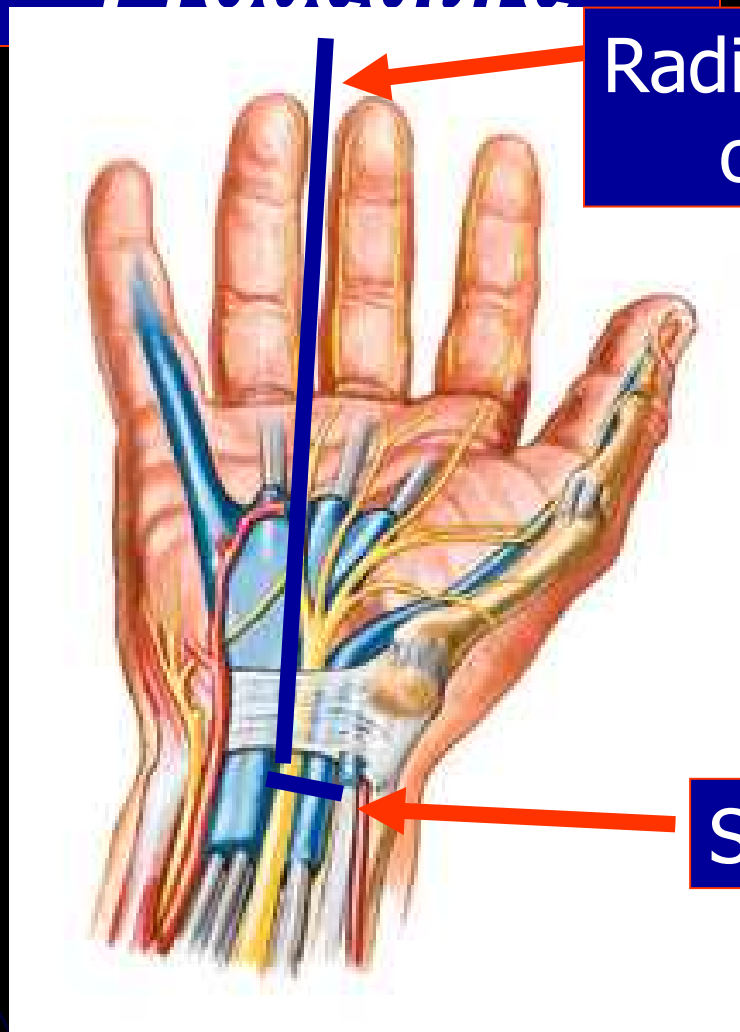


Operative Procedure

- Fashioning bluntly a subligamentous route
- Division of the ligament along the radial border of the ring finger



Operative Procedure

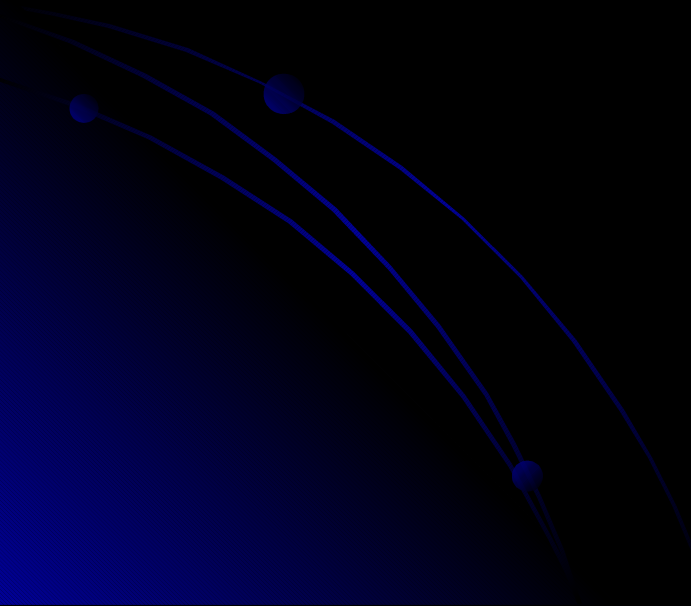


Radial Border
of Ring Finger

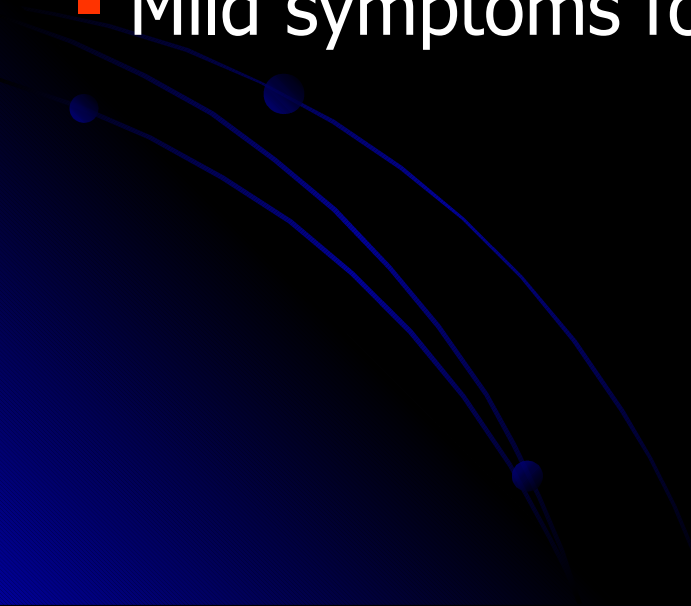
Skin Incision

Results

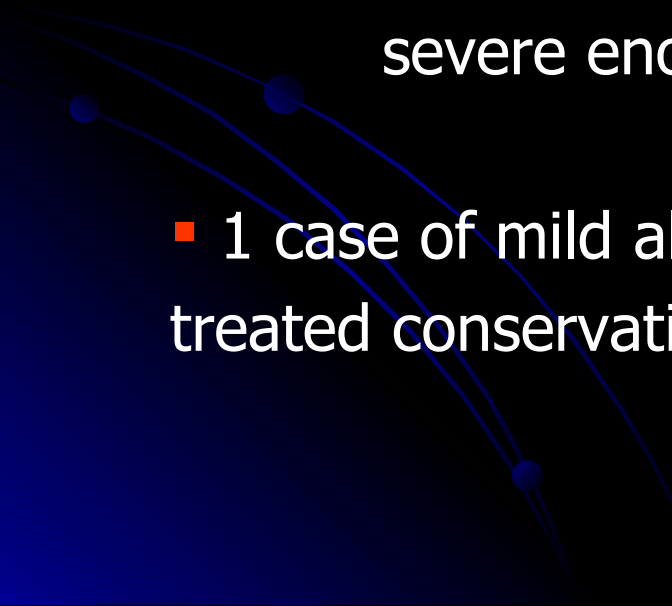
Symptoms and function scores improved significantly after the operation, while the complications were not permanent or significant.



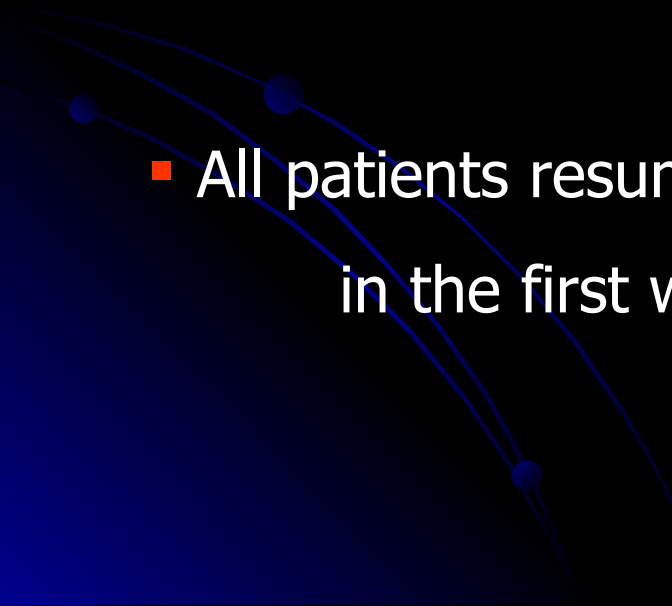
Results

- Immediate relief (the night of the operation) was achieved in 79 patients
 - Mild symptoms for the first 2 weeks in 16 patients
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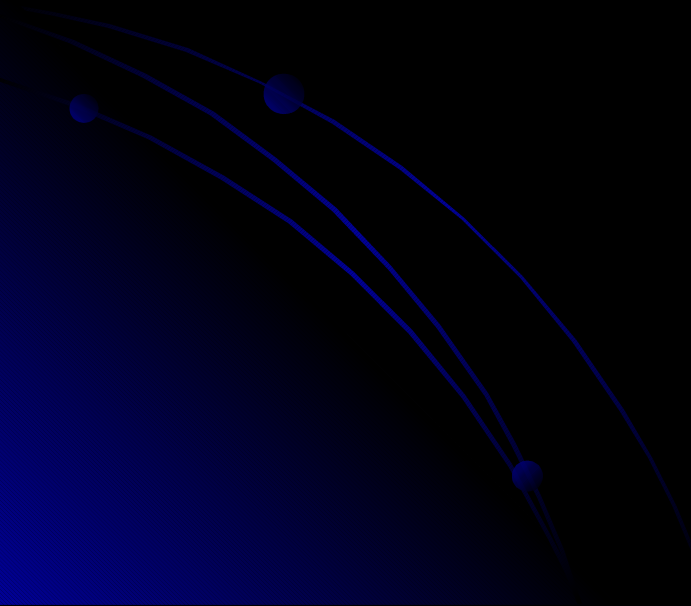
Results

- 3 pts paraesthesias at 3 months
 - complete relief was obtained in 84 of the 87 pts by the end of the study
 - Tenderness common during the first month, but it is not severe enough to interfere with daily activities.
 - 1 case of mild algodystrophy syndrome, treated conservatively
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Results

- No hypertrophic scars were observed.
 - 9 patients complained of mild pillar pain at the third month, and just 4 patients did so at 1 year.
 - All patients resumed daily activities in the first week after the operation.
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Conclusi on

- ✓ Minimal-incision open carpal tunnel release can be performed safely and is associated with good functional outcomes.
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Thank You

