RAPID RESEARCH

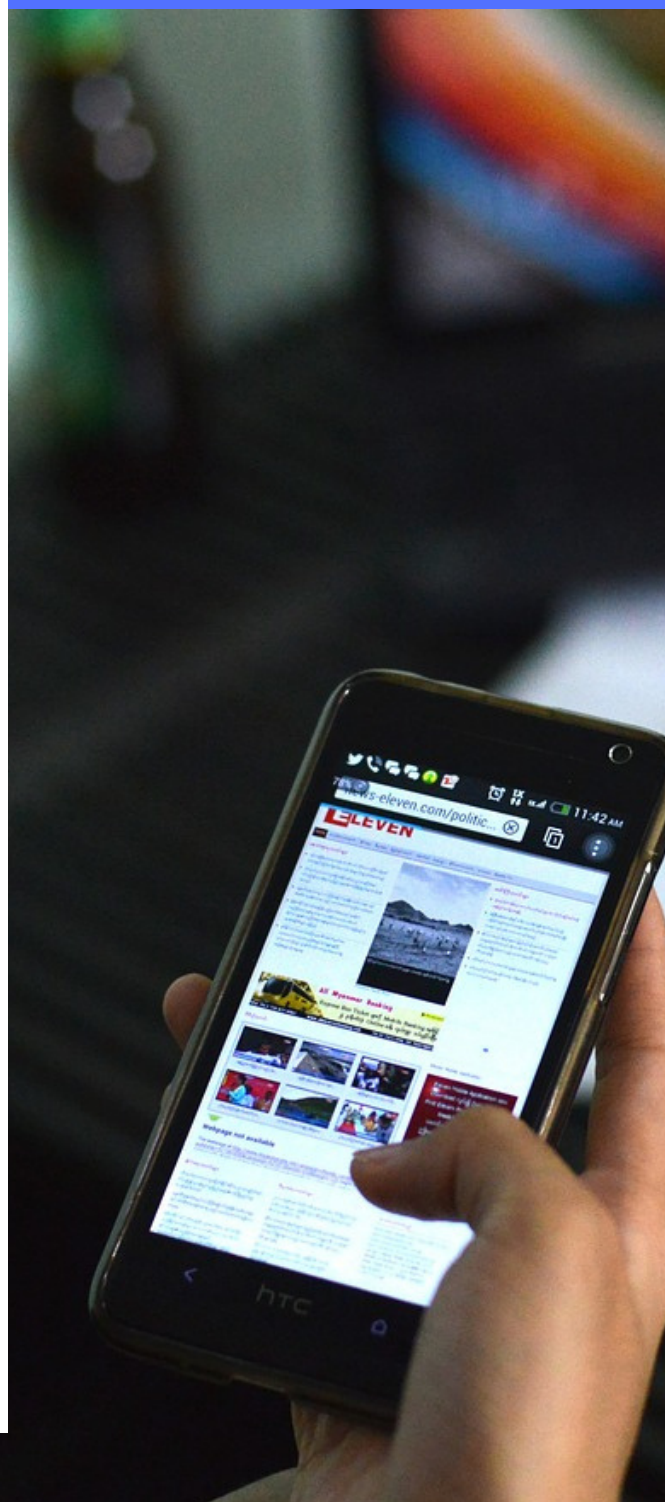
@physicaltherapyresearch

July 2022

Inside This Week:

Carpal Tunnel Treatment Options (Non-Surgical)

- Effectiveness of Manual Therapy for Carpal Tunnel
- Self-stretching of Carpal Ligament for CTS Treatment
- Extracorporeal Shockwave Therapy (ESWT) for Carpal Tunnel

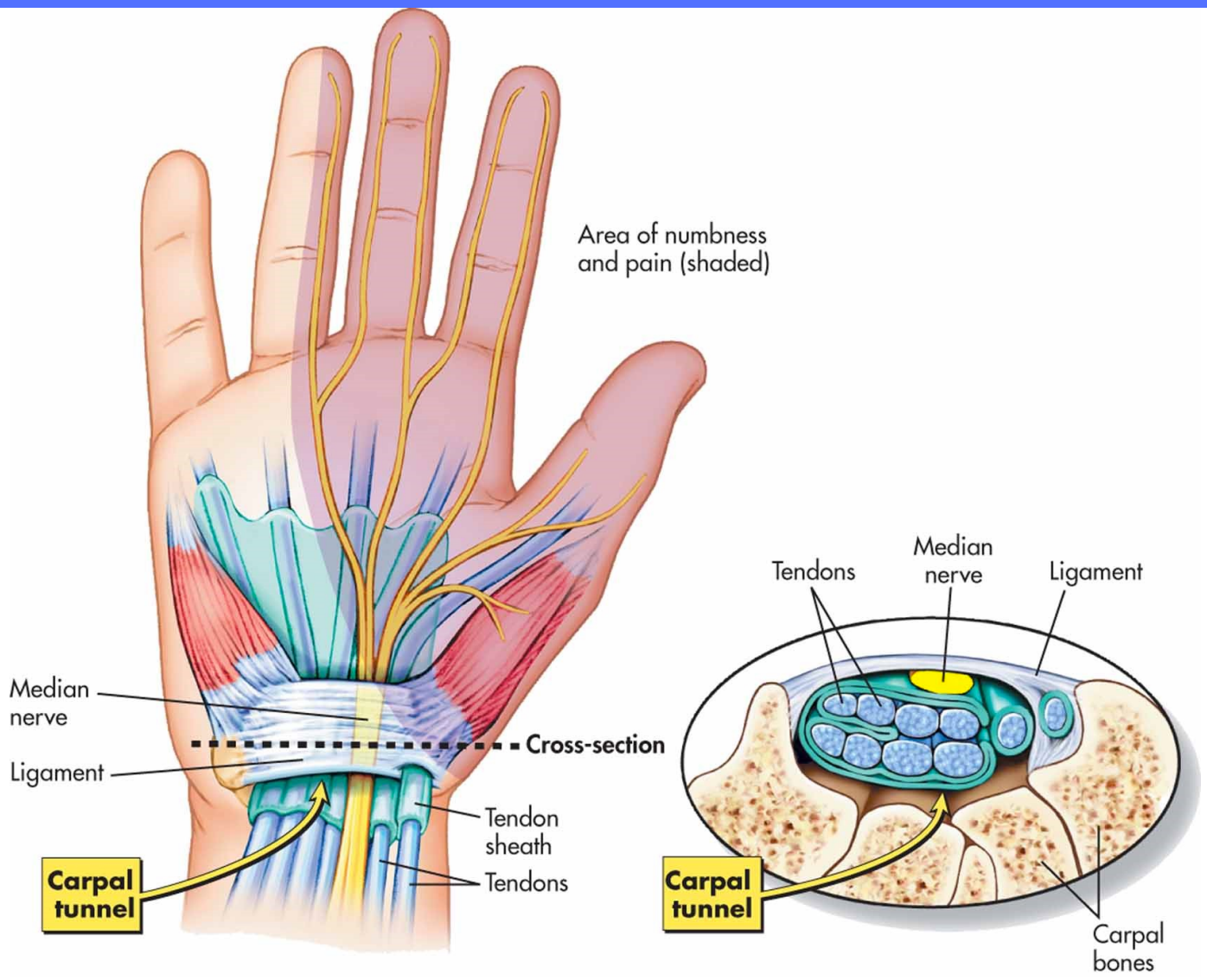


JULY 2022

EFFECTIVENESS OF MANUAL THERAPY FOR CARPAL TUNNEL

Click for Full Text (Jiménez-del-Barrio et al. 2022)

This systematic review assessed the effectiveness of manual therapy in improving CTS symptoms such as pain, physical function, and nerve conduction.



KEY FINDINGS

6 studies including 401 patients included.

Pain intensity (218 Rx group vs. 197 control):
Immediately after treatment showed an **average difference of -2.13 on a 0-10 scale.**

Physical function (194 Rx group vs. 173 control):
Average reduction of−1.67 for symptom severity.
Average reduction of−0.89 for functional status.

Nerve conduction (211 Rx group vs. 190 control):
Average reduction of -0.19 for motor conduction.
Average reduction of -1.15 for sensory conduction.

MAIN TAKEAWAYS

Conservative treatment based on manual therapy is **effective for reducing pain intensity and improve function and nerve conduction studies** compared to control or sham in patients with Carpal Tunnel Syndrome.

Manual therapy techniques can have beneficial effects for CTS by addressing soft tissue and neurodynamic mobilizations.

JULY 2022

SELF-STRETCHING OF CARPAL LIGAMENT FOR CTS TREATMENT

Click for Full Text (Shem et al. 2020)

This randomized controlled trial evaluated the effectiveness of a self-carpal ligament stretching (CLS) program versus a sham massage program in the treatment of Carpal Tunnel

KEY FINDINGS

83 participants randomized to sham or self-carpal ligament stretching. Performed self-treatment 4x/day for 6wks.

Outcome measures included:
Subjective complaints
Strength
Nerve conduction findings
Functional scores.

No Significant group differences found.

Significant improvements in treatment group found for:
Numbness (Cohen's d = .53)
Tingling (Cohen's d = .60)
Pinch strength (Cohen's d = −.58)
Symptom severity scale (Cohen's d = .69)

MAIN TAKEAWAYS

Self-myofascial stretching of carpal ligament can be a conservative treatment option for patients with CTS.

Improvements were seen across multiple measures (numbness, tingling, pinch strength, sensory amplitude, and SSS).

Teaching this simple self-stretch may help patients avoid excess cost associated with imaging, healthcare appointments and unnecessary treatment.

JULY 2022

EXTRACORPOREAL SHOCKWAVE THERAPY (ESWT) FOR CARPAL TUNNEL

Click for Full Text (Kim et al. 2019)

This meta-analysis compared the improvement in symptoms, functional outcomes, and electrophysiologic parameters on patients with CTS between ESWT and control treatment groups.

KEY FINDINGS

6 randomized controlled trials:
281 participants; 145 ESWT and 136 control
Follow-up duration ranged from 12-24 weeks.

ESWT showed **significant overall effect compared to the control**
(Overall Hedge g pooled standardized mean difference (SMD) = 1.44)

Symptoms, functional outcomes, and electro-physiologic parameters **all improved with ESWT treatment.**

No difference between the efficacy of ESWT and local corticosteroid injection.

A publication bias was not evident in this study.

MAIN TAKEAWAYS

The evidence summarized in this review suggests that treating CTS with ESWT can improve symptoms, functional outcomes, and electrophysiologic parameters.

No significant difference in efficacies between ESWT and local corticosteroid injections.

GIVE US YOUR FEEDBACK!

MEMBERS

We are on a mission to make research more accessible, easier to interpret, and quicker to implement.

Help us by giving 1 minute of your time to leave feedback for us.

We would greatly appreciate any feedback you have, as it helps us continually improve!

Leave Review