

Letter to the editor

Response to Khan et al: Long-Term Outcomes of Non-surgical versus Surgical Treatment for Carpal Tunnel Syndrome: An Observational Cohort Study.

Domingo Ly-Pen^{1*}, Diana Ly-Liu², José-Luis Andréu³

¹MD, PhD. Cootehill Medical Centre. Cootehill. Co. Cavan. H16AH30 Ireland.

²MD, PhD. Department of Anesthesia, Basurto University Hospital, Bilbao, Bizkaia, Spain.

³MD, PhD. Rheumatology Department. Hospital Universitario Puerta de Hierro Majadahonda. Majadahonda (Madrid). Spain. School of Medicine. Universidad Autónoma de Madrid.

*Corresponding Author: Domingo Ly-Pen; Email: domingoly@gmail.com; <https://orcid.org/0000-0003-4321-8272>

Conflict of Interest: None.

Ly-Pen D., et al. (2024). 4(1): DOI: <https://doi.org/10.61919/jhrr.v4i1.359>

SUMMARY

The letter to the editor discusses the comparative fairness between surgical and non-surgical treatments for Carpal Tunnel Syndrome (CTS), highlighted in Khan et al.'s study. The authors argue that surgical treatments, being based on a unified pathophysiology of decompression, are not comparable to the diverse non-surgical treatments like splinting and local corticosteroid injections, which only some have substantial evidence backing their effectiveness. They reference their own study showing equal effectiveness of surgery and corticosteroid injections in the short term, but a long-term advantage for surgery, despite a significant number of non-surgical cases not requiring further treatment.

Keywords: Carpal tunnel syndrome; surgical treatment, non-surgical treatment.

INTRODUCTION

Dear Editor:

We have read with great interest the recent article "Long-Term Outcomes of Non-surgical versus Surgical Treatment for Carpal Tunnel Syndrome: An Observational Cohort Study", by Khan et al. (1)

We share all the conclusions reached by the authors in their article. Nevertheless, in our modest opinion the comparison between "surgical" vs "non-surgical" treatment modalities is not fair.

We mean that all the surgical CTS treatments, despite different techniques, they are all based on the same pathophysiology: carpal tunnel decompression; these different techniques are almost equally effective as per literature. (2)

On the contrary, non-surgical treatments are very different among them and only two of them have plenty of evidence: splinting and local corticosteroid injections. (2) This is the reason why we think this comparison is not equal.

Our group published the first randomized study comparing decompressive surgery (short incision technique) vs local corticosteroid injections. (3) The follow-up was done at 3, 6 and 12 months. Both treatments were equally effective, with no relevant side effects in any group. In the 2-year follow-up the results were similar, but an additional benefit favourable to surgery. (4) In the long-term follow-up (mean 6.9 years) surgery seemed more effective than corticosteroid injections. (5) Nevertheless, more than one half of injected wrists, did not need new treatment modalities during the follow-up. Furthermore, there was no relationship between the severity of basal electromyogram with the final prognosis in the local injection or in the surgery group.

CONCLUSION

In conclusion, the authors suggest that comparing surgical and non-surgical treatments for CTS is not entirely fair due to the uniformity of surgical approaches versus the diversity of non-surgical ones. Their research indicates that, while both treatment modalities are initially effective, surgical intervention may offer more sustained benefits over time, despite a good prognosis for many treated non-surgically.

REFERENCES

- 1) Khan JHR, Sharif Z, Sajid M, Ikram M, Mahmood U, Yousaf F. Long-Term Outcomes of Non-surgical versus Surgical Treatment for Carpal Tunnel Syndrome: An Observational Cohort Study. JHRR [Internet]. 2023 Dec. 31 [cited 2024 Jan. 11];3(2):1178-83. <https://jhrlmc.com/index.php/home/article/view/309>
- 2) Pace V, Marzano F, Placella G. Update on surgical procedures for carpal tunnel syndrome: What is the current evidence and practice? What are the future research directions? World J Orthop. 2023 Jan 18;14(1):6-12. doi: 10.5312/wjo.v14.i1.6. PMID: 36686281; PMCID: PMC9850791. <https://www.wjgnet.com/2218-5836/full/v14/i1/6.htm>
- 3) Ly-Pen D, Andréu JL, de Blas G, Sánchez-Olaso A, Millán I. Surgical decompression versus local steroid injection in carpal tunnel syndrome: a one-year, prospective, randomized, open, controlled clinical trial. Arthritis Rheum. 2005;52(2):612-9. doi:10.1002/art.20767. <https://onlinelibrary.wiley.com/doi/epdf/10.1002/art.20767>
- 4) Ly-Pen D, Andréu JL, Millán I, de Blas G, Sánchez-Olaso A. Comparison of surgical decompression and local steroid injection in the treatment of carpal tunnel syndrome: 2-year clinical results from a randomized trial. Rheumatology. 2012;51(8):1447-54. doi:10.1093/rheumatology/kes053. <https://academic.oup.com/rheumatology/article/51/8/1447/1842518?login=false>
- 5) Ly-Pen D, Andreu JL, Millán I, de Blas G, Sánchez-Olaso A. Long-term outcome of local steroid injections versus surgery in carpal tunnel syndrome: observational extension of a randomized clinical trial. Hand. 2022;17(4):639-45. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9274889/pdf/10.1177_1558944720944263.pdf