

HAND STRENGTH AND FUNCTION BEFORE AND AFTER CARPAL TUNNEL RELEASE BY OPEN AND ENDOSCOPIC APPROACH IN DIABETES MELLITUS TYPE 2 PATIENTS. A CASE AND CONTROL STUDY

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Abstract

Background: Carpal tunnel syndrome (CTS) is the upper extremity neuropathy more frequent. Treatments led to the entrapment of the median nerve in the carpal tunnel are more complicated and the results less promising and unsatisfactory in diabetic patients.

The **objective** of this study is to compare the results of strength and hand function in healthy patients against patients with diabetes mellitus type 2 (DM2) with a diagnosis of CTS before and after the open and endoscopic release of the carpal tunnel.

Material and methods: This is an observational, retrospective and descriptive study for a period of five years where we evaluated the results in healthy patients and with DM2, with diagnosis of CTS who underwent surgical treatment by open or endoscopic approach; we applied the DASH questionnaire, force grip and clamp fine measurements, presence of infection, pain and complications.

Results: The results of 86 patients evaluated, showed a statistical association in the decrease in scores on the functional scale DASH with both approaches, association between remission of hypoesthesias in healthy patients with either of the two approaches as opposed to diabetic patients and association between developing DM2 and complications in the short term.

Conclusion: Both approaches improve symptoms and function of the hand in healthy and diabetic patients, but the first group will present cases of complete remission in contrast to the group of diabetic patients.

Key words: Carpal tunnel, open surgery, endoscopic surgery, diabetes.



Biography:

Dra. María de Lourdes Velázquez-Rueda received from Universidad La Salle her medical degree in 2012. She completed a 4 year residency training program in Orthopaedic and Trauma Surgery at Hospital Angeles MOCEL and a 2 year fellowship program in Hand and Microvascular Surgery at Instituto Nacional de Rehabilitación in México City. Currently, she is part of the medical staff at Shriners Hospitals for Children Mexico City and works in her private practice.

Speaker Publications:

Primary tumours and pseudotumors of the hand in adults. Epidemiological analysis of cases, management and evolution

Strength and function of hand before and after release of carpal tunnel in patients with type 2 diabetes mellitus by open and endoscopic approach. Case-control study

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