



Possibilities of surgical treatment of carpal tunnel syndrome in elderly women

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ABSTRACT

Carpal tunnel syndrome is a common neuromuscular condition that primarily affects elderly women, characterized by compression of the median nerve in the wrist. This compression leads to symptoms such as pain, tingling, and weakness in the hand and fingers, significantly impacting patients' quality of life.

Keywords: "Carpal tunnel syndrome", "Surgery", "Elderly women", "Treatment", "Results".

1 INTRODUCTION

Carpal tunnel syndrome is a common neuromuscular condition that primarily affects elderly women, characterized by compression of the median nerve in the wrist. This compression leads to symptoms such as pain, tingling, and weakness in the hand and fingers, significantly impacting patients' quality of life. Surgical treatment is an effective option for relieving symptoms and improving hand function, especially in more severe cases or when other therapeutic approaches do not provide adequate relief. The objective of this systematic literature review is to analyze the possibilities of surgical treatment



of carpal tunnel syndrome in elderly women. Through the analysis of scientific studies and relevant articles, we seek to identify the efficacy, safety and outcomes associated with the different surgical approaches available for this specific population.

2 MATERIALS AND METHODS

The methodology of this review was based on the PRISMA checklist. The databases used were PubMed, Scielo and Web of Science, which were explored to identify relevant studies published in scientific journals. The descriptors used for the search were: "carpal tunnel syndrome", "surgery", "elderly women", "treatment" and "results". Inclusion criteria: Studies that exclusively involved elderly women with a diagnosis of carpal tunnel syndrome, studies that addressed the surgical treatment of carpal tunnel syndrome in elderly women, studies that reported relevant outcomes related to the surgical treatment of carpal tunnel syndrome in elderly women. Exclusion criteria: Studies that included both elderly women and younger women, or that did not discriminate the age of the participants, studies that did not meet the criteria of adequate methodological quality, such as non-randomized clinical trials, case reports or studies with very small samples

3 FINDINGS

Analysis of the 5 studies revealed that surgical treatment is an effective option for symptom relief and improvement of hand function in elderly women with carpal tunnel syndrome. Transverse carpal ligament release surgery, either through an open or minimally invasive approach, has demonstrated promising results in reducing median nerve compression. This results in significant decrease in pain and tingling, as well as recovery of strength and tenderness in the affected hand (Tang DT, et al. 2015). Elderly women may have other medical conditions, such as diabetes, hypertension, and osteoporosis, which may influence the response to surgery and postoperative recovery. In addition, physical frailty and the general state of health should also be taken into account. The decision to perform the surgery should be made in conjunction with the patient, considering her expectations and preferences, as well as the risks and benefits of the intervention (Middleton SD and Anakwe RE, 2014). Most studies have reported significant improvement in pain, tingling, and weakness after surgery. However, it is also important to consider the possible complications associated with the surgical procedure. Among the most common complications are infection, bruising, persistent pain and scarring. Careful analysis of risks and benefits is critical for decision making and for providing adequate information to patients during the recovery process (Zamborsky R, et al. 2017). Transverse carpal ligament release surgery can be performed through an open or minimally invasive incision. Both approaches have shown positive results, with minimally invasive surgery associated with smaller incisions, shorter hospital stays, and faster recovery. The choice of surgical approach should



be made according to the severity of the case and the experience of the surgeon (Chammas M, et al. 2014). Physical therapy may be recommended to help with hand recovery and improved function. It is essential to follow the guidelines of the surgeon and medical team to avoid complications and ensure proper recovery. Regular follow-up after surgery is important to monitor the evolution of the condition and provide necessary support during rehabilitation (Barros MF, et al. 2015).

4 FINAL CONSIDERATIONS

Carpal tunnel syndrome affects elderly women, causing uncomfortable symptoms in the hand and fingers. Surgical treatment is an effective option to relieve symptoms and improve hand function. Careful selection of patients, choice of appropriate surgical approach, and consideration of risks and benefits are crucial to the success of surgery. Although surgery has high success rates, it is important to inform about possible complications. The systematic review provides valuable information for healthcare professionals and helps improve individualized care for older women affected by carpal tunnel syndrome.



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