

de Quervain's Tenosynovitis: Strategies for accurate diagnosis and effective treatment

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ABSTRACT

De Quervain's disease is a painful condition affecting the tendons of the thumb, characterized by inflammation and thickening of the tendon sheaths in the wrist, often associated with repetitive motions. The diagnosis is made by clinical evaluation and imaging tests such as ultrasound and magnetic resonance imaging, with conservative treatments including rest and the use of anti-inflammatory drugs, while persistent cases may require surgery. This study reviews the methods of diagnosis and treatment, analyzing their efficacy and implications.

Keywords: De Quervain's disease, Diagnosis, Treatment.

INTRODUCTION

De Quervain's disease or De Quervain's tenosynovitis (TQ) is a painful musculoskeletal condition that affects the tendons of the abductor longus and extensor pollicis brevis. Initially described by Fritz de Quervain in 1895, this condition is characterized by thickening and inflammation of the tendon sheaths in the first dorsal compartment of the wrist (Fakoya *et al.*, 2023; Hartveld, Smittenberg, Keuter., 2021; Medic-Pericevic *et al.*, 2024).

These pathological changes result in difficulties in the normal sliding of the tendons during movement, leading to symptoms such as pain at the base of the thumb, localized tenderness, and significant functional limitation. TQ is more common in women between the ages of 30 and 50, especially those involved in professions that require repetitive movements and heavy use of the hands (Laszlo *et al.*, 2020; Akdag *et al.*, 2021).

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This study aims to review the diagnostic and treatment methods available for TQ, exploring their efficacy in the clinical management of the condition.

MATERIALS AND METHODS

For this study, a detailed literature review was adopted in June 2024. Databases such as *SciELO*, *PubMed*, *Google Scholar* and Virtual Health Library were consulted. The search used keywords in Portuguese, English and Spanish, including "De Quervain's disease", "diagnosis" and "treatment".

The selection covered articles from the last 2 years, focusing on updated studies, systematic reviews and meta-analyses on TQ. The inclusion criteria considered studies on clinical symptoms, diagnostic imaging and clinical methods, and conservative and surgical therapeutic options. 10 articles were chosen based on relevance, methodological quality, and contribution to the understanding of TQ.

RESULTS

The diagnosis of TQ is based on the clinical evaluation of symptoms, such as pain at the base of the thumb, localized tenderness, and a positive Finkelstein test, which causes pain when performing a specific pull on the thumb (Akdag *et al.*, 2021; Hartveld, Smittenberg, Keuter., 2021).

In addition, ultrasound (USG) and magnetic resonance imaging (MRI) are used to confirm the diagnosis and assess the severity of inflammation (Asaad *et al.*, 2023). Conservative treatments include rest, use of nonsteroidal anti-inflammatory drugs (NSAIDs), and immobilization of the wrist and thumb. Corticosteroid injections are used in refractory cases, providing quick relief but with possible long-term complications such as skin atrophy (Laszlo *et al.*, 2020; Drapeza Jr *et al.*, 2022; Larsen *et al.*, 2021).

If conservative treatments fail, surgery may be considered, involving the release of the first dorsal compartment of the wrist to increase the space for the tendons, although there is a risk of hypertrophic scarring, recurrence of symptoms, and nerve damage (Kavalco *et al.*, 2023; Lima *et al.*, 2024; Magalhães *et al.*, 2023).

FINAL CONSIDERATIONS

Optimal management for TQ involves accurate diagnoses and effective treatments, tailored to individual needs, starting with less invasive measures such as rest and NSAIDs, progressing to corticosteroids and, if necessary, surgery. The multidisciplinary approach, involving orthopedists and physiotherapists, is crucial to optimize results and reduce complications. Future research is needed to improve treatment guidelines and compare the effectiveness of different therapeutic modalities.



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