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Importance of early arthrocentesis in temporomandibular joint closed lock by disc displacement without reduction. A case review

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Abstract

Arthrocentesis (joint lysis and lavage) and hydraulic distension with manipulation of the temporomandibular joint have been described as effective options for reducing joint pain and improving function in patients with limited mouth opening (closed lock) due to disc displacement without reduction, fundamentally in the acute phase of the disorder. However, the efficacy and scientific basis of such treatment have not been validated to date. As a result, the most frequent management strategies tend to be more conservative and mainly focus on the use of nonsteroidal antiinflammatory drugs and/or muscle relaxants, occlusal splints and physiotherapy.

The present study was carried out to assess the efficacy of early arthrocentesis in improving mouth opening and reducing joint pain in a woman with a 10-day history of acute closed lock due to left temporomandibular joint disc displacement without reduction.

Key words: Arthrocentesis, early use, closed lock, disc displacement without reduction, limited mouth opening, temporomandibular joint.

Introduction

Temporomandibular joint (TMJ) closed lock is typically the result of a normally anterior or anteromedially displaced joint disc that is not reducible and acts as an obstacle against anterior displacement of the mandibular condyle (1). The associated clinical signs are restricted anterior translation of the mandible, the absence of joint

sounds (clicks), deflection towards the affected side on opening the mouth, limitation of lateral movement towards the contralateral side and restricted protrusion, with the mandible displacing towards the affected side. Acute cases are characterized by joint pain in response to palpation and on opening the mouth (2). The diagnostic imaging technique of choice is magnetic resonance