

Images in Rheumatology

Chatelet, et al: TMJ synovial cyst

A Synovial Cyst of the Temporomandibular Joint

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A 25-year-old woman without personal medical history complained of a unilateral preauricular pain, increased by temporomandibular joint (TMJ) mobilization, that had been evolving for a few months. She had no history of traumatic injury. Clinical examination revealed a tender right preauricular mass, and a reduced mouth opening, with a maximal opening of 33 mm. Oral examination revealed normal occlusion.

Magnetic resonance imaging (MRI) was performed and revealed a well-delimitated and homogeneous cystic lesion, measured at $12 \times 8 \times 10$ mm, with a T2-weighted hypersignal (Figure 1A), and a T1-weighted hyposignal, without enhancement after gadolinium injection (Figure 1B), in the right

temporomandibular region. A surgical exploration found a cystic mass related to the TMJ (Figure 2). Histopathological examination confirmed the diagnosis of a synovial cyst.

A synovial cyst located in in the TMJ is rare, and to date only 24 cases of synovial cyst of the TMJ have been reported in the literature¹. The main differential diagnosis is represented by the ganglion cyst and the final diagnostic is usually made on histological examination². Surgical excision is the main treatment, with good results. Recurrence rate seems to be low, without any recurrence reported in the literature, but persistent postoperative pain is possible¹. Intraarticular injection or aspiration has also been described, without success^{1,3}.

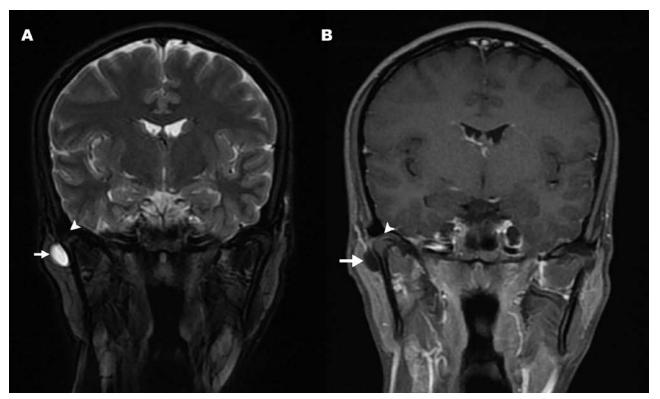


Figure 1. MRI showing a well-delimitated and homogeneous cystic lesion (white arrow), with (A) a T2-weighted hypersignal, and (B) a T1-weighted hyposignal, without enhancement after gadolinium injection, appended to the temporomandibular joint (white arrowhead). MRI: magnetic resonance imaging.

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Figure 2. Surgical view after dissection of the synovial cyst (white arrow) related to the TMJ capsule (white arrowhead). TMJ: temporomandibular joint.

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