

# **Association Between Disk Position and Degenerative Bone Changes of the Temporomandibular Joints: An Imaging Study in Subjects with TMD**

Sylvester, Daniel Cortes; Exss, Eduardo; Marholz, Carlos; Millas, Rodrigo; Moncada, Gustavo

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## **Resumen**

The aim of this study was to determine the frequency and relationship between disk position and degenerative bone changes in the temporomandibular joints (TMJ), in subjects with internal derangement (ID). MRI and CT scans of 180 subjects with temporomandibular disorders (TMD) were studied. Different image parameters or characteristics were observed, such as disk position, joint effusion, condyle movement, degenerative bone changes (flattened, cortical erosions and irregularities), osteophytes, subchondral cysts and idiopathic condyle resorption. The present study concluded that there is a significant association between disk displacement without reduction and degenerative bone changes in patients with TMD. The study also found a high probability of degenerative bone changes when disk displacement without reduction is present. No association was found between TMD and condyle range of motion, joint effusion and/or degenerative bone changes. The following were the most frequent morphological changes observed: flattening of the anterior surface of the condyle; followed by erosions and irregularities of the joint surfaces; flattening of the articular surface of the temporal eminence, subchondral cysts, osteophytes; and idiopathic condyle resorption, in decreasing order.

## **Palabras clave**

**KeyWords Plus:** Internal Derangement; Displacement; Pain; Disorders; Osteoarthritis; Classification; Biochemistry; Metabolism; Reduction; Diagnosis