

SYSTEMATIC REVIEW ON THE CORRELATION BETWEEN PRESENCE OF EFFUSION AND PAIN IN TMDPATIENTS

Objective: The aim of this systematic review is to present a thorough review of the literature regarding the correlation between the presence of effusion on the magnetic resonance (MRI) imaging and the clinical presence of pain, in a homogeneous group of patients with a temporo-mandibular disorder (TMD).

Materials and Methods: From January to February 2023 a systematic review of literature was performed on the main platforms for scientific research (PubMed, Scopus). This analysis follows a PICO model in order to select those articles which assessed the relationship between temporomandibular joint effusions in the MRI and clinical pain in TMD patients. The review follow the PRISMA guideline in the selection of the articles.

Results: The MeSH terms used for the research were "tmj AND mri". For this search a total of 2714 articles were initially retrieved. Only 13 of these articles answered the research question. In 7 articles a relationship between effusion and pain was found; 4 found a relationship between pain and disk displacement (DD); 7 articles found a relationship between effusion and disk displacement (DD) 1 study though stated that there was no correlation between effusion and disk displacement (DD).

Conclusions: The literature clearly suggests a correlation between the presence of effusions and clinical pain in TMD patient. Furthermore correlations were found between effusion and disk displacement (DD) and pain and disk displacement (DD).

Key words: Temporomandibular Disorders, Effusion, Disk Displacement