AB0968 EVALUATION OF OSTEOARTHRITIS OF TEMPOROMANDIBULAR JOINT BY COMPUTED TOMOGRAPHY, CLINICAL FEATURES AND CORRELATIONS

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Background: Osteoarthritis (OA) of the temporomandibular joint is a unilateral, degenerative disease of the jaw joint. It is characterised by breakdown of the articular cartilage, architectural changes in bone, and degeneration of the synovial tissues causing pain and/or dysfunction in functional movements of the jaw

Objectives: To determine the prevalence and relationship between clinical signs, symptoms and computed tomography (CT) manifestations of temporomandibular joint (TMJ) osteoarthritis

Methods: The study included 56 patients with osteoarthritis of the TMJ, included 25 unilateral and 31 bilateral lesions, a total of 87 joints with degenerative changes. Clinically, there was a significant restriction of the movement of the lower jaw and chewing efficiency and a significant increase in articular sounds and general complaints of pain

Results: CT data of the most frequent bone changes were erosions of the joint surfaces of the condyles (70 joints, 81%), osteophytes (73 joints, 87%), then their smoothing (67 joints, 77%), hypoplasia (24 joints, 27.6%), sclerosis (6 joints, 6.8%) and subchondral cysts (4 joints, 4.6%). Smoothing of the joint elevation and pneumatization were observed in five joints. Thirty-one patients had bilateral degeneration. In 25-one-sided degeneration. Hypermobility is found in 37 degenerative joints. Chewing efficiency was negatively correlated both with the degree of smoothing of condyles. Sclerosis and the general complaints of pain positively correlated with the smoothing of condyles

Conclusions: Conjunctural erosion, flattening, osteophytes, revealed with CT, along with pain, noise in the joint, restriction of the jaw movement and deterioration of the chewing movement were characteristic signs of the TMJ. A correlation was found between bone changes and the severity of the clinical signs and symptoms of the TMJ. CT is a powerful diagnostic tool for the diagnosis of TMJ osteoarthritis

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AB0969 CONVENTIONAL AND BIOLOGIC DISEASE MODIFYING ANTI-RHEUMATIC DRUGS FOR OSTEOARTHRITIS: A META-ANALYSIS OF RANDOMISED CONTROLLED TRIALS

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Background: The role of inflammation in osteoarthritis (OA) is controversial. Some perceive OA as a reparative process where modest inflammation is secondary to largely biomechanical insult.¹ In contrast, others believe synovial inflammation to be a central driver of OA pain and progression.² This has encouraged randomised controlled trials (RCTs) of conventional and biologic disease modifying anti-rheumatic drugs (DMARDs) in OA. However, it is unknown whether these treatments that are primarily used for rheumatoid arthritis are effective for OA.

Objectives: To examine the efficacy of DMARDs, including biologics, in people with symptomatic OA.

Methods: A systematic literature search was conducted (to November 2017) for placebo-controlled RCTs of DMARDs in OA. Data extraction and Cochrane's risk of bias assessments were conducted independently by two reviewers (MP, AS). Pain relief at treatment peak time-point was combined using a random-effects meta-analysis. All DMARDs were pooled and sensitivity analysis was undertaken for high-quality trials and subgroup analyses for DMARD type, biologic target, joint site, OA subtype, and publication type.

Abstract AB0969 – Table 1. Subgroup analysis

	ES	95% CI
Sensitivity analysis		
High-quality trials	0.11	–0.06 to 0.28
Subgroup analysis		
Joint		

Knee	0.34	–0.05 to 0.73
Hand	0.09	–0.05 to 0.24
OA type (hand OA)		
Erosive	0.19	–0.06 to 0.45
Non-erosive	0.05	–0.12 to 0.22
Biologic target		
IL1-inhibitor	0.14	–0.16 to 0.45
TNF-inhibitor	0.17	–0.05 to 0.39
Publication type		
Full text	0.27	–0.01 to 0.55
Conference abstract	0.11	–0.05 to 0.27

ES, effect size; CI, confidence interval

Abstract AB0969 – Figure 1. Meta-analysis of DMARDs. ADA: adalimumab; ANK: anakinra; ETN: etanercept; HCQ: hydroxychloroquine; MTX: methotrexate; N: number of participants

Results: Eleven RCTs (n=1205), including six (n=757) for conventional and five (n=448) for biologic DMARDs, were included in the meta-analysis (7 full texts, 4 abstracts). Overall, conventional and biologic DMARDs were marginally superior to placebo. However, statistical superiority was not observed in high-quality studies (table 1) or subgroup analysis for conventional or biologic DMARDs separately (figure 1). Furthermore, no differences were observed between erosive versus non-erosive hand OA, hand versus knee OA, anti-IL1 versus anti-TNF biologics, or full text versus abstract-only publications (table 1).

Conclusions: No significant pain relief was observed from either conventional or biologic DMARDs compared to placebo. Combining all DMARDs gave statistical separation from placebo, but this was below the minimal clinically important difference threshold (0.5 SD) used in the UK.³ Furthermore, the analysis is based on peak time point for the intervention, so even at their most effective timepoints these treatments do very little over placebo. Lack of efficacy of DMARDs supports the perspective that inflammation is not an important driver for OA pain and differs fundamentally from that in rheumatoid arthritis.

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