I56. DMARDS IN OSTEARTHRITIS: WHAT IS THE EVIDENCE?

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DMARDs are used in RA for their effect on the primary disease inflammatory process, resulting in reduction in symptoms and retardation of structural joint damage. Such DMARDs were historically not considered for OA since it was not primarily an inflammatory arthritis. A long history of focus on chondroprotective therapies and failed structure-modification trials may have contributed to this frame of mind. It is well known that inflammation is present in OA, with biopsy studies demonstrating histological synovitis detected at the time of the earliest chondral damage. In terms of cellular make up, there is cellular infiltration with macrophages, activated T and B cells and vascular proliferation. Though cytokine levels are often less than in RA, they are still elevated compared with normal controls, with a similar pattern to RA. The application of modern imaging modalities such as MRI and ultrasound to OA has led to important advances in understanding of the OA phenotype. In typical symptomatic OA, MRI has demonstrated abundant pathology and synovitis has been reported extremely commonly, with detection reflecting the sensitivity of the imaging tool employed. Although generally less in volume and vascularity than in RA, this imaging-detected synovitis has been associated with the pain of OA, and also independently associated with progression to knee joint replacement. How can we use the presence of inflammation in OA to improve therapy of OA? Of our current symptomatic pharmacological agents, the two with consistently modest analgesic effect sizes are NSAIDs and IA corticosteroids—both of which have significant anti-inflammatory actions. Unfortunately both also have considerable limitations on their chronic use. Traditional DMARDs have anecdotally been used in the treatment of OA pain for many years, and a large multicentre trial of HCO in hand OA is now underway.
in the UK. A small, open-label study of MTX demonstrated analgesic efficacy equivalent to that of an NSAID, so this effect is also under study in a randomized trial. Trials targeting IL-1 with a number of mAb inhibitors have been disappointing in terms of symptom control. Several recent studies have investigated the effects of anti-TNF therapies in OA, with variable results. Studies of erosive hand OA have resulted in reduced swollen joint counts and reduced structural deterioration in joints with baseline clinical synovitis, but generally there have been no sustained analgesic benefits, though often anti-TNF therapy was given for short duration. Fewer studies have been conducted in knee OA, although a small number open-label study suggested good analgesic response. Through rational use of DMARDs we may determine the key inflammatory drivers of both pain and structural progression in OA.

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