

fibromyalgia could lead to implementing unnecessary immunosuppressive therapy, or to stopping beneficial treatment prematurely.

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309 COMORBID FIBROMYALGIA COMPLICATING RHEUMATOID ARTHRITIS, ANKYLOSING SPONDYLITIS, PSORIATIC ARTHRITIS AND SPONDYLOARTHROSIS: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Background: Fibromyalgia (FM), is a neurosensory disorder, characterised by chronic widespread pain and tenderness, with a prevalence in the general adult population estimated to be approximately 5%. A higher prevalence of FM has been reported in various rheumatic disease groups. In inflammatory rheumatic disease, concomitant FM may influence assessment of inflammatory disease activity. The prevalence of comorbid FM and its impact on disease activity in rheumatoid arthritis (RA), ankylosing spondylitis (AS), psoriatic arthritis (PsA), and other spondyloarthritis (SpA) has not been systematically studied. Therefore, this systematic review and meta-analysis will describe the prevalence of comorbid fibromyalgia in adults with RA, AS, PsA, or SpA and describe the impact of comorbid fibromyalgia on disease activity scores.

Methods: Cochrane library, MEDLINE, Psycinfo, PubMed, Scopus, and Web of Science were searched by using key terms and predefined exclusion criteria. Studies were quality assessed using Newcastle-Ottawa Scores. We followed PRISMA guidelines for systematic review reporting. Where appropriate, proportional and pairwise meta-analysis methods were used to pool results.

Results: 38 articles met the criteria for inclusion (35 cross sectional, 3 case-control). In RA the prevalence of comorbid FM ranged from 4.9% - 52.4% (20% pooled), in AS 4.11% - 25% (13% pooled), in PsA 9.6% - 27.2% (18% pooled) and 11.1% - 20.7% in other SpA populations. The presence of concomitant FM was related to higher disease activity scores in patients with RA and AS (DAS28 mean difference 1.36, 95% CI 1.21- 1.50 in RA; BASDAI mean difference 2.22, 95% CI 1.86-2.58 in AS). Evidence was scarce amongst those with PsA, or other SpA, though concomitant FM was associated with higher disease activity scores in existing studies.

Conclusion: Fibromyalgia is common in inflammatory rheumatic diseases and significantly more prevalent in these conditions than in the general population. Concomitant fibromyalgia can influence disease activity scores, giving rheumatologists an inaccurate impression of disease severity. Therefore, disease activity indices should be interpreted with caution in these patients, and with knowledge of other objective clinical measurements. Failure to recognise comorbid