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**AB0713 PERIODONTAL DISEASES AND ITS ASSOCIATION WITH ANKYLOSING SPONDYLITIS/SPA: A SYSTEMATIC REVIEW**

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**Background:** A close association between periodontal disease and Ankylosing spondylitis (AS) has long been speculated. Both diseases are characterized by dysregulation of the host inflammatory response, leading to further destruction of soft and hard connective tissue with there being evidence of increased levels of TNF-α and various interleukins in both patients of AS and periodontitis.

**Objectives:** The aim of this systematic review was to appraise the available literature exploring the relationship between AS and periodontal disease.

**Methods:** We searched Medline & Embase databases (from their inception till October 2019) using appropriate combinations of following search items with limits (‘English, Human’): Ankylosing spondylitis, spondyloarthritides, spondyloarthropathies, spondyloarthritides, spinal disease, musculoskeletal disease. Rheumatic disease AND periodontitis, periodontal disease, periodontoses, parodontoses, chronic periodontitis, gum disease, gingivitis, oral health, dental health, plaque index, bleeding on probing, probing pocket depth, clinical attachment loss. This search was supplemented by the manual search of bibliographies of articles selected and conferences proceedings of EULAR. Only be reviews, observational study of cross-sectional, cohort or case control type on adult patients with AS were selected. Data was extracted from a predesigned proforma. A close association between periodontal disease and Ankylosing spondylitis (AS) has long been speculated. Both diseases are characterized by dysregulation of the host inflammatory response, leading to further destruction of soft and hard connective tissue with there being evidence of increased levels of TNF-α and various interleukins in both patients of AS and periodontitis.

**Results:** A total number of 984 articles were identified and 12 were selected for detailed appraisal (Figure 1, PRISMA flow chart). They were all case control type on adult patients with AS were selected. Data was extracted from a predesigned proforma. A close association between periodontal disease and Ankylosing spondylitis (AS) has long been speculated. Both diseases are characterized by dysregulation of the host inflammatory response, leading to further destruction of soft and hard connective tissue with there being evidence of increased levels of TNF-α and various interleukins in both patients of AS and periodontitis.

**Conclusion:** Our systematic review found an association between AS and periodontal disease. Patients with AS show higher prevalence of periodontitis and a poor oral hygiene as compared to healthy controls. At practice level, this systematic review underscores the need for a collaboration between dentists and rheumatologist.