to manage PSA in SPAIN, Consultant of: Pfizer, MSD, ABBVIE, Janssen, Amgen, BMS, Novartis, Lilly, Speakers bureau: Pfizer, MSD, ABBVIE, Janssen, Amgen, BMS, Novartis, Lilly, Eugenio de Miguel Grant/research support from: Yes (Abbvie, Novartis, Pfizer), Consultant of: Yes (Abbvie, Novartis, Pfizer), Paid instructor for: yes (AbbVie, Novartis, Pfizer, MSD, BMS, UCB, Roche, Grunental, Janssen, Sanofi), Speakers bureau: yes (AbbVie, Novartis, Pfizer, MSD, BMS, UCB, Roche, Grunental, Janssen, Sanofi), Rafael Ariza-Ariza: None declared, Cristina Sanabra Employee of: Yes: employed as a Medical Advisor (Novartis), Pau Terradas Employee of: Yes: employed as a Medical Advisor (Novartis), Carlos Sastré Employee of: YES; I'm Medical Advisor in Novartis Spain

DOI: 10.1136/annrheumdis-2020-eular.5336

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, spondyloarthritis, spondyloarthropathies, spondyloarthritis, 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 studies. The prevalence of periodontitis ranged from 38% to 88% in patients with AS whereas in the control group from 26% to 71 % in controls. Out of 12 studies, two showed significant changes in Plaque Index (PI), two studies showed altered Pocket Probing Depth (PPD), three showed significant increased in Clinical Attachment Loss (CAL) and increased Bleeding On Probing (BOP) was seen in 2 studies. In 7 studies, periodontitis was seen in a significant number of patients with AS ($P < 0.05$). All studies reported that the prevalence of periodontal disease in AS patients was higher as compared to non-AS patients.

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.

PRISMA 2009 Flow Diagram

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2020-eular.1564

AB0714

THE ROLE OF AGE, DURATION OF THE DISEASE AND CUMULATIVE GLUCOCORTICOID DOSE IN THE FORMATION OF DISORDERS OF THE STRUCTURAL AND FUNCTIONAL STATE OF BONE TISSUE IN MEN WITH ANKYLOSING SPONDYLITIS

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Background: In recent years, it is becoming increasingly clear that osteoporosis (OP) holds the important place among complications of ankylosing spondylitis (AS). The frequency of emergence of OP, according to the data of last investigations, ranges from 18.7 to 62%, osteopenic syndrome – from 50 to 92%. It is known that decrease of bone mineral density (BMD) in patients with AS is caused not only by the action of traditional risk factors (age, sex, genetic predisposition, low body mass, and others) but also by the action of factors associated with the disease itself such as: duration of AS, activity of the inflammatory process, administration of glucocorticoids (GC), deficiency of Vitamin D, low physical activity of patients and so on. However, until now there are no clear data about the role of each of them in the formation of disorders of bone metabolism in men with AS. In the Ukrainian population of patients with AS such investigations have not been conducted.

Objectives: To investigate the role of age, duration of disease and cumulative glucocorticoid dose in the formation of disorders of bone mineral density (BMD) in men with AS.

Methods: The investigation of 108 men with AS at the age of 40.74 ± 0.87 years and 25 normal control subjects of the same age and sex has been carried out. The diagnosis of AS was established on the basis of modified New York criteria. BMD of the lumbar spine and femoral neck was determined by dual-energy X-ray absorptiometry on the apparatus 'Hologic Discovery Wi' (S / N 87227). The diagnosis of osteoporosis in men over 50 years was considered in case of decrease of BMD by T-score ≤ -2.5 SD, osteopenia corresponded to T-score from -1 to -2.5 SD, for men under the age of 50, the Z-score was used, and its decrease ≤ -2.0 SD and more indicated the significant loss of bone mass.

Results: A decrease of BMD at the level of the lumbar spine and femur neck was found in 61 (56.5%) patients, of these 29 (27.7%) had osteoporosis, 31 (29.5%) had osteopenia. In the control group, decrease of BMD was detected in 6 (24%) patients, of these osteoporosis was diagnosed in 1 (4%), and osteopenia was diagnosed in 5 (20%) patients. In the age group of below 35 years, 18 (64.3%) patients had a decrease in BMD, 35 (56.5%) patients – in the 36-55 age group, and 8 (53.3%) patients – over the age of 45. The index of BMD also did not differ significantly between the groups. As for the duration of the disease, the