compared with unilateral. There were cases of isolated TMD in PA debut. In the developed stage of the disease almost all pts (67 out of 76, or 88.1%) demonstrated painfulness during palpation of periarticular muscles. Limitation of mandibular excursion of III and IV stage was found in 18 pts. TMD deviations were noticed prevalently in unilateral damage of them. No occlusion pathology or deformation of face skeleton was found. According to TMD radiography, aside from osteoporosis and narrowing of articular space, 27 pts demonstrated erosion of joints surfaces and in 6 cases osteolysis of the head of the mandible. In the majority of cases the stage of TMD correlated to radiological PA stage as a whole.

Conclusion TMD is a frequent PA clinical manifestation. The frequency and character of such damage are closely related with the activity of inflammatory processes, arthritis prevalence and stage of its development.

THU0150 PROGRESSION OF RADIOLOGICAL DAMAGE IN PATIENTS WITH RHEUMATOID ARTHRITIS IN REMISSION; A PROSPECTIVE TWO YEAR FOLLOW-UP STUDY

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Background

Objectives To investigate the progression of radiological damage in patients with RA in remission during a follow-up of 2 years.

Methods RA patients (n = 187), in remission according to the ACR/Pinals criteria were included. Radiographs of hands and feet were made at baseline and after 2 years. Radiological damage was assessed according to the Sharp-van der Heijde method (range score 0–448; (SHS)). SHS at baseline and after 2 years were compared in the complete group and in subgroups of patients with persistent remission and in those suffering an exacerbation (Wilcoxon test). As riskfactors for radiological progression were analysed: number of tender and swollen joint, Ritchie score, Disease Activity Score (DAS), serum rheumatoid factors, Visual Analogue Scale for physicians impression of disease activity (VAS, range 0–100), and Health Assessment Questionnaire (HAQ) score.

Results At baseline and after 2 years, the mean SHS of the complete group were 49 and 51 ($p < 0.001$). In the subgroup with persistent remission, the mean SHS were 52 and 53 ($P = 0.004$). No significant correlations were found between radiological damage and variables at baseline ($\rho = 0.1$). In the subgroup of patients with an exacerbation, the mean SHS were 46 and 51 ($p < 0.001$). Progression of radiological damage correlated significantly with the following baseline variables: SHS ($\rho = 0.40$), HAQ-score ($\rho = 0.28$), IgM-RF ($\rho = 0.29$), IgA-RF (0.25); but not with the DAS or VAS.

Conclusion Radiological damage proceeds in RA patients in remission and is not related to disease activity.

THU0151 HIGH FREQUENCY OF REDUCED BONE MASS IN MEN WITH RHEUMATOID ARTHRITIS

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Background

Objectives Osteoporosis is a well known complication of rheumatoid arthritis (RA). Both osteoporosis and RA are diseases predominantly affecting women. The aim of this study was to investigate the bone mineral density (BMD) in Scandinavian males with RA and to analyse the impact of different disease dependent and disease independent variables on bone health.

Methods Bone mineral measurements were done in 103 male RA patients attending a referral clinic of rheumatology. The BMD values were correlated with rheumatoid factor (RF), duration of disease, presence of erosions, degree of inflammation (DAS28), functional capacity (HAQ), treatment, levels of biologically active testosterone, body mass index (BMI) and smoking.

Results The patients were 20–70 years old with a median disease duration of 4 years (range 0–43). They had small but significant reductions in their BMD compared with an age and gender matched reference population (z scores). The mean BMD was lowered 6% ($p < 0.01$) in femoral neck, 6% ($p < 0.01$) in the trochanteric region, 7% ($p < 0.01$) in the region of Ward, and 4% ($p < 0.05$) in the spine. However, a substantial proportion of the patients had reduced bone mass defined as BMD lower than -1SD (z score). Thus 45/98 had reduced bone mass in femoral neck and 47/102 in the spine which is far more than the expected 16%.

Z-scores at Ward's triangle correlated with disease duration and presence of erosions. At trochanter z-scores correlated with duration of disease, erosions, HAQ, as well as BMI. The best multiple regression analysis with HAQ, erosions and BMI explained 22% of the variance. At femoral neck z-scores did not correlate to any of the tested variables. At spine (L2-L4) only erosions were significant correlated with z-scores.

Sulphasalazine had a statistically significant positive correlation to the bone in Ward's triangle and trochanter while methotrexate had a negative correlation to the bone in the trochanter region.

Neither in correlation analysis nor in multiple regression analysis there were any correlations between z-scores at hip or spine and RF, current degree of inflammation, treatment with glucocorticoids, parenteral gold or ciclosporin, levels of biologically active testosterone or smoking in any of the skeletal sites measured.

Conclusion A substantial proportion of males with RA had reduced bone mass. Variables that reflect structural damage had large impact on bone mineral density.

THU0152 THE DISEASE ACTIVITY SCORE PREDICTS RADIOLOGICAL PROGRESSION DURING THE FOLLOWING 6 MONTHS OF OBSERVATION IN A 5 YEARS OBSERVATIONAL STUDY; AN EXAMPLE OF ADVANCED LONGITUDINAL DATA ANALYSIS

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Background A number of studies have shown that a high level of disease activity is associated with more rapid radiological progression. In those studies *time-averaged* or *time-integrated* estimates for disease activity have been used. The concept of time-averaged disease activity does not entirely reflect reality, because disease activity is rarely constant over time. An inherent