Results A positive relationship was detected between the occurrence of atlantoaxial disorders and the destruction of both shoulder ($p < 0.001$) and peripheral ($p = 0.001$) joints. In addition, the extent of aAAS and the severity of AAI correlated positively with the grade of destruction in the evaluated joints. Furthermore, a positive relationship was found between the occurrence of the atlantoaxial disorders and a decrease in BMD of the lumbar spine ($p = 0.13$) and femoral neck ($p = 0.019$).

Conclusion Patients with severe RA have an increased risk for atlantoaxial disorders, and the co-existence of shoulder and cervical spine disorders makes the differential diagnosis of shoulder and neck pain challenging. In addition, osteoporosis may increase the risk for severe complications caused by cervical spine disorders in patients with RA.

REFERENCE

- 1 Neva MH, Kaarela K, Kauppi M. Prevalence of radiological changes in the cervical spine – a cross-sectional study after 20 years from presentation of rheumatoid arthritis. *J Rheumatol*. 2000;**27**:90–3

THU0155 IMPACT OF RHEUMATOID ARTHRITIS ON THE OUTCOMES OF 1093 PATIENTS, AND THE USE OF DISEASE MODIFYING ANTI RHEUMATIC DRUGS SINCE DIAGNOSIS

T Sokka, P Hannonen. Department of Medicine, Jyväskylä Central Hospital, Jyväskylä, Finland

10.1136/annrheumdis-2001.1057

Background Severe long-term consequences of rheumatoid arthritis (RA) are well known, while the existing evidence suggests that early and active use of disease modifying anti rheumatic drugs (DMARDs) may improve the outcomes.

Objectives To study the impact of disease on the outcomes of patients with RA, and to describe their use of DMARDs over time.

Methods In August 2000, a questionnaire was sent to 1500 patients with RA who had been seen in Jyväskylä Central Hospital since 1995 and were included in the RA database of the hospital. A total of 1093 (73%) patients replied and were included in the study. The overall impact of RA was assessed by asking "How much does RA impact your life?". Response alternatives were 1)"Not at all", 2)"Some", 3)"Much", and 4)"Very much". The questionnaire also assessed functional capacity by Health Assessment Questionnaire (HAQ, range 0–3), pain and general health by 10 cm visual analogue scale (VAS, range 0–100), and current usage of DMARDs. Data concerning demographics, "diagnostic delay", and previous use of DMARDs were available through the RA database. The intensity of the use of DMARDs was calculated as the percentage of the time on DMARDs from the total time elapsed since the diagnosis to August 2000.

Results A total of 13% of the patients did not experience any impact from RA, while 48% experienced "some", 27% "much", and 12% were impacted "very much". Those experiencing "very much" level of impact by RA were older, had longer disease duration, had less education, were more often rheumatoid factor positive, had worse HAQ and general health scores, had more pain, and also had longer diagnostic delay, and less use of DMARDs over time than those experiencing "no" or "some" impact by the disease (Table 1: mean values for variables are shown except median for DMARD%).

Abstract THU0155 Table 1

	None	Some	Much	Very much
Age	57.6	60.7	64.0	67.2
Duration	7.3	9.7	13.2	18.4
RF+, %	54%	67%	75%	85%
HAQ	0.1	0.5	1.2	2.1
Pain VAS	8	26	45	63
Dx delay (mo)	9	15	20	17
DMARD% (median)	99%	99%	97%	87%

Conclusion In spite of extensive therapy with DMARDs, RA causes considerable impact in the majority of patients in the long term. Shortening of diagnostic delay (improvement in the cooperation between primary and specialist care) and continuous active therapy with available DMARDs should be emphasised to decrease disease impact.

THU0156 DO GLUCOCORTICOIDS AFFECT MUSCLE STRENGTH IN RHEUMATOID ARTHRITIS (RA)?

¹OR Madsen, ²C Egsmose. ¹Department of Rheumatology, Herlev and Amager University Hospitals, Herlev; ²Department of Rheumatology, Bispebjerg and Gentofte University Hospitals, Copenhagen, Denmark

10.1136/annrheumdis-2001.1058

Background It is common knowledge that treatment with steroids is accompanied by muscle wasting. However, only very limited data on the effect of steroids on muscle strength in RA are available in the literature.

Objectives We examined the effect of cumulative and current prednisolone dose on leg muscle strength in women with RA.

Methods Seventy-five women with RA according to the 1987 ACR criteria were included. Mean age was 62 ± 13 years, median disease duration 11 (1–51) years. Sixty-three were or had been on steroids [median cumulative prednisolone dose (CPD) 2.5 (0.05–66) g]. Maximal voluntary knee extensor strength (KES) and flexor strength (KFS) (Nm) were assessed at 30°/s by an isokinetic dynamometer. Based on the 25th and 75th centiles of the distribution of CPD, the women were stratified into those who had received a) 100 mg prednisolone or less ($n = 21$, median CPD = 0 mg), b) more than 100 mg but less than 6095 mg prednisolone ($n = 35$, median CPD = 2000 mg), and c) 6095 mg or more ($n = 19$, median CPD = 10771 mg). Adjustment for between-group differences in age, height, weight and disease duration was performed using ANOVA with correction for covariates.

Results The following adjusted mean values for KES were found (low, central and high CPD range): 84 Nm, 76 Nm and 80 Nm (ns). The corresponding values for KFS were 44 Nm, 42 Nm and 42 Nm (ns).

In currently treated subjects ($n = 25$) adjusted mean values for KES and KFS were 75 Nm and 39 Nm, respectively, vs. 70 Nm and 33 Nm in never-treated subjects ($n = 12$) (ns).

Conclusion In conclusion, muscle strength was not associated with cumulative or current steroid dose in women with RA.