REFERENCES:

- [1] Van Staa TP, Geusens P, Bijlsma JW, et al. Clinical assessment of the long-term risk of fracture in patients with rheumatoid arthritis. *Arthritis Rheum* 2006;54:3104–12.
- [2] Briot K, Roux C. Glucocorticoid-induced osteoporosis. *RMD Open* 2015;1:e000014. doi:10.1136/rmdopen-2014-000014

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.5260

AB0386

RELATIONSHIP BETWEEN EXTRA-ARTICULAR MANIFESTATIONS AND JOINT SURGERY IN RHEUMATOID ARTHRITIS

O. Saidane, M. Sellami, R. Barhoumi, A. Ben Tekaya, H. Ajlani, R. Tekaya, I. Mahmoud, L. Abdelmoula. *Rheumatology, Charles Nicolle Hospital, Tunis, Tunisia*

Background: Extra-articular organ involvement is a serious condition in rheumatoid arthritis (RA) associated with increased mortality. These manifestations may affect the course of the disease, but could they accelerate the joint destruction and shorten the pre- joint surgical period?

Objectives: Our objective was to study the impact of extra-articular manifestations (EAM) on joint surgery during RA management.

Methods: It is a retrospective comparative study involving 500 RA patients (according to 1987 ACR or 2010 ACR/EULAR criteria) in rheumatology department between 2000 and 2014. The assessment of EAM was systematically done in RA diagnosis and during management. We compared 2 groups of RA patients according to the presence or not of EAM.

Results: We enrolled 422 women and 78 men with mean age of 53.3 years (21–83) and mean disease duration of 12 years [2–40]. RA was Rheumatoid Factor positive and erosive in 71.4% and 90% cases respectively. A surgical procedure was considered necessary in 59 cases (11.8%). An EAM was diagnosed in more than a half of patients (62.4%) with a predominance of ocular and bone manifestation, mainly xerophthalmia (173 cases, 34.6%) and osteoporosis (120 cases, 24%). Secondary Sjögren's syndrome was confirmed in 70 cases. Pulmonary manifestations related to RA were noted in 70 patients (14%), especially diffuse interstitial pulmonary in 48 cases (9.6%). Renal involvement was present in 45 patients, of which interstitial renal disease was the most common manifestation (29 patients, 64.4%). Rheumatoid nodules (4.6%) and small vessel vasculitis (0.6%) were the most frequent skin manifestations. A significantly higher incidence of joint surgery was noted in osteoporotic RA patients (OR=1.91; p=0.029). There was no significant correlation between joint surgery resort and other EAM (table 1).

Abstract AB0386 – Table 1. Correlation between EAM and joint surgery during RA

EAM (N)	Joint surgery (+)	Joint surgery (-)	p
Xerophthalmia	22	151	0875
Secondary Sjögren's syndrome	9	61	0633
Osteoporosis	31	89	0029
Pulmonary manifestation	3	67	0601
Renal manifestation	3	42	0257
Skin manifestation	1	25	0502

Conclusions: Our study concluded to a higher incidence of EAM during RA management. Osteoporosis was the only EAM associated to greater frequency of joint surgery.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.4684

AB0387

IS RHEUMATOID ARTHRITIS A RISK FACTOR FOR DEMENTIA ?

O. Saidane, M. Sellami, I. Mahmoud, A. Ben Tekaya, H. Ajlani, R. Tekaya, L. Abdelmoula. *Rheumatology, Charles Nicolle Hospital, Tunis, Tunisia*

Background: A direct link between chronic inflammation and dementia was well established by different epidemiological studies. Nevertheless, data on impaired cognitive function during rheumatoid arthritis (RA) are still controversial and doubtful.

Objectives: To assess the association of RA and impaired cognitive function.

Methods: This is a case-control study involving patients with RA according to ACR/EULAR criteria 2010 and randomly-chosen controls by matching on age and gender during 4 months. The Mini Mental State Examination (MMSE) was used to evaluate cognitive functions. Cognitive impairment was defined by a MMSE score

lower than 24 (or 26 in patients with primary education). The activity of RA was evaluated using Disease activity score (DAS28).

Results: A total of 20 RA patients (12 women and 8 men) with a mean age of 52.6 years [31–72] and 20 healthy controls (15 women and 5 men) with a mean age of 55.8 years [50–77] were included. No significant differences for age or gender between RA patients and controls were observed. Rheumatoid factor was positive in 95% of cases. Mean disease duration was 3.2 years [2–6]. Thirteen RA patients had active disease with mean DAS28 of 4.73. Three-quarters of RA patients had been treated with methotrexate and only 8 patients received biotherapy: 5 anti TNF alpha and 3 Rituximab. Forty percent of RA group were illiterate versus 49% in control group. Eleven RA patients (55%) had a normal cognitive function versus 15 (75%) in control group. A moderate cognitive impairment (mean MMSE of 18.62) was found in 8 RA patients (40%) and 2 controls (10%) primarily affecting constructional apraxia. No severe cognitive impairment was found in the 2 groups. Significant positive association was found between cognitive impairment and RA (p=0.001). Patients with RA using methotrexate had higher risk for cognitive impairment comparing to patients using biotherapy (p=0.02).

Conclusions: Our study highlighted a serious psychological expression of RA which was early onset of cognitive impairment and dementia. This is a possible effect of inflammation and vascular disease caused by RA.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.4715

AB0388

SLEEP DISTURBANCES IN INFLAMMATORY RHEUMATIC DISEASES

O. Addimanda^{1,2}, M. Burattini^{1,3}, L. Baldelli^{1,3}, G. Chiaro^{1,3}, E. Pignotti², F. Provini^{1,3}, R. Meliconi^{1,2}. ¹Department of Biomedical and Neuromotor Sciences, University of Bologna; ²Medicine and Rheumatology Unit, Rizzoli Orthopaedic Institute, IRCCS; ³Neurology Unit, Institute of Neurological Sciences, Bellaria Hospital, Bologna, Italy

Background: Inflammatory rheumatic joint diseases such as Ankylosing Spondylitis (AS) and Rheumatoid Arthritis (RA) have recently been found to be associated with sleep disturbances especially obstructive sleep apnoea.^{1,2}

Objectives: The aim of our study was to evaluate the occurrence of sleep disturbances, especially REM Sleep Behaviour Disorder (RBD), in inflammatory rheumatic diseases, (rheumatoid arthritis -RA and Spondyloarthritis -SpA).

Methods: We enrolled 103 consecutive patients affected by inflammatory rheumatic diseases [RA (64, 62.1%) or SpA (39, 37.9%)]. Patients underwent a neurologic and psychopathological assessment, including identification of sleep disorders by means of the Pittsburgh Sleep Quality Index (PSQI), the Berlin and the REM sleep behaviour disorder (RBD) questionnaires, a structured interview on sleep terrors and sleep paralysis, Beck Depression Inventory (BDI-II) and the Spielberger State-Trait Anxiety Inventory (STAI). Statistical analysis was performed utilising SPSS software.

Results: No significant differences were found between RA and SpA patients in age at diagnosis, disease duration, smoke habit, alcohol consumption, anamnestic comorbidities (especially metabolic diseases, anxiety or depression), disease activity/remission and biologic Disease Modifying Antirheumatic Drugs use. No differences demonstrated in BDI-II, STAI, PSQI and RBD questionnaires; only the Berlin Questionnaire showed significant differences (17.2% in RA vs 35.9% in SpA, p=0.036). No differences in sleep paralysis (10.9% in RA vs 7.7% in SpA, p=0.74) and sleep terrors (37.5% in RA vs 20.5% in SpA, p=0.0826) which were found to be increased if compared with general population (2.6%).

Conclusions: Our data show an increased prevalence of sleep terrors in rheumatic patients when compared to the general population although no differences were highlighted between RA and SpA; also increased risk of sleep apnoea (Berlin Questionnaire) has been demonstrated in patients with SpA compared with RA.

REFERENCES:

- [1] Aydin E, Bayraktar K, Turan Y, Omurlu I, Tastaban E, Sendur OF. Sleep quality in patients with ankylosing spondylitis. *Rev Bras Reumatol* 2015;55:340–5.
- [2] Taylor-Gjevrev RM, Nair BV, Gjevrev JA. Obstructive sleep apnoea in relation to rheumatic disease. *Rheumatology* 2013;52:15–21.
- [3] American Academy of Sleep Medicine. *International Classification of Sleep Disorders*, 3rd ed, American Academy of Sleep Medicine, Darien, IL 2014.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.6304