THU0127

THE SEVERITY OF KERATOCONJUNCTIVITIS SICCA IN RHEUMATOID ARTHRITIS CORRELATES WITH THE MEDICAL OUTCOME STUDY 36-ITEM SHORT FORM HEALTH SURVEY (SF-36) SCORE BUT NOT THE DISABILITY INDEX (HAQ-DI)

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Background: Keratoconjunctivitis sicca (KSC) is the most frequent ocular manifestation of rheumatoid arthritis (RA). It is highly heterogeneous and exhibits a considerable variability of presentation. Whereas a significant proportion of patients with KSC may be asymptomatic; it is unknown if the degree of dryness of the eyes, irrespective of symptomatology, has an association with the overall quality of life and functional ability.

Objectives: To determine the correlation between the Schirmer's score and the Medical Outcome Study 36-Item Short Form Health Survey (SF-36) score as well as the disability index measured by the Health Assessment Questionnaire-Disability Index (HAQ-DI).

Methods: A total of 50 Nigerian patients satisfying the 2010 American College of Rheumatology/European League Against Rheumatism classification criteria for RA were studied. Tear production was measured by unstimulated 5 min Schirmer's test (using 5 mm by 35 mm Whatman filter paper) and ocular staining with fluorescein stain. Each patient also completed the SF-36 and HAQ-DI questionnaires.

Results: The mean age of the patients was 47.2±12.5 years. Among them, 42 (84%) were females, giving a female-to-male ratio of 5.25:1. Rheumatoid factor and anti-citrullinated protein antibody were positive in 38 (76%) and 30 (60%) patients respectively. KSC was found in 15 (30%) patients among whom only 6 patients were symptomatic for dry eyes. The mean visual acuity [LogMAR (Snellen equivalent)] among the patients with and without KSC were 0.70 (6/30) and 0.10 (6/7.5). Among all patients, there was a positive correlation between the mean Schirmer's score (between each patients two eyes) and the Physical Component Summary ($r=0.292$, $p=0.008$) as well as the Mental Component Summary ($r=0.228$, $p=0.030$) of the SF-36. There is however no significant correlation between the mean Schirmer's score and the HAQ-DI ($r=0.148$, $p=0.188$).

Conclusions: Ocular manifestation is very common in RA and KSC is particularly rampant. Even in asymptomatic patients, the degree of xerophthalmia may give a reliable insight into both the physical and mental quality of life but not into the degree of functional disability.

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THU0128

DO BIOLOGICAL DMARDS PREVENT LONG TERM ARTICULAR DAMAGE BY RHEUMATOID ARTHRITIS IN ROUTINE CLINICAL CARE?

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Background: Treatment of rheumatoid arthritis is primarily aimed to achieve remission and thereby reduce the risk of permanent joint damage. Preventing disabling joint damage is an important long term goal for patients. Effectiveness of bDMARDs on disease activity has been proven in randomised controlled studies; however studies on long term joint damage are scarce and show conflicting results.^{1,2}

Objectives: To compare joint damage more than 5 years after RA diagnosis in patients who have never used bDMARDs and in patients treated with bDMARDs. Joint damage is measured with the Rheumatoid Arthritis Articular Damage (RAAD) score, a clinical method comprising all joints that may be affected by RA.³

Methods: Retrospective cohort study in RA patients in a Dutch teaching hospital diagnosed between 2006 and 2011. Inclusion criteria were receiving a DMARD for at least 12 months and availability of a RAAD-score after a disease duration of 5 years or more. Exclusion criteria was receiving a DMARD for an other indication than RA. The exposure of interest was the type of treatment (sDMARD or bDMARD).

Results: Among 305 patients included, 101 used a bDMARD (table 1). Baseline characteristics were not significantly different in terms of prognostic factors for

joint damage progression, with the exception of patients in the bDMARD group being younger. During follow up, the highest DAS28 was higher in the bDMARD group 5.0 vs 4.3, $p<0.001$. After 8.5 years, more than half of the patients in bDMARD (55.4%) and sDMARD (57.4%) groups had no joint damage (RAAD-score 0). No significant differences in long term joint damage were observed, even after adjusting for potential confounders ($b=-0.26$, 95% CI $-1.9-1.4$, $p=0.76$).

Table	bDMARD n=101	sDMARD n=204
Values as median (IQR) unless indicated otherwise;		
		*=P<0.002
Age yrs mean (SD)	49 (13)	57 (14)*
Female n (%)	63 (62.4)	129 (63.2)
ESR	22.0 (14.0–37.5)	27.5 (13.2–43.7)
CRP	10.0 (3.0–21.0)	15.0 (4.0–36.0)
≥6 ACR2010 criteria n%	79 (78.2)	158 (78.2)
Rheumatoid factor n%	81 (81.0)	145 (71.1)
ACPA n%	54 (76.1)	90 (70.9)
Bone erosions	17 (16.8)	46 (22.9)
DAS28	4.9 (4.3–5.60)	4.7 (3.8–5.5)
Disease duration yrs mean (SD)	8.5 (1.9)	8.5 (2.2)
Prednisolone use n%	57 (56.0)	63 (30.0)*
Highest measured DAS	5.0 (4.2–5.8)	4.3 (2.9–5.1)*
RAAD-score	0.0 (0.0–2.0)	0.0 (0.0–2.0)
HAQ	0.3 (0.0–0.9)	0.1 (0.0–0.4)*

Conclusions: In this cohort joint damage is not significantly different between patients treated with sDMARD(s) alone and those also using a bDMARD. Given the higher disease activity in the bDMARD group it is possible that this treatment prevented long-term joint damage by RA. Since there was limited joint damage in these groups this analysis should be repeated after longer disease duration and preferably in randomised cohorts.

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THU0129

PREDICTIVE VALUE OF CD19 SERUM LEVELS FOR LONG TERM THERAPEUTIC RESPONSE AND UTILITY AS BIOMARKER FOR OPTIMISATION, IN RHEUMATOID ARTHRITIS PATIENTS TREATED WITH RITUXIMAB

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Background: Rituximab (RTX) is a chimeric monoclonal antibody directed against CD20 antigens in B lymphocytes (BL) surface, producing selective depletion of BL, without affecting mature plasmatic cells. Current guidelines recommend optimisation of biologic therapy once remission has achieved in rheumatoid arthritis (RA) patients. A serum biomarker able to predict what patients would maintain remission after optimisation in RTX treated RA patients is lacking.

Objectives: To analyse the predictive value of CD19 serum level prior to RTX infusion for the long term maintenance of therapeutic response, and its utility as a biomarker for optimisation in RA patients treated with RTX.

Methods: all RA patients treated with RTX in our centre during 2016 and 2017 for at least 6 months, and with 12 months follow-up, were included. Demographic data, clinical data related to RA, including activity parameters (DAS28, HAQ, ESR, RCP), number of infections, optimisation and serum levels of lymphocytic subpopulations (CD19, CD3 and CD56) and immunoglobulins (Ig) prior to each RTX cycle were collected. Optimisation was defined as any dose decrease (lower dose for cycle and/or increase interval between cycles). Recurrent infections were defined as three or more infections in one year. Descriptive statistics, correlation between basal levels of CD19, CD3 or CD56, and activity parameters or Ig levels at 6 and 12 months, and association studies between lymphocyte subpopulations and optimisation or recurrent infections were performed.

Results: Thirty patients (25 females, 60±12 year) with RA (24 RF/aCCP +, 17 ±11 years from disease onset), treated with RTX during 52±40 months, with an accumulated dose of 13±10 g were included. At study inclusion, DAS28 was 3.77 ±1.65, HAQ was 1.28±0.78 and 22 had been optimised. CD19 levels were lower