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OP0350

DEPRESSION AND ANXIETY IN AN EARLY RHEUMATOID ARTHRITIS INCEPTION COHORT. ASSOCIATIONS WITH EPIDEMIOLOGICAL, SOCIOECONOMIC AND DISEASE FEATURES

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Background: Co-morbid depression and anxiety occur in the context of rheumatoid arthritis (RA). Their characteristics, including associations with RA features, have not been examined previously in an early RA inception cohort with longitudinal follow up data.
Objectives: To examine the frequency of anxiety and depression in patients with early RA, over time and to explore associations with epidemiological, socioeconomic and disease-related features.
Methods: The Scottish Early Rheumatoid Arthritis (SERA) inception cohort recruited newly diagnosed RA patients (fulfilling ACR-EULAR 2010 criteria) followed-up thereafter every 6 months. Pre-specified clinical, laboratory and psychosocial features, including anxiety and depression scores (measured by the hospital anxiety and depression scale; score range: 0–21 for each one), were recorded at baseline and at follow-up. Non-parameteric tests and logistic regression models were used to examine the nature and magnitude of associations.
Results: Data from 848 RA patients were available. Frequency of anxiety and depression at baseline was 19.0% and 12.2% with a reduction at month 12% to 13.4% and 8.2% (p=0.004 and p=0.01, respectively). Anxiety and depression scores were correlated with DAS28 at all time points, including baseline (all p<0.0001). Change in DAS28 (final-baseline) was correlated with change in depression and anxiety scores at month 6 (p<0.0001, r=0.265 and p=0.001, r=0.230) and 12 (p<0.0001, r=0.288 and p<0.0001, r=0.217). In univariate analyses, anxiety and depression scores were associated with various features, at different time points (table 1). CRP was highly associated with depression but not anxiety scores at all time points, with change in CRP correlating with change in depression scores (month6; p<0.0001, r=0.185 and month12; p<0.0001, r=0.302). Multivariable analysis indicated that anxiety score at baseline was associated with female gender (p=0.01, Beta=0.133), younger age (p=0.007, Beta=−0.181) and patient global assessment score (PGA) (p<0.0001, Beta=0.201), and at month 6 and 12 with low BMI (month 6, p=0.024, Beta=−0.091; month 12, p=0.002, Beta=−0.139), PGA (month 6, p<0.0001, Beta=0.222; month 12, p<0.0001, Beta=0.248) and baseline anxiety scores (month 6, p<0.0001, Beta=0.623; month 12, p<0.0001, Beta=0.586). For depression scores, multivariable analysis indicated association at baseline with PGA (p<0.0001, Beta=0.286) and at month 6 and 12 with PGA (month 6, p<0.0001, Beta=0.306; month 12, p<0.0001, Beta=0.320), CRP levels (month 6, p=0.006, Beta=0.150; month 12, p=0.002, Beta=0.171) and baseline depression (month 6, p<0.0001, Beta=0.422; month 12, p<0.0001, Beta=0.356) and anxiety scores (month 6, p<0.0001, Beta=0.189; month 12, p=0.008, Beta=0.170).

Abstract OP0350 – Table 1 Variables associating with high anxiety and/or depression score at baseline and at month 6 and 12. 1) ANOVA test, compared to employed and to retired individuals, 2) patient global VAS used for DAS28 calculation. 3) average alcohol units/week. NA: not applicable, BMI: body mass index, IM: intramuscular. ^by mouth, *intramuscular

Anxiety score						
	Baseline		6 months		12 months	
Factors/confounders	p value	r	p value	r	P value	r
Age	<0.001	- 0.187	<0.001	- 0.158	0.001	-0.131
BMI					0.044	-0.084
Female gender	0.002	NA				
Smoking			0.008	NA	0.039	NA
Unemployment[1]	0.001	NA	<0.001	NA	<0.001	NA
Anxiety baseline			<0.001	0.691	<0.001	0.632
Depression baseline			<0.001	0.507	<0.001	0.443
DAS28 baseline			<0.001	0.175	0.020	0.114
Patient global VAS[2]	<0.001	0.210	<0.001	0.397	<0.001	0.387
Depression score						
	Baseline		6 months		12 months	
Factors/confounders	p value	r	p value	r	P value	r
Age	0.004	- 0.101				
BMI	0.037	0.075				
Alcohol units[3]	0.002	- 0.107				
Smoking			0.021	NA	0.002	NA
Unemployment	0.001	NA	<0.0001	NA	<0.0001	NA
Anti-CCP negative	0.013	NA				
Corticosteroids			0.017^	NA	0.005*	NA
Anxiety baseline			<0.001	0.488	<0.001	0.423
Depression baseline			<0.001	0.602	<0.001	0.519
DAS28 baseline			<0.001	0.223	<0.0001	0.172
Patient global VAS	<0.0001	0.328	<0.001	0.500	<0.001	0.522
ESR	0.016	0.116			0.029	0.130
CRP	<0.0001	0.163	<0.0001	0.152	0.004	0.112

Conclusions: Depression and anxiety are significant comorbidities at the time of RA diagnosis. While there are also associations with socioeconomic and other variables, the close relationship between CRP and depression provides further support to the already compelling data linking inflammation and depression. Changes in the anxiety and depression scores, in tandem with disease activity over time, requires further investigation.
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Battling hyperinflammation in paediatric rheumatic diseases

OP0351

FIRST DIAGNOSIS OF UVEITIS IS NOT HIGHER AMONG JUVENILE IDIOPATHIC ARTHRITIS (JIA) PATIENTS RECEIVING ETANERCEPT COMPARED TO METHOTREXATE

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Background: Uveitis is a common comorbidity among patients with juvenile idiopathic arthritis (JIA), occurring in approximately 1 in 10 JIA patients. Among other risk factors such as early ageat JIA onset, shorter disease duration and oligoarticular subtype, the use of etanercept (ETN) may also increase the risk of developing uveitis. However, previous studies have produced conflicting results, often limited by small sample sizes and limited follow-up time.
Objectives: To determine if patients receiving ETN have a higher risk of developing uveitis for the first time compared to patients receiving methotrexate (MTX).
Methods: The study population comprised JIA subjects recruited to the BSPAR ETN Cohort Study at point of starting ETN or MTX. Only patients with no prior history of uveitis were included. This was an on-drug analysis, whereby events were only included if the patient was on ETN or MTX at the time of uveitis onset. Follow-up began from date of first treatment to first uveitis diagnosis, discontinuation of ETN or MTX, most recent follow-up up to 30/11/16 or death, whichever came first. Crude incidence rates of uveitis per 100 person years (pyears) were calculated. Hazard ratios (HR) comparing risk of uveitis with ETN versus MTX were calculated using propensity adjusted Cox regression.
Results: Of 1517 patients, 1009 were registered to the ETN cohort (all receiving ETN) and 508 to the MTX cohort. ETN patients were older, with longer disease duration, and were less likely to have persistent oligoarthritis. The mean age at uveitis diagnosis was 8 years in the ETN cohort versus 5 years in the MTX cohort. The HR adjusted for age and gender, disease scores, disease duration, baseline steroid use, co-morbidity, ILAR subtype, and ethnicity found a lower risk of developing uveitis inpatients receiving ETN compared to MTX (0.30, 95% CI (0.10–0.90)) (table 1).

Abstract OP0351 – Table 1

New onset uveitis	Patients taking MTX	Patients taking EN
Subjects (n)	508	1009
Age, median (IQR)	9 (3–13)	11 (8–14)
Gender, % female	71	69
Disease duration (years), median (IQR)	1 (0–1)	3 (1–6)
CHAQ score, median (IQR)	0.9 (0.3–1.5)	1.0 (0.3–1.6)
ILAR subtype, n (%)		
Persistent oligoarthritis	84 (17)	53 (5)
Other non-systemic JIA	424 (83)	955 (95)
Person years exposure	908	2471
New diagnosis of uveitis	18	15
Crude incidence rates per 100 pyears	2.4 (1.4–3.9)	0.6 (0.3–1.0)
Unadjusted HR (95% CI)	ref	0.24 (0.11–0.52)*
Age & Gender adjusted HR (95% CI)	ref	0.41 (0.18–0.95)*
Fully adjusted HR (95% CI)	ref	0.30 (0.10–0.90)*

**p<0.05*

Conclusions: Within this cohort of UK children with JIA, a new diagnosis of uveitis is not more common among children receiving ETN compared to MTX, even after taking into account differences inage and disease duration between the cohorts. This is reassuring given there ports of possible increased risk of uveitis among children with JIA receiving ETN. Age appears to be a major influencing factor as patients in the MTX cohort were younger thus at a higher risk of uveitis. For patients with a high eruveitis risk other treatments options could have been