Abstract SAT0692 – Table 1. General characteristics of RA-FDR women, n=882

Table 1. General characteristics of RA-FDR women, n=882		
	ACPA (+) 57 (6%)	ACPA (-) 825 (94%)
General characteristics		
Age, years, median (IQR)	52 (47-60)	45 (34-54) *
Education, years, median (IQR)	14 (13-16)	14 (13-15)
Caucasian, n(%)	51 (90)	770 (93)
Body mass index, kg/m ² , median (IQR)	24 (21-27)	23 (21-26)
Ever smoking, n(%)	32 (56)	378 (46)
Alcohol consumption, n (%)	43 (75)	651 (79)
Rheumatoid factor, n(%)	11 (19)	123 (15)
Reproductive characteristics		
Parous women, n(%)	38 (67)	465 (56)
Number of pregnancies, median (IQR)	2 (2-2)	2 (2-2)
Breastfeeding, [yes/no] n(%)	31 (54)	371 (45)
Breastfeeding, months, median (IQR)	1 (0-4)	0 (0-3)
0 month	26(46)	455(55)
1-7 months	22(39)	284(34)
≥7 months	9 (16)	86(10)

*p-value <0.05, univariable logistic regression.

Conclusions: Among women at risk of RA, breastfeeding was not associated with the presence of ACPA or anti-CarP. Our results do not support a protective role of breastfeeding in the development of systemic autoimmunity associated with RA.

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Disclosure of Interest: None declared

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SAT0693 GENETIC POLYMORPHISMS AND EFFICACY OF METHOTREXATE IN RHEUMATOID ARTHRITIS

E. Chamizo¹, E. González², C. Carrasco¹, S. Rojas¹, J.J. Aznar¹, P. Dorado², A. Llerena². ¹Rheumatology, Hospital Mérida and CHU Badajoz, Mérida; ²CICAB, CHU de Badajoz, Badajoz, Spain

Background: Methotrexate (MTX) is the DMARD of choice in the treatment of rheumatoid arthritis (RA). There is important variability in its therapeutic response. The identification of genetic factors related to the absorption, metabolism and action of MTX may facilitate a more efficient use.

Objectives: To study the effect of clinical characteristics and different single nucleotide polymorphisms (SNPs), related to the transport and metabolic pathways of MTX, on the therapeutic response of MTX in monotherapy in RA patients.

Methods: Observational study. Outcome variable: response to MTX (DAS-PCR <3.2). Study factors: SNPs of transport (ABCB1 C3435T), glutamation (GGH T16C and FPG G2782A), transmethylation (MTHFR C677T and MTHFR A1298C) and adenosine (AMPD1 C34T, ADA A534G, ITPA C94A). The association between SNPs and therapeutic response was analysed by logistic regression, assessing the allele independence (Hardy-Weinberg equilibrium) and interaction by sex. Different models of SNPs inheritance were analysed. Models were adjusted by the characteristics of the patient, of disease and of treatment. The haplotypes of the MTHFR SNPs (C677T and A1298C) were also analysed.

Results: Bivariate analysis showed lower probability of response with smoking (OR=0.37), erosions (OR=0.26), Mantoux (OR=0.20), disease activity (OR=0.08), previous DMARDs (OR=0.46) and doses of folic acid (OR=0.97), MTX (OR=0.87) and prednisone (OR=0.93), with higher response at a higher age at diagnosis (OR=1.05). In relation to the SNPs, the C/A genotype of the ITPA_C94A decreases the probability of response (OR=0.48) according to an overdominant inheritance model, and the C/C genotype of MTHFR_A1298C is also associated with a lower response according to a model of recessive inheritance (OR=0.18). An interaction between the GGH_T16C SNP and sex was observed, so that the C/C genotype increases the possibility of response in women (OR=2.95), but not in men.

In the adjusted models, only the effect of genotype C/C of MTHFR_A1298C is maintained (OR=0.14), irrespective of age, sex, smoking, alcohol, RF, anti-CCP, erosions, extra-articular manifestations, Mantoux, DAS28-CRP, previous

DMARDs, time to MTX, doses of folic acid, prednisone, MTX and route of administration. On the contrary, the association between the ITPA_C94A polymorphism and the response was not maintained nor the interaction effect of the C/C genotype of GGH_T16C observed in bivariate analysis. Finally, the CC haplotype of the combination MTHFR C677T and MTHFR A1298C is associated with a decrease in the response (OR=0.55) in the adjusted models, so it is an effect independent of the control variables. No interaction effects were observed by sex.

Conclusions: Genetic polymorphisms related to the transport and metabolism of MTX have little effect on the therapeutic response, or at least much lower than other patient (smoking), disease (activity, erosions), or treatment (number of previous DMARDs) characteristics.

Disclosure of Interest: None declared

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SAT0694 DETERMINANTS OF TRAJECTORIES OF MULTI-SITE PAIN IN KNEE OSTEOARTHRITIS: A 10.7-YEAR PROSPECTIVE STUDY IN OLDER ADULTS

E. Pan¹, J. Tian¹, F. Cicuttini², C. Ding¹, G. Jones¹. ¹Menzies Institute for Medical Research, University of Tasmania, Hobart; ²Department of Epidemiology and Preventive Medicine, Monash University Medical School, Melbourne, Australia

Background: Pain in osteoarthritis (OA) is very common especially in elderly and commonly occurs at multiple sites. Multi-site pain (MSP) has been shown to be associated with more severe symptoms and worse health-related quality of life compared to single-site pain. Limited evidence exists about understanding the course of MSP and its determinants.

Objectives: To identify distinct trajectories of MSP over 10.7 years in an older population, and to examine risk factors for identified trajectories.

Methods: 1099 participants (mean age 63 years) from the population-based Tasmanian Older Adult Cohort study were recruited at baseline. 875, 768 and 563 participants attended years 2.6, 5.1 and 10.7 follow-up, respectively. Demographic, psychological, lifestyle and comorbidities data were obtained at baseline. Knee radiographic OA was assessed by X-ray at baseline. Group-based trajectory modelling was applied to identify distinct trajectories of MSP. Multi-nominal logistic regression was used for the analyses with adjustment for potential confounders.

Results: Three distinct MSP trajectories were identified: a group of participants with 'no MSP' (11%), a group with 'fluctuating MSP' (38%), and a group with 'persistent MSP' over time (51%). In multivariable analyses with the 'no MSP' trajectory as reference, emotional problems and comorbidity were significantly associated with both 'fluctuating MSP' and 'persistent MSP' trajectory. In addition, female sex, being obese and radiographic knee OA predicted the trajectory of 'persistent MSP' in the whole population. Results were similar with emotional problems (relative risk [RR]: 2.57 for 'fluctuating MSP' and 5.70 for 'persistent MSP', both p<0.05), being obese (RR: 3.80 for 'persistent MSP', p=0.007) and comorbidity (RR: 2.45, p=0.010) in either 'fluctuating MSP' or 'persistent MSP' trajectory in those with radiographic knee OA.

Conclusions: MSP trajectories appear stable once established and can be predicted by factors both peripheral and central in origin.

Disclosure of Interest: None declared

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SAT0695 HOSPITALISATION RATES AMONG PATIENTS WITH PRIMARY SJÖGREN'S SYNDROME: A POPULATION-BASED STUDY, 1995–2016

G. Maciel¹, L. Servioli¹, C. Nannini², A. Berti³, C. Crowson⁴, S. Achenbach⁴, E. Matteson⁵, D. Cornec⁴. ¹Maciel Hospital, Montevideo, Uruguay; ²Hospital of Prato, Prato; ³San Raffaele Scientific Institute, Milan, Italy; ⁴Mayo Clinic, Rochester, USA; ⁵Mayo Clinic, Rochester, Uruguay

Objectives: To determine rates and primary discharge diagnoses of hospitalisation in a cohort of patients with incident primary Sjögren's syndrome (pSS) compared to the general population.

Methods: This was a retrospective population-based cohort study focused on Olmsted County, Minnesota. The pSS cohort consisted of patients with incident pSS in the 1976–2015 period and was compared with a cohort of individuals without pSS matched 3:1 for age, sex and calendar year, randomly selected from the same population. Hospitalizations in 1995–2016 were examined. Discharge diagnoses were categorised using the Clinical Classifications Software for ICD-9-CM.

Results: A total of 385 hospitalizations occurred in the 160 patients with pSS during 1592 person-years of follow-up. Among 466 comparators, there were 899 hospitalizations during 4660 person-years of follow-up, resulting in a significantly higher rate of hospitalizations in patients with pSS (rate ratio [RR]:1.25, 95% CI:1.11–1.41). Rates of hospitalisation were increased among patients with pSS for endocrine, nutritional and metabolic diseases and immunity disorders