Diagnosis was dichotomized into osteoarthritis (OA) and other diagnoses. Annual revision risks were calculated for each subsequent year after primary arthroplasty by dividing the number of revisions by the total number of patients at risk during that year. The risks were stratified according to the underlying diagnosis, sex, age at primary arthroplasty and fixation type. In addition cumulative annual revision percentages were calculated for the full follow-up period. Furthermore we estimated the percentage of avoided OA revisions by assuming that all OA patients received their primary THA 5 years later (in all age groups <85 yrs) and that the revision risks remained the same in all age categories.

Results: In total 134463 primary THA patients were included of whom 68% were female, 89% had OA as underlying indication and 66% of the THAs were uncemented. The 7th year cumulative risk percentage varied between 2.0 and 11.7% (Table 1). Overall cumulative revision percentages were higher in younger age categories (Table 1), with the exception of a 11.7% revision in the group aged 85–90 yrs (uncemented, male, other diagnosis), but this finding is likely due to chance as this group existed of 67 patients. We estimated that by delaying THA for 5 years, a total of 197 revision surgeries (4.4% of all revision surgeries) could be avoided, 48 (14.0%) in the OA male cemented group, 11 (0.9%) in the OA male uncemented group, 69 (3.3%) in the OA female cemented group and 69 (8.6%) in the female uncemented group. This could result in a yearly cost reduction of approximately 4 million euros.

Table 1. Cumulative revision percentages within 7 years after index surgery.

	Osteoarthritis				Other diagnosis			
	Male		Female		Male		Female	
Age-categories	Cemented	Uncemented	Cemented	Uncemented	Cemented	Uncemented	Cemented	Uncemented
50-54	4,10	4,46	3,14	5,27	8,31	6,56	4,44	7,19
55-59	4,55	5,46	6,70	4,63	8,94	5,38	8,02	5,95
60-64	4,72	4,34	3,55	4,24	5,03	5,54	7,23	3,82
65-69	4,23	4,06	2,36	3,63	5,92	7,30	6,86	4,99
70-74	3,71	4,53	2,92	4,50	5,24	7,34	2,46	4,28
75-79	3,00	4,67	2,47	3,78	4,15	7,25	3,87	2,94
80-84	2,69	3,84	2,20	3,59	5,94	3,76	3,48	3,79
85-90	2,02	4,93	2,11	3,73	2,04	11,65	2,47	2,51
Total	3,45	4,50	2,62	4,11	5,53	6,39	4,31	4,54

Conclusions: Cumulative 7th year risk percentages decreased by age in all different categories. By delaying the primary THA surgery, revisions might be avoided thereby resulting in cost reduction.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.4274

SAT0702 LOCAL AND SYSTEMIC INFLAMMATION IN PATIENTS WITH EARLY RHEUMATOID ARTHRITIS WITH CHLAMYDIA TRACHOMATIS INFECTION

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Objectives: We had to study local and systemic inflammation in rheumatoid arthritis patients with persistence Chlamydia trachomatis (Ch tr) in the joint

Methods: 31 patients with early RA; mean age 54,5 (10,6) years, disease duration 21,5 (14,4) weeks witch persistence Ch tr in the joint (mRNP Ch tr had been revealed in synovial fluid by NASBA PCR) were enrolled in this study. The comarison group was patients with RA (n=42) without mRNP in synovial fluid (Ch tr-). Mean age was 51,7 (15,4) years, disease duration 20,8 (13,3) weeks. All the patients had been received only symptomatic treatment (NSAID). Disease activity had been detected by DAS 28. Systemic inflammation was estimated by levels of erythrocyte sedimentation rate (ESR), hsp C-reactive protein (hspCRP), orozomucoid (OR) in the blood samples; local inflammation- by detection hsp CRP, OR in synovial fluid. Also we had been detected level of ACCP in the blood samples and synovial fluid.

Results: We didn't reveal statistically significant differences between levels of ESR, hsp CPR, OR, ACCP in blood samples patients with RA Chtr+ and RA Ch tr-. Level of hsp CPR and OR in synovial fluid of research group (Ch tr+) were significantly higher than comparison group (4,1±0,3 mg/l versus 2,4±0,2 mg/l, $p<0,05$ –hspCRP and 157,4±17,5mg/dl versus 78,5±18,9 mg/dl, $p<0,001$- OR). In the group of research (Ch tr+) level of ACCP in synovial fluid was statistically significant higher than comparison group (Ch.tr -) (195,6±37,3 versus 67,9±15,4; $p<0,001$)

Conclusions: Patients with early RA detected by NASBA PCR in synovial fluid Ch tr+, had been characterized by absence differences compared RA Ch tr- patients in the level of systemic inflammation and had differences in the level of local inflammation. We revealed high level of ACCP in RA patients with Ch tr in the joints, that may be important for understanding some aspects of RA pathogenesis.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.6876

SAT0703 INFLUENCE OF PHYSICAL ACTIVITY AND SLEEP ON FUNCTIONAL CAPACITY AND PAIN IN PATIENTS WITH KNEE OSTEOARTHRITIS

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Background: Knee osteoarthritis (OA) is a degenerative disease in which pain and functional disability progression tend to increase with reducing the health-related quality of life (HRQOL). Factors related to healthy lifestyles, such as physical activity and sleep, are known to have restorative benefits on function and pain in these patients. A previous study found that patients with reparative sleep achieved better WOMAC and SF-36 HRQOL questionnaire dimension scores.

Objectives: To determine the influence of physical activity and sleep on functional capacity and pain in patients with long-term knee OA.

Methods: Cross-sectional study. Sociodemographic and clinical variables, physical activity (PA) (regular physical exercise ≥3 times a week ≥30 minutes per session (PE) and sitting ≤6 hours/day [S]) and sleep quality/reparative sleep (RS) were determined using the question: How do you usually sleep? (1=well [RS], 2=regular, 3=badly, 4 =with medication/treatment [NRS]). Functional capacity and pain were evaluated using the WOMAC (specific) and SF-36 (generic) HRQOL questionnaires. Associations were analysed using multiple regression models.

Results: 453 patients (84.3% female), mean age 69.73 (8.4), BMI 35.27 [SD 6.3], comorbidities 2.43 (SD 1.5), 78.6% with obesity (BMI 33.68 [SD 6.7]), depression/anxiety in 36.4%, PE 60.5%, S 72.2% and PA 48.6%, were included. 22.5% reported RS. Bivariate analysis showed patients with PA and those with RS had better functional capacity and less pain intensity (>10, $p>0.001$, in both WOMAC and SF-36). The four multiple regression showed that patients with PA and SR had better scores, both in functional capacity (dependent variables, WOMAC and SF-36) and pain (dependent variables, WOMAC and SF-36), $p<0.006$. Age, gender, number of comorbidities and obesity were included in the models as potential confounders. Obesity was associated with worse function and more pain in the four models ($p<0.05$). Being female and greater comorbidity were associated with poorer functional capacity and pain assessed by the SF-36.

Conclusions: Physical activity and sleep were associated with less pain and better functional capacity, suggesting these variables should be determined systematically in clinical practice due to their significant relationship with HRQOL. Obesity was negatively associated with function and pain. There was also a negative relationship between female gender and comorbidity according to the SF-36. Differences in generic and specific questionnaires mean they should be used together to provide more detailed information.

Acknowledgements: This work was funded by project PI/13/00948, integrated in the Plan Nacional I+D+I and cofounded by ISCIIISubdirección General de Evaluación and European Regional Development Fund (ERDF).

References:

[1] Uthman OA, van der Windt DA, Jordan JL, Dziedzic KS, Healey EL, Peat GM, et al. Exercise for lower limb osteoarthritis: systematic review incorporating trial sequential analysis and network meta-analysis. BMJ. 2013;347:f5555.

[2] Abad VC, Sarinas PS, Guilleminault C. Sleep and rheumatologic disorders. Sleep Med Rev 2008;12:211–28.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.2180

SAT0704 THE IMPACT OF AUTOIMMUNE DISEASE IN THE MANAGEMENT AND PROGNOSIS OF ACUTE CORONARY SYNDROME

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Background: Patients with autoimmune diseases (AID) have a high burden of cardiovascular disease leading to premature morbidity and mortality. But it is unclear if it is due to a higher prevalence of cardiovascular disease, to a worse case fatality or to a different management after an index event.

Objectives: The primary aim of the study is to assess the prognostic implications of the presence of AID both during the hospitalization and after discharge after an acute coronary syndrome (ACS). The secondary objectives included the assessment of the prevalence of AID in patients with ACS, their clinical profile and the management of this index event

Methods: The study included consecutive patients admitted after ACS from January 2011 to December 2015 at the University Hospital Virgen de la Arrixaca, Murcia (Spain). For AID patients, in-hospital management and ACS presentation was compared to non-AID patients. We also compared in-hospital and major adverse events during follow-up (death, recurrent non-fatal myocardial infarction, stroke and major bleeding, between groups). A multivariate Cox regression model was performed to assess the independent role of the presence of AID in the occurrence of the events of interest.

Results: Of 2236 patients included with ACS, 78 had AID (3.3%): 24 rheumatoid arthritis, 10 inflammatory bowel disease, 7 ankylosing spondylitis, 6 psoriatic arthritis, 5 polymyalgia rheumatica, 2 systemic lupus erythematosus and 20 miscellanea. Mean age of AID patients was 67±13 years and median evolution of the disease was 10 [4–14] years. Seventy percent of AID patients were taking corticosteroids, 50% disease modifying antirheumatic drugs, 22% non-steroidal anti-inflammatory drugs and 8 biological theraphy. No significant differences were found in clinical and demographics characteristics between groups except for a