1.65; 95% CI 1.29–2.09); this was not observed in HFpEF (RR 0.80; 95% CI 0.63–1.01). Following HF diagnosis, RA patients were more likely to be hospitalised for non-cardiovascular causes (RR 1.26; 95% CI 1.14–1.39), but not for HF (RR 0.96; 95% CI 0.76–1.21) or other cardiovascular causes (RR 0.99; 95% CI 0.81–1.20) compared to the non-RA patients. Readmission rates within 30 days of prior discharge were similar in RA and non-RA ($p=0.14$). Smoking (current or former), prior myocardial infarction (MI) and higher score on Charlson comorbidity index were associated with increased risk for hospitalisation: hazard ratio (HR) 1.33, 95% CI 1.06–1.68; HR 1.37, 95% CI 1.03–1.82; and HR 1.10, 95% CI 1.06–1.14, respectively.

Conclusions: Hospitalisation rate following HF diagnosis was 16% higher in RA than in non-RA patients regardless of sex and age. This difference was particularly apparent between 1990 and 2010. Increased hospitalisation risk was mostly among patients with RA who had HFpEF rather than HF, and was predominantly due to non-cardiovascular causes. Smoking, prior MI and Charlson comorbidity index were associated with increased risk of hospitalisation suggesting that increased complexity of management of patients with comorbid RA may play a role in more frequent hospitalizations in the RA cohort.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.3808

THURSDAY, 14 JUNE 2018

Epidemiology, risk factors for disease or disease progression

THU0680

SURVIVAL ANALYSIS OF PATIENTS WITH CONNECTIVE TISSUE DISEASE ASSOCIATED INTERSTITIAL LUNG DISEASE

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Background: Interstitial lung disease (ILD) is common in connective tissue diseases (CTDs) and can lead to significant shortened survival. Although the various CTDs associated with ILD are often considered as a whole because of their sharing the same autoimmune nature, there are substantial differences in the natural course in each specific CTD. Still, there is little research comparing the mortalities in different underlying CTDs and investigated the risk factors.

Objectives: We aimed to examine mortality in patients with ILD secondary to dermatomyositis and polymyositis (DM/PM), systemic sclerosis (SSc), rheumatoid arthritis (RA), primary Sjögren syndrome (pSS), and systemic lupus erythematosus (SLE), to test whether the survival was associated with ILD imaging subtypes, as well as to identify independent risk factors for CTD-ILDs.

Methods: We retrospectively reviewed the medical records of patients with newly diagnosed CTD-ILD. The high-resolution computed tomography of lung images was reviewed by two expert pulmonary radiologists. According to imaging manifestations, ILD was categorised into three subtypes, i.e., usual interstitial pneumonia (UIP), nonspecific interstitial pneumonia (NSIP) and indeterminate, respectively. The extensity of ILD lesions was also evaluated as grade 1, 2, 3. The primary outcome assessed was all-cause mortality. We examined survival after stratifying on each specific CTD, or lung-CT imaging subtypes, respectively. We used Cox proportional hazards model to identify independent predictors of survival.

Results: Three hundred and twenty-five patients were included with a median follow-up time of 54 months. Eighty-four (25.8%) had DM/PM, 73 (22.5%) had SSc,

63 (19.4%) had RA, 58 (17.8%) had pSS, 47 (14.5%) had SLE. Overall, 98 (30.2%) patients died. The survival rate of pSS-ILD (85.1%) and SLE-ILD (79.3%) were significantly higher than other CTD-ILDs [SSc-ILD (68.5%), RA-ILD (66.7%), DM/PM-ILD (58.6%), $p=0.009$]. However, after categorised into three different ILD imaging subtypes, it showed no statistical differences in survival rates (64.5%, 73.6%, 69.5% of the UIP group, NSIP group, indeterminate group, respectively, $p=0.558$). Multivariable analysis revealed that compared with DM/PM-ILD, the mortality rate was significantly lower in pSS-ILD (RR=0.321, $p=0.001$), RA-ILD (RR=0.466, $p=0.016$), SSc-ILD (RR=0.566, $p=0.045$), and SLE-ILD patients (RR=0.363, $p=0.018$), and old age (RR=1.028, $p=0.002$), long course of disease (RR=1.004, $p=0.005$), extended ILD lesions (RR=1.854, $p=0.025$) were independent predictors of mortality in all types of CTD-ILD. The present study shows DM/PM-ILD patients had the worst prognosis then pSS-ILD, RA-ILD, SSc-ILD, and SLE-ILD patients. Age, disease course, intensity of ILD lesions at baseline is also critical for the survival of CTD-ILD patients.

Conclusions: The present study shows DM/PM-ILD patients had the worst prognosis then pSS-ILD, RA-ILD, SSc-ILD, and SLE-ILD patients. Age, disease course, intensity of ILD lesions at baseline is also critical for the survival of CTD-ILD patients.

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Acknowledgements: We would like to thank Drs Zhenjun Zhao and Qian Liu for their review of the high-resolution computed tomography of lung images.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.6917

THU0681

ESTABLISHING THE BATH ANKYLOSING SPONDYLITIS METROLOGY INDEX (BASMI) NORMATIVE VALUES IN A MALAYSIAN POPULATION: THE IMPORTANCE OF SEX AND AGE FACTORS

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Background: Ankylosing spondylitis (AS) is a chronic spinal inflammatory disorder which leads to progressive fusion and deformity. The loss of spinal mobility is recognised as an important clinical sign. The BASMI, a composite index of spinal mobility is used internationally in clinical practice and research. However, the interpretation of BASMI has been impeded by the absence of normative values.

Objectives: We aimed to attain the normative values for BASMI in Malaysian healthy individuals.

Methods: BASMI data of 142 healthy individuals and 187 AS patients were analysed. Each BASMI component was assessed, using the 10-point scoring system, where zero is no mobility and 10 is very severe limitation. Measurements were performed by the rheumatologists and trained researchers following a designated protocol. Data were summarised and analysed according to sex and age groups.

Results: The total BASMI scores ranged from 0.2 to 4.2 and 0.6 to 9.6 in the healthy individuals and the AS cases, respectively. There was no significant difference for the BASMI median score between healthy men and women (men=1.2, women=1.6, $p>0.05$). The estimated median score for healthy individuals aged 15–19 years was 1.2, increasing with age to 2.7 for healthy individuals aged ≥ 60

years. In AS cases, the estimated median score was 5.4 and 5.8 for men and women, respectively ($p > 0.05$). We observed significant increase of estimated median score between AS patients aged 15–19 years (BASMI score=2.0) and AS patients aged ≥ 60 years (BASMI score=6.4) ($p < 0.05$).

Conclusions: Our data suggest that it is uncommon for healthy individuals to score zero on the BASMI. The magnitude of increase in BASMI score is apparent with increasing age, but not sex in the healthy individuals. Establishment of normative values may aid baseline measurement and monitor change of spinal mobility in AS patients over time, as well as help assess the impact of clinical interventions.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.6172

THU0682 HUMAN HISTOCOMPATIBILITY ANTIGENS (HLA) CLASS I IN ANTERIOR UVEITIS PATIENTS WITH AND WITHOUT SPONDYLOARTHRITIS

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Background: Anterior uveitis (AU) and spondyloarthritis (SpA) are associated with HLA-B27. Previous genetic studies in different populations demonstrated other associations, in particular, HLA, both common and different for AU and SpA.

Objectives: To assess the relationship of HLA class I antigens with AU depending on the presence or absence of SpA.

Methods: 148 pts with AU were typed. All pts were divided into 2 groups: 1–52 pts with confirmed diagnosis of SpA (AU + SpA), 96 pts – with other forms of AU (52 – idiopathic AU, 29 – viral AU, 2 – multiple sclerosis, 2 – toxoplasmosis, 1 – sarcoidosis, 1 – tuberculosis, 3 – chlamydial AU, 2 – Behcet's disease, 3 – juvenile chronic arthritis, 1 – Fuchs's heterochromic iridocyclitis). 150 healthy donors formed control group. Analysis of the distribution of HLA- class I antigens (loci A, B, Cw) was performed comparing 2 groups of patients with AU and each group with control.

Results: HLA-27 in the group of pts AU + SpA identified in 96.1% (50/52), in the group AU – in 40.6% (39/96), in control – in 7.3% (11/150). If HLA-27 was present in the genotype, the risk of developing of common pathology (AU + SpA) was OR=315.9 [95% CI 61.9–2176.7], $p < 0.0000001$, the risk of AU – OR=8.7 [95% CI 3.9–19.4], $p < 0.000001$. Among locus C antigens high frequency of Cw2 was identified in the groups AU + SpA and AU compared with control (64.0%, 36.3% and 10.0%, respectively): AU + SpA vs control - $p < 0.000001$, AU vs control, - $p < 0.0001$. The occurrence of Cw7 was significantly lower in the group AU + SpA in comparison with control: 12.8% and 38.7%, $p = 0.002$. In the group AU the occurrence of this antigen was not significantly different from the control group and the group AU + SpA.

Conclusions: The analysis of the distribution of HLA class I antigens confirmed association of HLA- B27 with AU in Russian population. Other associations, except Cw2, were not identified. Such significant increase of Cw2 in two groups of pts with high frequency of B27 is natural due to the phenomenon of linkage disequilibrium for HLA-B27 and Cw2 antigens. Cw7 antigen can play a "protective" role in relation to SpA, because the frequency of this gene in the group AU was not reduced compared to control.

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Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.2773

THU0683 PREDICTORS FOR PRETERM DELIVERY AMONG PREGNANT WOMEN WITH RHEUMATOID ARTHRITIS AND JUVENILE IDIOPATHIC ARTHRITIS

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Background: It has previously been shown that pregnant women with inflammatory arthritis are at an increased risk for preterm delivery (PTD), yet it remains unclear what underlying maternal factors may drive this excess risk.

Objectives: The aim of our study is to identify overall predictors for PTD among women with rheumatoid arthritis (RA) and juvenile idiopathic arthritis (JIA) and to

analyse the contribution of maternal disease activity, medication use, and comorbid pregnancy conditions on the risk for PTD in this population.

Methods: Data were obtained from the Organisation of Teratology Information Specialists (OTIS) Autoimmune Disease in Pregnancy Project, a prospective cohort study among pregnant women in the U.S. and Canada. Women who enrolled between 2004 and 2017 prior to 19 weeks' gestation, had not enrolled with a previous pregnancy, and delivered at least one live born infant were considered eligible for analysis. All data were obtained by maternal report via telephone interviews and confirmed in the medical record when available. For our statistical analysis, Poisson regression with robust standard errors was used to estimate multivariable adjusted risk ratios.

Results: Mothers with RA and JIA had a higher risk of PTD, preterm labour, early term delivery, and caesarian section versus comparison women. Women with RA additionally had a higher risk of gestational diabetes mellitus (GDM), and women with JIA had a higher risk of preeclampsia versus the comparison group. Active disease (defined as patient activity scale (PAS) score > 3.70) was associated with PTD among women with RA both at intake and anytime during pregnancy, and this association remained after adjustment for corticosteroid (CS) use (aRR 1.60, 95% CI 1.12–2.30; aRR 1.54, 95% CI 1.08–2.20, respectively). CS use in all three trimesters was associated with PTD among women with both RA and JIA, an association that remained after multivariable adjustment for maternal factors including disease activity. Use of non-steroidal anti-inflammatory drugs (NSAIDs) in the first trimester was associated with PTD in women with JIA (aRR 2.31, 95% CI 1.04–5.14). Additional analysis showed that preeclampsia was associated with a higher risk of PTD among both RA and JIA women (aRR 1.92, 95% CI 1.12–3.31; aRR 3.01, 95% CI 1.10–8.23, respectively) but not in the comparison group. GDM and caesarian section were associated with a higher risk of PTD exclusively among RA women (aRR 1.84, 95% CI 1.07–3.15 and aRR 1.58, 95% CI 1.09–2.28, respectively) and fever during pregnancy increased the risk for PTD exclusively among women with JIA (aRR 3.45, 95% CI 1.47–8.08).

Conclusions: Women with RA and JIA are at risk for preterm delivery. Maternal disease activity and medication use, particularly corticosteroid use, may explain much of this excess risk.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.4967

THU0684 PREVALENCE OF RHEUMATIC DISEASES IN ADULT POPULATION IN SPAIN. EPISER 2016 STUDY

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Background: Prevalence of rheumatic diseases was first studied in Spain in 2000 EPISER 2000 study¹). Sociodemographic and lifestyle changes during the last 16 years and their possible influence in prevalence figures justify a new study.

Objectives: To estimate the prevalence of rheumatoid arthritis (RA), psoriatic arthritis (PsA), ankylosing spondylitis (AS), systemic lupus erythematosus (SLE), Sjögren syndrome, symptomatic osteoarthritis (knee, hip, hands, cervical and lumbar spine), fibromyalgia, gout and symptomatic osteoporotic fracture in adult population in Spain.

Disease	Prevalence	95% CI
Cervical osteoarthritis	10.1%	9.1–11.2
Lumbar osteoarthritis	15.5%	14.3–16.8
Hand osteoarthritis	7.9%	7.0–8.9
Hip osteoarthritis	5.2%	4.4–6.0
Knee osteoarthritis	13.9%	12.7–15.1
RA	0.9%	0.7–1.3
PsA	0.6%	0.4–0.8
AS	0.4%	0.3–0.7
Gout	2.5%	2.0–3.1
SLE	0.2%	0.1–0.4
Sjögren syndrome	0.3%	0.2–0.5
Fibromyalgia	2.4%	2.1–2.9
Symptomatic osteoporotic fracture	1.8%	1.4–2.4

Methods: Population-based multicenter cross-sectional study, with the participation of 78 municipalities in the 17 Spanish autonomous communities. The reference population are adults aged 20 and above residing in Spain. All participants gave their informed consent. CATI system (Computer Assisted Telephone Interview) was used for initial data collection and screening questionnaire. Diagnostic suspicions and diagnosis referred by the participants were studied by rheumatologists in the referral hospital for the selected municipalities. Statistical analysis: the prevalence of the rheumatic diseases were calculated using estimators and their