activity), age, sex and MASEI score was assessed with nonlinear Spearman's rho. Significance of differences was assessed by chi-square test. The level of statistical significance of differences was set at p

Results: All of 35 patients with IBD presented at least one entheses alteration with a mean MASEI of 5.43 (thickness 57.1%, enthesophytosis 42.8%, bursitis 0%, erosions 0%, PD abnormalities 14.2%) vs 3 patients of control group (enthesophytosis 14%) (p

Conclusions: 1) IBD patients showed a significantly higher prevalence of early entheses involvement, even in the absence of clinical symptoms; 2) the entity of entheses alteration as assessed by MASEI did not correlate with type, duration and activity of IBD; 3) age was the only variable which significantly correlated with ultrasonographic entheses involvement.; 4) we speculate that IBD patients should undergo ultrasonography evaluation of entheses and, if any alteration, be followed up for early detection of SpA.

References:

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Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.4869

SAT0402 FREQUENCY AND HLA PHENOTYPE OF REACTIVE ARTHRITIS, UVEITIS, AND CONJUNCTIVITIS IN JAPANESE PATIENTS WITH BLADDER CANCER FOLLOWING INTRAVESICAL BCG THERAPY: A 20-YEAR, TWO-CENTER RETROSPECTIVE STUDY

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Background: Intravesical instillation of Bacillus Calmette-Guerin (iBCG) is used as an effective immunotherapy of bladder cancer. However it may have, as adverse event, a reactive arthritis (ReA) and the frequencies are known as about 0.5 to 1% in Western countries.

Objectives: To evaluate the frequencies and HLA phenotype of reactive arthritis (ReA), uveitis, conjunctivitis and other adverse events in Japanese patients with bladder cancer following iBCG therapy.

Methods: The clinical findings of Japanese patients who received iBCG (n=555 [250 and 305 in Kochi Medical School Hospital {KMSH} and Kurashiki Medical Center {KMC}, respectively]) for bladder cancer from March 1997 to February 2016 were retrospectively assessed, with specific attention to patients with ReA and conjunctivitis/uveitis. We also looked at human leukocyte antigen (HLA) phenotypes of patients with ReA.

Results: Patient age was 73±10 and 70±11 years and male/female ratio was 198/52 and 240/65 in KMSH and KMC, respectively. 91/555 (16.4%), 121/555 (21.8%), and 196/555 (35.3%) of all enrolled patients presented with fever, haematuria, and dysuria, respectively. Of the 555 cases, ReA, uveitis and conjunctivitis were revealed in 11/555 (2.0%), 4/555 (0.7%) and 33/555 (5.9%), respectively. The frequency and the protocol of iBCG therapy were stable over the 20 years. Notably, HLA-B27, -B35, -B39 and -B51 positivity was more frequent in ReA patients (9.1%, 36.3%, 36.3% and 63.6%, respectively) ($p<0.05$) than in healthy subjects without ReA (0.3%, 8.3%, 4.0% and 9.1%, respectively).

Conclusions: The 2.0% ReA frequency in iBCG-treated Japanese patients exceeds that in Western countries. HLA phenotype, especially HLA-B51 and -B39 alleles in addition to -B27, may be a risk factor in iBCG-induced ReA in Japanese patients.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.1768

SAT0403 ARTERIAL HYPERTENSION IN PATIENTS WITH ANKYLOSING SPONDYLITIS AND PSORIATIC ARTHRITIS – RESULTS OF 10-YEARS FOLLOW-UP

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Background: Spondyloarthritis (SpA) (ankylosing spondylitis (AS) and psoriatic arthritis (PsA)) are associated with increased cardiovascular risk [1]. Destabilization of arterial pressure in chronic inflammation and anti-inflammatory treatment could be one of the reasons of early cardiovascular events onset.

Objectives: The purpose of this work is evaluate the occurrence and risk of arterial hypertension (AH) onset in patients with AS and PsA.

Methods: 663 patients were involved in the study: AS patients fulfilled mNew-York criteria (1984), PsA patients fulfilled CASPAR criteria (2006). Study included cross-sectional analyze, where 159 AS and 85 PsA patients participated, and 10-year prospective follow-up part, included 278 AS patients, 109 PsA patients. 276 patients were excluded due to lose the follow-up. In follow-up part of the study were involved SpA patients without AH at baseline. 182 healthy volunteers participated in the study like controls, 32 of them lost the follow-up. New cases of AH were registered after 4 and 10 years.

Statistics was performed in SPSS17 and GraphPadPrizm. All the results were adjusted to cardiovascular risk factors.

Results: Characteristics of the patients and controls with 10-years follow-up are presented in table 1.

Table 1. Baseline characteristics of the patients, involved in the study

	AS, n=278	PsA, n=109	Controls, n=150
Age, years (M ± SD)	40.0±11.4	40.55±10.6	39.0±11.2
Gender, male, n (%)	212 (76.25)#@	41 (48.2)	84 (56)
Disease duration, years (M ± SD)	13.7±10.03	14.8±14.4	–
Obesity, n (%)	32 (11.5)	24 (28.2)	22 (14.7)
Smoking, n (%)	151 (54,31)#@	30 (35,2)	40 (26,7%)

AS, ankylosing spondylitis; PsA, psoriatic arthritis; "–", absence of data. #$p<0.001$ for the difference with controls. @$p<0.001$ for the difference with PsA.

100% of patients recieved NSAIDs, 10% - glucocorticoids (5–10 mg prednisolone), 68.8% of PsA patients recieved methotrexate (10–25 mg/week), 14.3 of AS patients - sulfasalazine (2.0–3.0 g/day).

Due to cross-sectional analyses was shown that AH occurred in 48.7 of AS and in 67.5% of PsA patients, respectively, p=0.03.

Numbers of new AH cases during follow-up are presented in table 2.

Table 2. New cases of arterial hypertension in ankylosing spondylitis, psoriatic arthritis and healthy controls after 4 and 10-years of follow-up

	AS, n=278		PsA, n=85		Controls, n=150	
	4 years	10 years	4 years	10 years	4 years	10 years
AH cases, n (%)	95.0 (34.1)	139.0 (50)*	59.0 (69.4)	61.0 (71.7)*	31.0 (36.5)	31.0 (36.5)

*$p<0.0001$ for the difference with controls.

The relative risk (RR) of AH onset in patients with AS compared to healthy individuals is 2.22 (95% confidential interval (CI) 1.59 - 3.1); RR in PsA patients is 3.08 (95% CI 2.19 - 4.03), difference between risk of AH development in PsA and AS is significant, $p<0.0001$. Median to new AH cases in AS and PsA is 10±2.57 years from the first SpA symptoms appearance.

Conclusions: AH is frequently presented in PsA patients than in AS. Risk of new AH onset in patients with AS and PsA is superior compared with the healthy individuals. The number of new cases of hypertension increases with time, and in 10 years from diagnosis half of PsA/AS patients without cardiovascular disease will be in the risk of hypertension.

References:

[1] Agca R et al. Ann Rheum Dis. 2017 Jan;76(1):17–28.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.6325

SAT0404 RELATIONSHIP OF SCLEROSTIN AND DICKKOPF-1 SERUM LEVELS WITH DISEASE ACTIVITY AND INFLAMMATORY MRI LESIONS IN PATIENTS WITH SPONDYLOARTHRITIS

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Background: Dickkopf-1 (Dkk-1) and sclerostin (Scl) are likely to play important roles in the process of ankylosis in Spondyloarthritis (SpA) [1]. Their serum levels are associated with the formation of new syndesmophytes [2]. But the relationship between these biomarkers and disease activity including active inflammatory lesions in sacroiliac joints (SIJ) on magnetic resonance imaging (MRI) still not clear.

Objectives: To estimate the relationship between the Scl and Dkk-1serum levels and active inflammatory MRI lesionsin SIJ, disease activity and functional status in SpA patients (pts).

Methods: Serum levels of Scl and Dkk-1 (pmol/l; ELISA) were measured at baseline in 79 pts with SpA. Mean age of pts (63.3% male) was 37.5±11.3, mean disease duration – 10.7±9.44 yrs. Radiological sacroiliitis defined according to Kellgren grade was: 0 – 1.6%, I – 22%, II – 49.2%, III – 13.6% and IV – 13.6%. Active inflammatory lesions in SIJ were evaluated with Spondyloarthritis Research Consortium of Canada (SPARCC) MRI SIJ score (0–72, n=46). Disease activity was measured by Ankylosing Spondylitis Disease Activity Score (ASDAS) using C-reactive protein (CRP), Bath Ankylosing Spondylitis Disease Activity Index (BASDAI, mm), CRP (mg/l) and erythrocyte sedimentation rate (ESR, mm/hr). Functional status estimated using Bath Ankylosing Spondylitis Functional Index (BASFI, mm). For correlation the Spearman correlation coefficient was calculated.

Results: Mean value (M±σ) of biomarkers in all SpA pts were: Scl – 19.2±11.63, Dkk-1 – 30.7±19.5. The mean value of indices and laboratory parameters in all SpA pts were: ASDAS-CRP – 3.01±1.09, BASDAI – 4.36±1.88, CRP – 20.3±33.0, ESR – 25.8±20.7, BASFI – 3.01±2.33. SPARCC score was 24.6±10.9.

Scl level was significantly higher in pts with lower activity by SPARCC score (23.1±12.7) vs higher activity (16.6±7.63), p=0.043, in pts with moderate disease activity by ASDAS-CRP (22.3±15.6) vs very high disease activity (14.6±9.89), p=0.031, and in women (23.1±12.6) vs men (16.9±10.5), p=0.014. Its level didn't depend on CRP, ESR, BASDAI, BASFI and HLA B27 positivity.

Scl showed significantly negative correlation with BASDAI (r=-0.381, p=0.041) only in women.

There was no difference in Dkk-1 serum level depending on the gender, disease activity (by ASDAS-CRP), functional status, the presence of HLA B27 and inflammatory changes in SIJ (with quartile distribution). But the correlation analysis showed significant relationship of Dkk-1 with CRP (r=0.243, p=0.031) and SPARCC MRI SIJ score (r=0.351, p=0.017). The strength of the correlation between Dkk-1 and CRP was slightly higher in HLA B27 positive pts (90%; r=0.334, p=0.018).