

FRI0190

### RELATIONSHIP BETWEEN FAECAL CALPROTECTIN, HLAB-27 AND ACUTE PHASE REACTANTS IN PATIENTS WITH SPONDYLOARTHRITIS WITHOUT PRIOR DIAGNOSIS OF INFLAMMATORY BOWEL DISEASE

C. Ramos Giraldez<sup>1</sup>, M. Espinosa Malpartida<sup>1</sup>, C. Merino Argumániz<sup>1</sup>, B. Ruíz Antorán<sup>2</sup>, J. Campos Esteban<sup>1</sup>, C. Barbadillo Mateos<sup>1</sup>, H. Godoy Tundidor<sup>1</sup>, B. Agudo Castillo<sup>3</sup>, Y. González Lama<sup>3</sup>, J.L. Andrés Sánchez<sup>1</sup>, J. Sanz Sanz<sup>1</sup>.  
<sup>1</sup>Rheumatology Service; <sup>2</sup>Clinical Pharmacology Service; <sup>3</sup>Gastroenterology Service, Hospital Universitario Puerta De Hierro Majadahonda, Madrid, Spain

**Background:** Faecal calprotectin (FC) is a biomarker of inflammatory bowel activity widely used in the diagnosis and follow-up of inflammatory bowel disease (IBD). Microscopic intestinal inflammation is described in approximately 50% of patients with spondyloarthritis (SpA), and it is associated with more severe disease.

**Objectives:** The purpose of this study was to describe the possible relationship between FC, HLAB27 and acute phase reactants in patients diagnosed of SpA without clinical suspicion or prior diagnosis of IBD.

**Methods:** Unicentric, cross-sectional observational study with prospective clinical data collection. We included consecutively selected patients in the Rheumatology Clinic diagnosed of SpA who fulfilled ASAS criteria and did not have digestive symptoms suggestive of IBD (chronic diarrhoea, rectal bleeding, perianal disease or chronic abdominal pain persistent/recurrent). Demographic, clinical and analytical data from SpA (Uveitis, HLAB27, acute phase reactants), treatments and FC were collected and a FC cut-off point >50 MG/kg was determined. For patients on NSAIDS suspension was recommended two weeks prior to collection of stool samples. The study was approved by the centre's Ethics Committee for Clinical Trials.

**Results:** Ninety-nine patients were included. 50% male, average age 46±11 years old. 3.7±2.5 BASDAI. 79% HLA-B27 positive, 31% had elevated levels of ESR, 9% elevated CRP (>10 mg/L). 49 patients (49.5%) had high levels of FC, with mean levels of 276 mg/kg (range 52–3,038). HLAB27 positive patients had significantly higher FC levels than HLAB27 negative patients (160 mg/kg vs 98 mg/kg; p<0.05). There were no differences in relation to the history of uveitis. Patients with high FC had significantly higher CRP levels than patients with normal FC (6.7 mg/L vs. 3.2 mg/L; p<0.05), in accordance with these results from the group of patients with CRP levels>10 mg/L, the percentage of FC elevation was 78% vs. 47% of patients with CRP <10 mg/L. There were no significant differences in relation to ESR.

**Conclusions:** Patients with spondyloarthritis (ASAS criteria), HLAB27 positive and elevated CRP have higher levels of faecal calprotectin, a biomarker of inflammatory bowel activity, which may indicate that inflammatory activity in SpA might be associated with subclinical intestinal inflammation.

**Disclosure of Interest:** None declared

**DOI:** 10.1136/annrheumdis-2018-eular.5902

FRI0191

### SIMILARITIES AND DIFFERENCES BETWEEN OSTEITIS CONDENSANS ILII AND AXIAL SPONDYLOARTHRITIS PATIENTS PRESENTING WITH CHRONIC BACK PAIN IN A RHEUMATOLOGY SETTING

D. Poddubnyy<sup>1,2</sup>, H. Weineck<sup>1</sup>, J. Listing<sup>2</sup>, T. Diekhoff<sup>1</sup>, K.-G. Hermann<sup>1</sup>, J. Sieper<sup>1</sup>.  
<sup>1</sup>Charité Universitätmedizin Berlin; <sup>2</sup>German Rheumatism Research Centre, Berlin, Berlin, Germany

**Background:** Osteitis condensans ilii (OCI) is regarded as a non-inflammatory disorder, which is considered to be induced by mechanical stress (e.g., by pregnancy and delivery). The diagnosis is normally based on wide spread sclerosis of the sacroiliac joint without erosions or ankyloses on imaging. More recently, par-articular bone marrow oedema has been described on MRI, which can occur early but also intermittently later in the course of the disease. The clinical characteristics of OCI patientst have not been well described. To date, there are no published systematic data on the characteristics of OCI as compared to axial spondyloarthritis (axSpA).

**Objectives:** The objective of this matched case-control study was to investigate demographic, clinical, and lab characteristics of OCI as compared to axSpA.

**Methods:** Using medical database search we have identified n=103 patients aged ≥18 years who were diagnosed with OCI upon presentation with chronic back pain in the Early Spondyloarthritis Clinic of the rheumatology department in the Charité University Hospital between January 2010 and May 2015. These patients were contacted in order to obtain an informed consent and to complete a survey on the disease-related history. n=60 OCI patients who provided an informed consent and completed the survey were included in the final analysis. These patients were matched with a 1:2 ratio according to the back pain duration to patients with definite axSpA diagnosed in the same setting in order to compare demographic, clinical and lab characteristics.

**Abstract FRI0191 – Table 1.** Demographic, clinical and lab characteristic of OCI as compared to axSpA in the rheumatology setting.

Characteristics	OCI N=60	axSpA N=120	p-value
Age, years	40.3±10.0	39.4±11.3	0.51
Female sex, %	96.7%	41.7%	<0.001
Age at back pain onset, years	29.7±9.0	30.5±9.0	0.59
Back pain duration, years	9.0±7.9	8.9±8.0	n.a.*
HLA-B27 positive, %	35.2%	84.2%	<0.001
CRP, mg/l	2.1±2.1	11.3±27.6	<0.001
Elevated CRP (>5mg/l), %	7.1%	41.3%	<0.001
Inflammatory back pain, %	39.5%	92.3%	<0.001
Good response to NSAIDs, %	73.8%	76.9%	0.67
Peripheral arthritis, %	4.5%	12.5%	0.25
Enthesitis of the heel, %	4.8%	15.8%	0.11
Dactylitis, %	0%	5.0%	0.60
Uveitis, %	0%	11.7%	0.011
Psoriasis, %	5.6%	3.3%	0.68
Inflammatory bowel disease, %	1.8%	2.5%	1.00
Family history of SpA, %	32.7%	20.8%	0.12
BASDAI, NRS points (0-10)	4.6±2.0	4.0±2.0	0.17
BASFI, NRS points (0-10)	3.4±2.2	3.1±2.3	0.49
Menell's test positive, %	37.5%	62.5%	0.09
Patrick's test positive, %	45.8%	69.6%	0.07
Tenderness in the SIJ area, %	75.6%	66.7%	0.48
Schober's test, cm	4.2±0.9	4.6±2.1	0.63
Lateral spinal flexion, cm	15.6±5.0	15.3±4.5	0.83

\*Matching variable

**Results:** The main characteristics of the two groups are presented in the table. Most importantly, all but 2 patients with OCI were females and had a significantly lower prevalence of inflammatory back pain, lower level of CRP stressing a rather non-inflammatory nature of this condition. All patients were referred because of possible axial SpA, therefore SpA features, although being lower than in axSpA patients (table 1), were higher than can normally be expected in OCI patients. This is probably the reason why a statistical significance in comparison to axSpA was observed for uveitis only. There was no difference in age of back pain onset (but age <45 years was a referral parameter). Signs of sacroiliitis at physical examination were only slightly more frequent in axSpA; there were no differences in spinal mobility. The level of symptoms (BASDAI) and the perceived level of functional disability (BASFI) were comparable between groups. 83% of female patients with OCI reported a history of at least one pregnancy with a mean number of pregnancies of 3 (median=3, range 1–8).

**Conclusions:** OCI manifesting with chronic back pain starting prior to 45 years of age represents an important differential diagnosis for axSpA. A constellation of a female sex (with a history of pregnancies), negative HLA-B27 and negative CRP seems to be of differential diagnostic value as compared to axSpA.

**Disclosure of Interest:** None declared

**DOI:** 10.1136/annrheumdis-2018-eular.4256

FRI0192

### PREDICTORS OF SEVERE HIP INVOLVEMENT IN ANKYLOSING SPONDYLITIS: DATA FROM NATIONAL INPATIENT SAMPLE

P. Karmacharya<sup>1</sup>, D.R. Poudel<sup>2</sup>, P. Shrestha<sup>2</sup>, R. Dhital<sup>2</sup>, J.M. Davis III<sup>1</sup>.  
<sup>1</sup>Rheumatology, Mayo clinic, Rochester; <sup>2</sup>Reading Hospital and Medical Center, Reading, USA

**Background:** Hip involvement in ankylosing spondylitis (AS) is common (24%–36%), leading to worse functional outcomes. While some cases achieve long-term remission, few develop progressive joint destruction with 5%–8% requiring hip replacement. Although studies in the past have looked at factors associated with severe hip involvement, these remain debated.

**Objectives:** To investigate the factors associated with severe hip disease in patients with AS using a large inpatient US database.

**Methods:** Using the Nationwide Inpatient Sample (NIS) data from 2009–2011, we identified patients with AS based on International Classification of Diseases, Ninth Revision (ICD-9) code 720.0 (first 5 positions) and identified patients with hip surgery with ICD-9 procedural codes 800.5, 801.5, 802.5, 803.5, 804.5, 807.5, 808.5, 809.5, 812.1, 815.1, 815.2, 815.3 (any position). NIS is the largest publicly available all-payer inpatient care database in the United States, sponsored by