survival for bDMARD naïve vs. non-naïve patients was similar for all diagnoses (RA, p=0.15; PsA, p=0.23; axSpA, p=0.71), with trend towards better drug survival in bDMARD naïve RA and PsA patients (figure), 4 year drug survival in bDMARD naïve/non-naïve patients were: RA, 54/48%; PsA, 47/43%; axSpA, 48/46%, respectively. Subgroup analyses of patients with and without concomitant sDMARDs showed similar findings. A trend was seen towards better 3 month responses in bDMARD naïve vs. non-naïve patients, with statistically significant better responses for DAS28 in PsA and BASDAI and ASDAS in axSpA (table 1).

Conclusions: Golimumab drug survival was similar in bDMARD naïve vs. non-naïve RA, PsA and axSpA patients. A trend was seen towards better responses for bDMARD naïve patients. Identified predictors for golimumab drug discontinuation was female gender and no concomitant sDMARDs in PsA and female gender in axSpA.

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SAT0266

THE RESPONSE TO TNF-BLOCKERS TREATMENT OF SPA PATIENTS IS INFLUENCED BY THE INTERPLAY BETWEEN HLA-B27 AND GUT MICROBIOTA COMPOSITION AT BASELINE

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Background: The response to TNF-blockers in axial spondyloarthiritis (AxSpA) is at least partially influenced by HLA-B27 through a still poorly understood mechanism.

Objectives: Given that HLA-B27 regulates the gut microbiota composition in rats, we seek to evaluate the predictive value of the gut microbiota composition in AxSpA patients on their responsiveness to TNF-blockers.

Methods: A total of 58 patients was monocentrically recruited between October 2014 and May 2015. At baseline, these patients had an active disease despite NSAIDs intake and were eligible for treatment with a TNF-blocker, while having no history of inflammatory bowel disease (IBD). The mean BASDAI (±SD) was 45.6 ±21.4. ASDAS 2.8±0.9 and CRP 9.7±11.4 mg/L. Among these patients, 56 fulfilled the ASAS classification criteria (imaging arm) with sacroilitis on X-rays (n=37) or objective signs of inflammation on MRI (n=48). Two patients fulfilled the clinical arm. These patients were not subjected to antibiotics within 3 months before stool sample collection. Bacterial 16S rRNA gene sequencing of the V3-V4 region was performed on stools samples before and 3 months after TNF-blocker treatment. Beta diversity metrics were calculated on the abundance of operational taxonomic units (OTU) after their taxonomic assignment on quality-filtered sequences.

Results: Principal component analysis (PCA) ordination of Bray-Curtis similarity revealed that current smoking (compared with never or ever smokers) and HLA-B27 genotype were significantly associated with the overall composition of the microbiota at baseline. Meanwhile, the abundance of each bacterial OTUs was influenced by HLA-B27 genotype at baseline but not after 3 month of treatment. In contrast, we identified a bacterial signature that was linked to the smoking behaviour independently of TNF-blocker treatment, whereas the BASDAI and ASDAS indices were significantly associated to the general composition of the gut microbiota after the 3 month treatment. In line with a previous report, the abundance of Ruminococcus gravis was not associated with disease activity in the absence of IBD. Interestingly, the abundance of 5 and 7 bacterial OTUs at baseline was associated with the response to TNF-blockers assessed by BASDAI and ASDAS, respectively. Among these candidates, the abundance of one bacterial OTUs belonging to the Clostridiales order was associated with a better response to the treatment and with the HLA-B27 genotype.

Conclusions: Anti-TNF treatment was found to modulate the HLA-B27-induced variations of the intestinal microbiota of AxSpA patients. Moreover, the abundance of a subset of OTUs at baseline was found to predict the responsiveness to TNF-blockers. Further functional studies will be conducted to assess how these taxa can be use as predictors of the treatment outcome.

REFERENCES:

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SAT0266

USE OF CONVENTIONAL SYNTHETIC DMARDS AND BIOLOGICAL DMARDS IN PATIENTS WITH ENTEROPATHIC SPONDYLOARTHITIS: A COMBINED GASTRO-RHEUMATOLOGICAL APPROACH

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Background: Enteropathic spondyloarthiritis (eSpA) is a chronic autoimmune disease associated with inflammatory bowel disease (IBD) that is poorly diagnosed and managed.

Objectives: To assess the diagnostic and therapeutic effect of a combined gastro-rheumatological approach in eSpA patients.

Methods: IBD-patients with joint pain referred to a dedicated rheumatologist by gastroenterologist were enrolled. Clinical and biochemical variables, SpA and intestinal disease activity measures, and treatment (biologic; bDMARDs and conventional synthetic; csDMARDs) were recorded at baseline, 3, 6, 12 and 24 months. The association between treatment on demographic and clinical characteristics was evaluated by logistic regression.

Results: From a total of 229 IBD patients, 147 (64.2%) were diagnosed with eSpA (65.3%) showing peripheral involvement and 51 (34.7%) with axial involvement. The majority (67.3%) of eSpA patients were female (n=99), median age and disease duration of 46 and 14.6 years. bDMARD treatment increased over the follow-up period (baseline-24 months: 32.6%>60%; AOR:3.45, 95% CI: 1.93–6.2, p<0.001), however, their use was less frequent in elderly patients (AOR: 0.73, 95% CI: 0.56–0.96, p=0.023), in ulcerative colitis patients (AOR:0.43, 95% CI:0.2–0.94, p=0.034) and in patients with peripheral involvement (AOR:0.53, 95% CI:0.3–1.04, p=0.007). csDMARD use was increased in patients with peripheral involvement (AOR: 4.65, 95% CI:12.09–10.33, p=0.001) and in patients with ulcerative colitis (AOR:2.30, 95% CI:1.13–4.67, p=0.021) (figure 1). CRP, ESR, ASDAS-ESR levels and BASFI were significantly decreased over the follow-up period whereas pMayo score, BASDAI and HAQ-S were unchanged (figure 2).