Conclusion: The SpA group had a mean age of 45.88 ± 11.67, 62.3% of them were male, 6.6% reported current smoking and 37.7% reported smoking sometime in life. In total, 67.2% had inflammatory back pain, 14.8% had dactylitis, 63.9% had enthesitis and 57.4% arthritis. Thirty patients were HLA-B*27 positive with a genotypic frequency of 50.8% and an allelic frequency of 24.6%. In this group of patients, the mean age was 43.5 ± 11.8, 76.6% were male, 86.7% of them were subtype B’27:05:02:02g and 13.3% presented the B27:02:01:01. None of the SpA patients had both B27 alleles. On the other hand, the healthy individuals were men in 51.0% and the mean age was 37.15.4 years. Ten subjects were positive for the HLA-B*27 allele with a genotypic frequency of 3.4% and an allelic frequency of 1.7%. In this group of individuals 50.0% were male gender with a mean age of 38.4±17.9. No individuals were found to have the two alleles or homozygous for the B27 allele. In all of them the subtype B’27:05:02:02g was observed in high-resolution sequencing.

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AB0118

FREQUENCY OF INTESTINAL PARASITES AND THEIR ASSOCIATION WITH CLINICAL DISEASE ACTIVITY AND TREATMENT-DECISION IN PATIENTS WITH SPONDYLOARTHRITIS

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Background: Studies of human intestinal microbiota have focused mainly on bacteria and scarce information on how eukaryotic parasites fit in the gut context or its role in human health and disease.

Objectives: This is an approach to explore if intestinal parasites represent a significant factor concerning the treatment-decisions or disease activity in inflammatory conditions such as SpA

Methods: A Cross-sectional study including 65 patients with SpA according to ASAS classification criteria was performed. Clinical evaluation was made by rheumatologists and gastroenterologists. Stool samples were collected and microscopically analyzed by direct saline, Mini Parasep concentration and PCR/qPCR. Lab tests included fecal calprotectin, CRP, ESR, and HLA-B27. The association between intestinal parasite infection and clinical/treatment variables were evaluated using the Chi-square or Fisher’s exact test. (Ethical/Code 2017-023)

Results: SpA patients had a mean age of 43.9±11.5 years, 61.5% were male, 52.5% were positive for HLA-B27 and 87.7% had axial involvement. In total, 67.7% of the patients were receiving biological treatment, 64.6% had ASDAS-CP-R ≥2.1. In total, 75.4% of patients were positive for ≥2 gastrointestinal symptoms with a predominance of abdominal pain (66.2%), abdominal inflammation (63.1%), diarrhea (47.7%), 11% of patients tolerated some food (58.5%). Interestingly, 23.3% have high levels of calprotectin, 20% of patients with high calprotectin were receiving biological treatment against IL-17 (p=0.086) and 80% of these patients had BASDAI ≥4 (p=0.017) and ASDAS-VSG ≥2.1 (p=0.03). The parasites found in SpA patients were Endolimax nana (98%), Blastocystis ssp. (63.8%), Entamoeba coli (6.8%), Entamoeba histolytica (6.9%), Chilomastix mesnili (6.4%), E. dispar/moshkovskii (1.7%) and Giardia intesti- nalitis (3.7%). Patients positive for E coli (80%) were treated with NSAIDs (p=0.003). 3/4 of patients positive for H histolytica presented HLAB’27:05:02:02 positive. Likewise, the only patient who was positive for G intestinialis expressed this allele. 5/7 of patients treated with Sulphasalazine presented Blastocystis ssp and 33.3% E coli. The presence of intestinal parasites in SpA patients was not associated with gastrointestinal symptoms, either disease-activity measures.

Conclusion: The intestinal parasitism in the tropical countries as Colombia have shown an interesting pattern in SpA patients. The treatment may modulate the presence of some parasites; however, the presence of intestinal parasites in SpA does not seem to influence clinical disease activity

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AB0119

SERUM LEVELS OF INTERLEUKIN-22 ARE HIGH IN ANKYLOSING SPONDYLITIS, PARTICULARLY IN SMOKERS, BUT DO NOT CORRELATE WITH RADIOGRAPHIC BONE FORMATION NOR WITH DISEASE ACTIVITY

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Background: Elevated serum levels of interleukin-22 (IL-22) were reported in patients with ankylosing spondylitis (AS). IL-22 was also reported to drive the osteoclastic differentiation of mesenchymal stem cells. (1)

Objectives: To confirm the fact that serum levels of IL-22 are elevated in AS patients and to examine the relationship between concentrations of IL-22 and degree of radiographic progression in AS patients.

Methods: Seventeen male patients with established AS of more than 4 years duration signed the informed consent and donated 10ml of peripheral blood. Demographic data was collected from patient’s charts. Disease activity indices were calculated for all patients and radiographic disease progression was calculated as mSASS. A control group included 6 healthy persons and 4 patients with advanced diffuse idiopathic skeletal hyperostosis (DISH). Serum levels of IL-22 were tested using enzyme-linked immunosorbent assay. Intergroup differences were examined using the Mann-Whitney test, while correlations were calculated using Pearson correlation coefficient.

Results: Serum IL-22 levels were remarkably elevated in patients with AS, comparing to healthy individuals and patients with DISH (p=0.005). However, increased concentrations of IL-22 did not correlate with the degree of radiographic progression or AS disease activity indices, nor with disease duration or patient’s age. Presence of diarrhea, psoriasis, uveitis, or elevated levels of C-reactive protein did not influence the levels of IL-22 as well. More AS patients with elevated serum IL-22 were smokers (p=0.05).

Conclusion: The serum levels of IL-22 are elevated in patients with AS. It seems that smoking can be related to the elevated levels of serum IL-22 in AS. The significance of this data is unclear and further research is needed.

References: