Objectives: To analyze the potential association between the presence of HLA-B27 and the different comorbidities observed in axSpA patients.

Methods: A comparative cross-sectional study including axSpA patients from COMOSPA registry. COMOSPA is a worldwide registry that includes a wide set of anthropometric and clinical variables from 3984 patients with spondyloarthritis. The registry also includes the most frequent comorbidities observed in spondyloarthritis such as obesity, hypertension, diabetes, hyperlipidemia, heart ischemic disease, stroke, renal failure, neoplasms, peptic ulcer, diverticulitis, chronic obstructive pulmonary disease, and the presence of osteoporosis. A descriptive analysis and a multiple logistic regression model was performed including all variables assessed.

Results: 2370 patients fulfilled ASAS criteria of axSpA patients and were included in the study. 1858 (78.4%) of them were HLA-B27 positive. HLA-B27 positive axSpA patients presented significantly higher percentage of male sex, longer disease duration, higher percentage of definite Ankylosing Spondylitis, higher CRP levels, and were also more frequent tobacco consumers and excessive alcohol intakers compared to the negatives. However, disease activity measured by BASDAI, BASFI and ASDAS-CRP were all significantly higher in the HLA-B27 negative patients compared to the positive ones.

The only association observed between any comorbidity and presence of gen HLA-B27 was the presence of osteoporosis. This association was independently significant even after adjusting in the multivariate analysis for all variables assessed.

Conclusion: The association observed between the gen HLA-B27 and the presence of osteoporosis in axSpA patients could be of great relevance given the impact of osteoporosis in the phenotypical frame of axSpA patients.

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Methods: In total, 180 patients with SpA (ASAS/criteria) were assessed by rheumatologists, of which (n=35) (19.4%) had an indication to pharmacologist to perform the chromoendoscopy, magnification colonoscopy and histological analysis. The association between clinical and colonoscopy variables were evaluated using the Chi square or Fisher’s exact test. (Ethical/Code: 2017-023)

Results: The average age of the patients included for colonoscopy was 45.4±10.3 years. 57.1% were men and 42.9% presented the HLA-B27 allele. Axial involvement (91.4%), inflammatory back pain (66.8%) and use of biological therapy (71.4%) were associated with a higher risk for flares. High levels of calprotectin (25.7%), CRP≥3 (14.3%), positive ESR (29.2%) and positive ANCA (6.8%) was observed. Regarding outcome measures of function and activity, BASDAS ≥4 (60%) and ASDAS-PCR ≥2.1 (80.0%) was observed.

The loss of vascular pattern in the ileum was associated with high levels of calprotectin levels (p=0.002). At microscopic level, 80% of the patients who presented acute inflammation in the ileum had elevated calprotectin (p=0.013). Cryptitis (77.8%) in the ileum was associated with axial involvement (p=0.017). Ulcers and erosion in the ileum were associated with positive ESR (p=0.003). All patients who presented ulcerations and inflammation (64.3%) in ileum were HLA-B27 positive (p=0.029) and (p=0.052) respectively. The 50% of patients with atrophy of villi in ileum were receiving biological treatment (p=0.035).

Conclusion: Digital chromoendoscopy and augmentation colonoscopy provided an improved and detailed contrast of the surface of the gastrointestinal mucosa. The tissue sampling showed the loss of vascular pattern as main finding in ileum with interesting associations with fecal calprotectin levels in patients with SpA. The interest of proposing the active search for symptoms, signs and biomarkers of gastrointestinal involvement in patients with SpA without IBD to define subclinical gastrointestinal involvement and early remission through an endoscopic evaluation and objective histological and propose a specific clinical and therapeutic treatment.

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Background: Disease flares in axial spondyloarthritis (axSpA) might occur even in patients with otherwise stable disease receiving highly effective anti-inflammatory therapy such as TNF inhibitors. The frequency of disease flares, especially in patients with axSpA receiving long-term stable therapy, and factors associated with flares are not sufficiently investigated.

Objectives: The objective was to assess the frequency of disease flares and to identify factors associated with flares in patients with early axSpA receiving continuous long-term (up to 10 years) treatment with a TNF inhibitor etanercept.

Methods: In the ESTHER (etanercept versus sulfasalazine in early axial spondyloarthritis trial), patients with early axSpA (symptom duration ≤5 years) were treated with ETN (n=40) versus sulfasalazine (n=36) for 48 weeks [2]. After one year all patients were treated continuously with etanercept (n=17 patients temporarily interrupted treatment in the 2nd year to assess time to flare and were then re-treated with etanercept, except 4 patients who completed the study in sustained remission) for up to 10 years in total. Only patients who were continuously treated with etanercept for at least 6 months were included in the current analysis.

Result: The disease flare was defined as a worsening of the ASDAS by ≥0.9 as compared to the value obtained at the previous visit. Univariate and multivariable Cox-regression analyses were performed to analyze the predictors of flares.

Conclusion: Disease flares according to the ASAS definition of clinically important worsening in axSpA based on ASDAS occurred –1/3 of patients with early axSpA who received a treatment with etanercept for up to 10 years without major differences between r- and nr-forms of axSpA. HLA-B27 negativity, normal CRP, higher spinal ankylosis scores, higher fatty degeneration scores but lower ankylosis scores in the SIJ’s at baseline MRI were associated with a higher risk for flares.

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Figure 1. Baseline characteristics of all patients with continuous ETC treatment.

Figure 2. Kaplan-Meier curves indicating time to first flare and flare free survival probability.