were male, with a mean age of 41.83±6.27 years and a BASDAI of 2.99±0.58. A statistically significant difference was observed in the displacement of the center of mass (with respect to the pelvis local coordinate system) along the anteroposterior axis between the two studied groups (H = 4.96, p = 0.03), with a mean rank displacement of 8.6 for r-axSpA and 15.00 for nr-axSpa, corresponding to a reduction in displacement of 38% (mean 0.00986 vs 0.01579m), in the r-axSpa group.

Conclusion: Our preliminary results in r-axSpA subjects show a reduction of the pendulum mechanism. Although no significant segmental (kinematics) changes were observed, the sum of all studied variables result in a clear different gait pattern between the two groups. The observed decline can be an early sign of the inefficiency of the r-axSpA group to minimise the cost of transport of the center of mass during walking (i.e. increased instability). This study shows the potential of gait analysis to identify subjects who may benefit from early physiotherapy intervention.

Disclosure of Interests: Nuno Gonçalves: None declared, Lúcia Domingues: None declared, Atlas Mashayekhi Sardoo: None declared, Lucian Radu: None declared, Santiago Rodrigues-Manica Speakers bureau: Jansse, MSD, Novartis, Agna Neto: None declared, Rita Torres: None declared, José Marona: None declared, Jaime Branco Speakers bureau: Vitoria, César Mendes: None declared, Ricardo Matias: None declared, Fernando Pimentel dos Santos Speakers bureau: Novartis, Pfizer, Biogen, Vitoria,

DOI: 10.1136/annrheumdis-2020-eular.5632

AB0689 THE IMPORTANCE OF THE SUN. VITAMIN D AND SPONDYLOARTHRITIS: OUR EXPERIENCE IN A THIRD LEVEL HOSPITAL.

I. González Fernández[1], C. Álvarez Castro[1], C. Moriano[1], A. López Robles[1], X. E. Larco Rojas[1], M. E. Vallejo Pascual[2]. [1]*Complejo Asistencial Universitario de León, Reumatología, León, Spain;* [2]*Facultad de CC.EE y Económicas, León, Spain*

Background: Vitamin D plays an important role in the pathogenesis of autoimmune diseases, so that it has been shown that an adequate level is associated with a lower risk of developing this group of entities as well as a lower severity of them. Specifically, in spondyloarthritis (SpA) the deficiency has been associated with greater aggressiveness and greater radiological progression.

Objectives: Assess levels of vitamin D in patients diagnosed with SpA in the León University Assistance Complex and study its possible relationship with different clinical-epidemiological variables.

Methods: Prospective observational study between January 1, 2019 and December 31, 2019 with consecutive sampling of patients diagnosed with SpA (New York criteria, ASAS) in our hospital between 1973 and 2018. It was taken as a cut-off point for vitamin normality D those values ≥ 30 ng / ml. The disease activity was assessed based on BASDAI and CRP level (taking as a cut-off point 5 mg/l, reference value of our hospital and ruling out elevation due to intercurrent processes) in the last consultation. Positive values above 130 mlg/dL were considered for the orosomucoid and for calprotectin as undetermined values between 50-100 mg/kg feces and suspected IBD greater than 100 mg/kg feces. An attempt was made to link the value of vitamin D with disease activity, tobacco, the development of uveitis and the presence of subclinical intestinal inflammation.

Results: 132 patients were included, of which 60.6% were men with a mean age of 49.35 ± 12.95 years. 84.8% were B27 positive. 88.6% met New York criteria. 35.6% suffered uveitis at some time during their evolution. As for tobacco, 68.2% were non-smokers, 12.9% were former smokers and 18.9% were active smokers. 6.8% of the sample presented positivity for the orosomucoid and 37.8% alterations in calprotectin (of which 24.2% were undetermined and 13.6% suspected of inflammatory bowel disease). Only 25% of patients had elevated CRP levels and 11.4% of patients had BASDAI> 4. 50.8% of our sample had optimal levels of Vitamin D while 49.2% were at low values.

A statistically significant association was observed between hypovitaminosis D and elevated CRP levels (p 0.038). In our sample we found no statistical association with uveitis or with markers of subclinical inflammatory activity.

Conclusion: -Almost half of the patients in our sample have hypovitaminosis D which is probably attributable to the meteorological characteristics of León region.

-Low levels of vitamin D are statistically significantly related to higher levels of CRP and, therefore, with greater disease activity.

-No significant relationship was found with uveitis or with a higher risk of subclinical intestinal inflammation in our simple.

References:

[1] Castro Domínguez F, Salman Monte TC, Blanch Rubió J. *Vitamin D in rheumatic diseases.* Rev Osteoporos Metab Miner. 2017; 9 (1) supplement: 31-39.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2020-eular.4191

AB0690 ANTIPHOSPHOLIPID ANTIBODIES AND SPONDYLOARTHRITIS. TRUTH OR MYTH? OUR RESULTS IN A THIRD LEVEL HOSPITAL.

I. González Fernández[1], C. Álvarez Castro[1], C. Moriano[1], E. Diez Alvarez[1], T. Pérez Sandoval[1], M. E. Vallejo Pascual[2]. [1]*Complejo Asistencial Universitario de León, Reumatología, León, Spain;* [2]*Facultad de CC.EE y Empresariales, León, Spain*

Background: The importance of antiphospholipid antibodies and their clinical involvement in thrombotic phenomena, isolated or associated with certain autoimmune diseases such as systemic lupus erythematosus, is known. However, in spondyloarthritis (SpA) there is little published data about it.

Objectives: Identify the presence of antiphospholipid antibodies in patients diagnosed with SpA in the León University Assistance Complex and analyze its possible relationship with different clinical-epidemiological variables.

Methods: Prospective observational study between January 1, 2019 and December 31, 2019 with consecutive sampling of patients diagnosed with SpA (New York criteria, ASAS) in our hospital between 1973 and 2018. Anticardiolipin antibodies, anti-B2 glycoprotein and Lupus anticoagulant (AL) were the requested antiphospholipid antibodies excluding cases of positivity for other causes (coagulopathy, liver disease) and repeating the determination at 12 weeks. The disease activity was assessed based on BASDAI and CRP level (taking as a cut-off point 5 mg/l, reference value of our hospital and ruling out elevation due to other intercurrent processes) in the last consultation. An attempt was made to link antiphospholipid antibodies with sex, disease activity, cardiovascular risk factors (CVRF), thrombotic events and taking anti-TNF.

Results: 132 patients were included, of which 60.6% were men with a mean age of 49.35 ± 12.95 years. 84.8% were B27 positive. 88.6% met New York criteria. 43.2% had CVRF, highlighting arterial hypertension (HT) in 25%; dyslipidemia (DL) in 24.2%; Obesity in 3.8%, hyperuricemia in 3% and diabetes mellitus (DM) in 2.3%. 43.9% of the patients were being treated with an anti-TNF. Only 25% of patients had elevated CRP levels and 11.4% had BASDAI> 4.

38.7% of the sample had positive antiphospholipid antibodies; of which 58.8% (22.7% of total patients) were confirmed. Of these, AL was the predominant in 90.2% of cases (34.9% of the total number of patients). Likewise, 10% of patients with repeated antiphospholipid antibodies met criteria for antiphospholipid syndrome (thrombi).

It was observed in our sample that female sex can behave as a protective factor against the positivity of AL (p 0.002) and that elevated CRP levels show a statistically significant tendency to the presence of AL (since the first positive determination was related with a p 0.013).

Conclusion: -According to our results, it seems important to determine antiphospholipid antibodies (especially AL) in patients with SpA, especially in order to avoid future thrombotic events.

-There seems to be a trend between disease activity and the probability of presenting positive AL, however, more studies are needed to confirm this hypothesis.

-The female sex, in our sample, can be considered a protection factor against this antibody.

References:

[1] Juanola X, Mateo L, Domench P, Bas J, Contreras Montserrat, Nolla JM, Roig-Escofet D. *Prevalence of antiphospholipid antibodies in patients with ankylosing spondylitis*. J Rheumatol 1995; 22: 1891-3.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2020-eular.4283

AB0691 CHARACTERIZATION OF DIFFERENT GROUPS WITH IMAGING AND NON-IMAGING FINDINGS OF ANKYLOSING SPONDYLITIS COMBINE WITH HIP LESION IN WESTERN CHINESE

Q. Han[1], Z. Zheng[1], K. Zhang[1], Z. Yu[1], F. Yang[1], Q. Liang[1], P. Zhu[1], X. Baraliakos[2]. [1]*Department of Clinical Immunology, PLA Specialized Research Institute of Rheumatology & Immunology, Xijing Hospital, Fourth Military*