fulfill the ASAS criteria for SpA, 21 patients underwent SIJ CT and 20 underwent SIJ MRI. Sacroiliitis was not visualized by CT in any patients and was visualized by MRI in 2 out of 20 patients (10%). Sensitivity, specificity, positive and negative likelihood ratio of CT calculated with ASAS classification as golden standard were respectively estimated at 93.3%, 100%, 100% and 91.3%. Youden index was estimated at 0.93 and Q Yule coefficient at 1. Sensitivity, specificity, positive and negative likelihood ratio of MRI calculated with ASAS classification as golden standard were respectively estimated at 62.9%, 90%, 89.5% and 64.3%. Youden index was estimated at 0.53 and Q Yule coefficient at 0.88.

Conclusion: In our study, the evaluation of sacroiliitis by CT, in comparison with MRI, has shown to be more sensitive and more specific. However, other factors should also be taken into account while comparing CT and MRI such as the high radiation exposure of CT scanning in the one hand and the cost and the restricted accessibility of MRI in the other hand.

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THU0385

COMPARISON OF CLINICAL AND DEMOGRAPHIC FEATURES OF JUVENILE SPONDYLOARTHRITIS BETWEEN ISRAELI AND US CHILDREN

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Background: Clinical observations among Israeli pediatric rheumatologists reveal that some of the clinical and demographic features of Israeli children diagnosed with Juvenile Spondyloarthritis (JSpA) are different as compared to the typical characteristics described in US studies.

Objectives: In this study, we compared clinical, laboratory and radiographic features to determine whether differences occur between the two populations of JSpA.

Methods: We performed a retrospective, cross-sectional, multicenter comparison of JSpA patients from 3 large Israeli pediatric rheumatology centers and a large US pediatric rheumatology center. Patients with a diagnosis of Juvenile Ankylosing Spondylitis (JAS) and/or Enthesitis-related Arthritis (ERA) were included. The demographic, clinical and imaging features of the subjects upon presentation were compared, including MRI of the sacroiliac joints. Inter Center Comparison (ICC) between the Israeli and US musculoskeletal radiologists was conducted.

Results: Overall 87 patients met the inclusion criteria (39 Israeli, 48 US). As compared to the US population, the Israeli population was less likely to be male (56% vs. 75%, $p=0.11$), and more likely to be older at time of diagnosis (14.3 vs. 11.9 years, $p<0.001$). Upon presentation, axial symptoms (inflammatory back pain) and physical examination findings consistent with sacroiliitis (SIJ tenderness, modified Schober test), were significantly more prevalent among Israeli patients (59% vs. 35.4%, 48.7% vs. 16.7%, and 41.2% vs. 21.5%, respectively, all $p<0.05$), whereas peripheral arthritis and enthesitis were significantly more prevalent among the US patients (43.6% vs. 91.7% and 7.7% vs. 39.6% in Israeli patients vs. US patients, $p<0.05$). For HLA-B27, 32% of the Israeli patients vs. 66.7% of the US patients were positive ($p=0.007$). In addition, of those who had imaging ($N=30$ and $N=37$ for Israeli and US cohorts) 96.7% of the Israeli patients versus 29.7% of the US patients demonstrated positive MRI findings that were consistent with sacroiliitis ($p<0.001$, overall $N=67$). An excellent level of agreement was observed between the Israeli and US musculoskeletal radiologists ($\kappa=0.9$).

Conclusion: We found important distinctions between two populations with JSpA. Israeli children were more likely to present with axial disease, less likely to demonstrate HLA B27 carrier positivity, and more likely to demonstrate sacroiliitis on MRI than US children, who more commonly presented with peripheral arthritis and enthesitis, HLA-B27 positivity and negative MRI findings. These unique findings of the Israeli JSpA population, also as compared to descriptions of JSpA patients in the medical literature, point to environmental and/or population specific factors that merit additional studies in order to unravel the differences in disease presentation between the two countries.

Abstract THU0385 – Figure 1

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THU0386

CHILEAN AXIAL SPONDYLOARTHRITIS PATIENTS REPORT HIGH DISEASE BURDEN AND IMPAIRED WORK ACTIVITY – AN INTERNET SURVEY IN 472 PATIENTS

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Background: Axial spondyloarthritis (axSpA) can be associated with significant burden and impaired work activity. In Chile, several barriers impede adequate treatment, such as insufficient access to specialists and biological treatment. Furthermore, there is an important lack of insight into the local situation. This hampers the development of adequate national treatment standards and financial support.

Objectives: 1. To evaluate the disease burden, quality of life and work participation in Chilean axSpA patients. 2. To assess gender differences in disease burden and 3) compare patients with and without biologics.

Methods: A cross sectional online survey among Chilean SpA patients, recruiting via the internet website and associated social media of the Chilean SpA Patient Foundation ("Espondilitis Chile"). The survey was written in Spanish and requested information, mostly via multiple choice options, on gender, age, disease characteristics (diagnosis, disease duration, treatment), disease burden (BASDAI and BASFI), quality of life (ASAS Health Index) and work participation (WPAI). Only axSpA patients were included for further analyses. The association between BASDAI, quality of life or work participation (presenteeism, absenteeism) and subgroups (gender, biologics) was assessed through univariable regression and subsequently multivariable regression analyses, correcting for age, disease duration and concomitant treatment (NSAIDs, DMARDs, opiates).

Results: Between July and October 2018, 625 patients completed the website survey, of whom 472 reported a diagnosis with axSpA (91% radiographic axSpA, 37% male, mean age 42 years, 83% BASDAI $\geq$ 4, table 1). Twenty percent used a biological and patients with biologics were more likely to have a paid job ($p=0.01$) and had significantly lower BASDAI, BASFI, ASAS HI and risk of absenteeism. In multivariable analyses, biologics remained significantly associated with a lower BASDAI. Interestingly, biologics were used significantly more often in male patients compared to females (26% versus 16%, $p<0.01$), while BASDAI, ASAS HI and chance of absenteeism and presenteeism were significantly higher in female patients (table 1). After correction for treatment, the gender difference in BASDAI, absenteeism and presenteeism was not significant anymore.

Conclusion: The results of the web survey demonstrate a high level of disease burden and work impairment in Chilean axSpA patients. The use of biologics is low, although its use is independently associated with having a lower disease activity. Women used significantly less biologics despite reporting a worse disease state (BASDAI, ASAS HI) and greater work disability, suggesting inequality in access to treatment.