SAT0407 RISE IN THE DIAGNOSIS OF NON-RADIOGRAPHIC FORM OF AXIAL SPONDYLOARTHRITIS IN NORTHERN ISRAEL OVER TIME

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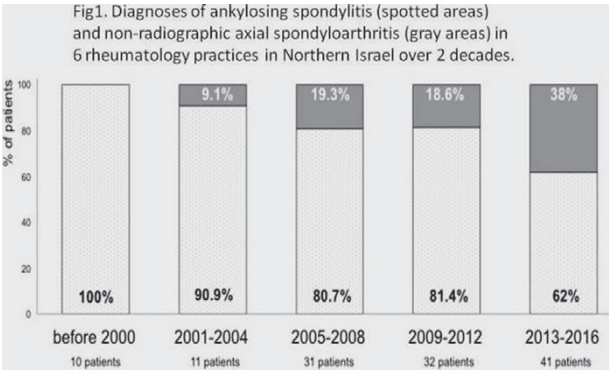
Background: Approach to the diagnosis of axial spondyloarthrithis (axSpA) has changed in the last decade, with the aim of diagnosing the disease in its early form.
Objectives: The objective of this study was to explore change in the diagnostic pattern of axSpA in Northern Israel over the last 15 years.
Methods: Patients with the clinical diagnosis of axSpA from six rheumatology practices affiliated with the Rheumatology Unit of the Bnai Zion Medical Center in Haifa, Israel were recruited to the study. Ankylosing Spondylitis (AS) was diagnosed in the presence of sacroiliitis grade 2 or more on X-ray films; all other patients were considered as having non-radiographic axSpA. All patients were subdivided by time periods to 5 groups, and percentages of patients diagnosed in the non-radiographic stage of the disease, as well as patient demographic data were compared using exact Fisher test.
Results: One hundred twenty five patients were subdivided to 5 groups by periods of diagnoses (before 2000, 2001–2004, 2005–2008, 2009–2012, 2013–2016). Gradual increase in a proportion of patients diagnosed with non-radiographic axSpA was observed over years, with statistical significance achieved in 2013–2016 ($p<0.05$) (Fig.1). Patients' gender and age distribution did not differ significantly among the groups.



Conclusions: Progressive increase in the proportion of patients diagnosed with non-radiographic form of axSpA over years was observed in this study. This finding, made on the basis of real life data, reflects change in the diagnostic approach to spondyloarthritis during the last decades.
Disclosure of Interest: None declared
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SAT0408 POSITIVE CORRELATION BETWEEN INFLAMMATION ON SACROILIAC JOINT MRI AND SERUM C-TERMINAL TELOPEPTIDE OF TYPE-I COLLAGEN IN ANKYLOSING SPONDYLITIS BUT NOT IN NON-RADIOGRAPHIC AXIAL SPONDYLOARTHRITIS

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Background: The MRI-determined inflammatory score was suggested as a more objective measure of disease activity than clinical activity scores in axial spondyloarthritis. It would be useful to identify the disease activity scores and/or laboratory biomarkers that objectively reflect inflammation on MRI.
Objectives: To identify the clinical disease activity scores and laboratory markers that best reflect magnetic resonance imaging (MRI)-determined sacroiliac joint (SIJ) inflammation in ankylosing spondylitis (AS) and non-radiographic axial spondyloarthritis (nr-axSpA).
Methods: This cross-sectional study included all consecutive patients who presented with axial spondyloarthritis in 2013–2015. All underwent SIJ MRI. The bone marrow edema in the inflammatory lesions on MRI was scored using the SPondyloArthritis Research Consortium of Canada (SPARCC) method. Bone-specific alkaline phosphatase (BALP), serum C-terminal telopeptide of type-I collagen (sCTX-I), and inflammatory markers were measured. Bath Ankylosing Spondylitis Disease Activity Index (BASDAI) and Ankylosing Spondylitis Disease Activity Score (ASDAS) were assessed. The correlations between the MRI-determined SIJ inflammation scores and disease activity scores and laboratory variables were evaluated.
Results: Of the 81 patients with axSpA, 45 had AS and 36 had nr-axSpA. The AS and nr-axSpA groups did not differ in terms of disease activity scores, physical functional index, or MRI-determined SIJ inflammation. Erythrocyte sedimentation rate, C-reactive protein, and ASDAS correlated with MRI inflammatory scores in nr-axSpA but not in AS. sCTX-I correlated with MRI-determined SIJ inflammatory scores in AS only. BASDAI and BALP levels did not associate with MRI inflammatory scores in either group. Multivariate analysis showed that sCTX-I associated independently with MRI inflammatory score in AS (β=17.047, p=0.038).
Conclusions: Inflammatory markers and ASDAS correlated with active sacroiliitis on MRI in nr-axSpA only. In AS, only sCTX-I correlated with active inflammation on SIJ MRI. sCTX-I may be useful as a marker of objective inflammation in AS.
Disclosure of Interest: None declared
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SAT0409 IMPORTANCE OF ULTRASONOGRAPHY FOR THE DETECTION OF PERIPHERAL ENTHESITIS IN SPONDYLOARTHRITIS

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Background: Peripheral enthesitis has been repeatedly described like the primary lesion in all forms of spondyloarthritis (SpA), and it may occur at any enthesis in SpA, though it is most common in the entheses of the lower limbs. Ultrasonography (US) has proved to be a highly sensitive and noninvasive tool, to assess the presence of enthesitis
Objectives: To estimate the prevalence and the US abnormalities of enthesitis in patients with SpA, compared to a control group.
Methods: We have consecutively included 40 patients with established SpA, including 30 patients with ankylosing spondylitis (AS), 8 patients with psoriatic arthritis (RP) and two patients with arthritis-associated with Crohn's disease. Control populations consisted of 20 patients with mechanical low back pain (MBP). Ultrasound (US) in B mode and power Doppler (PD) was performed at Achille tendon (AT) and plantar fascia (PF).
Results: The study sample included 40 control patients (4 male- 16 female) with a mean (SD) age of 51.05 (11.45) years (range 32–73) and mean duration of disease 8.40 (range 5–81) years.
SpA subtypes were: ankylosing spondylitis 30; psoriatic arthritis 8; arthritis-associated inflammatory bowel disease (AIBD) 2. 47.5% of entheses were tender at clinical examination. Axial form was found in 36 cases (90%) and peripheral form in 4 cases (10%).
In SpA patients, a total of 109/160 (68.12%) of the entheseal sites were abnormal compared with 27/80 (33.75%) in controls, which was statistically significantly fewer than in the SpA group for AT (p=0.000) and PF (p=0.023). Abnormal vascularization in the cortical bone insertion was found in 47 cases (29.375%) versus 4 cases in control group with a significant correlation. We also found a significant correlation for decreased echogenicity and bone erosions. No major variation in the proportion of abnormal entheses identified by US examination was observed between different forms of SpA.
US abnormalities were not correlated to the duration of the disease in patients with SpA, and there was no significant difference between US findings and either ESR, CRP, BASDAI score or BASFI score. We also, found no significant correlation between entheseal US abnormalities and the anti-TNF medications used among the SpA patients.
Conclusions: Ultrasonography can be useful for detecting subclinical enthesitis in SpA patient and the enthesis US score can be useful for improving the diagnostic of SpA.
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SAT0410 HLA-B27 ROLE IN ANKYLOSING SPONDYLITIS PHENOTYPE: RESULTS FROM THE REGISPONSER DATABASE

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Objectives: To assess if there are different phenotypical patterns of Ankylosing Spondylitis (AS) patients depending on the positivity or negativity of HLAB27.
Methods: This is a multicentric, observational, transversal and descriptive study of AS patients from the spanish database REGISPONSER. We compared HLAB27 positive and HLAB27 negative patients regarding clinical and demographical data, disease activity and structural damage. In order to assess disease activity we used the Bath Ankylosing Spondylitis Disease Activity Index (BASDAI) and acute phase reactants (VSG and PCR). Functional disability was measured by Bath Ankylosing Spondylitis Functional Index (BASFI), and structural damage by Bath Ankylosing Spondylitis Radiology Score (BASRI). For qualitative variables we used the Chi square test and for quantitative ones the t test. An univariate