uveitis a pelvis x-ray was done. Any type of studies were ordered according to protocol.

Results Data from 376 were recorded in our date base. Seventy (18.6%) had some type of spA, 49 (70% of patients with spA) were male and the mean age of this group was 44.7, SD:15.7. Forty patients (57%) were previously diagnosed (33 ankylosing spondylitis (AS), 4 Reiter's syndrome (RS), 2 inflammatory bowel disease (EII) and 1 undifferentiated spA (UspA)); thirty (43%) were undiagnosed and uveitis was the first manifestation (15 AS, 5 psoriatic arthritis (PA), 4 RS, 4 EII, 1 UspA and 1 SAPHO). The most frequent clinical pattern was acute (only one was chronic), anterior (only two were panuveitis) and unilateral (only four were bilateral) uveitis. There were two main keys to achieve the diagnosis of spA that were the recurrence of a type of pattern of uveitis (acute, recurrent and unilateral) and the presence of lumbar or articular pain in addition to the uveitis flare. HLA B27 was found in 47 (66%) patients, 37 AS, 4 RS, 4 PA, one UspA and one SAPHO syndrome. All patients received local treatment. Sistemic corticosteroids, sulfasalazine and metotrexate was associated in 8, 8 and 1 patient respectively.

Conclusion Uveitis was the first manifestation in 43% of the patients with spA, attended prospectively in a multidisciplinary outpatient clinic of uveitis. That is why the collaboration between ophthalmologics and rheumatologics contribute to a better diagnosis and treatment of patients. In case in which this close collaboration could not be possible, all patients with acute unilateral recurrent uveitis and those with rheumatic complains, should be referred to a rheumatologist, in spite of the absence of rheumatic symptoms.

SAT0016 ULTRASOUND DENSITOMETRY AND DXA IN PATIENTS WITH ANKYLOSING SPONDYLITIS – HOW DO THEY CORRELATE?

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Background Patients with ankylosing spondylitis are well-known to have an increased incidence of osteoporosis/osteopenia. Consequently, control measurements of bone densitometry should be done more frequently than in the normal population. Ultrasound densitometry has the advantage to be free of radiation and having been used widely. However, DXA is still a "gold standard".

Objectives The aim of our study was to look at the relationship of the ultrasound densitometry and DXA-measurements in patients with ankylosing spondylitis.

Methods We have examined 184 patients with ankylosing spondylitis. All patients fulfilled the modified New York criteria. We measured the bone mineral density of the right hip and lumbar spine with DXA (QDR 4500) and of the calcaneus with ultrasound (UBIS 5000).

Results The best correlation was found between DXA of the right hip and ultrasound of the calcaneus.

The correlation of BMD hip total with ultrasound BUA was $r = 0.235$ ($p < 0.001$, with ultrasound T-Score $r = 0.205$ ($p < 0.005$) and with ultrasound Z-Score $r = 0.203$ ($p < 0.006$). The corresponding correlations of BMD of the lumbar spine with ultrasound BUA ($r = 0.135$ $P = 0.067$) were not significant.

Conclusion The hip total measured by DXA present with significant ($p > 0.005$) correlations with ultrasound measurements of the calcaneus.

In contrast, BMD of the lumbar spine did not show significant correlations with the ultrasound measurements. As measurements of BMD of the lumbar spine in patients with ankylosing spondylitis have limitations due to disease specific changes of the lumbar vertebra, ultrasound of the calcaneus measurement should be considered as an alternative, too.

SAT0017 THE RELATIONSHIP OF CLINICAL AND LABORATORY MEASUREMENTS TO TWO DIFFERENT RADIOLOGICAL SCORING METHODS IN ANKYLOSING SPONDYLITIS

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Background

Objectives The aim of this study was to evaluate the relationship of radiological scoring methods with clinical and laboratory measurements of the patients. Two different scoring methods - Bath Ankylosing Spondylitis Radiology Index (BASRI) and Stoke Ankylosing Spondylitis Spine Score (SASSS), which are both widely used in clinical trials- were assessed.

Methods Nineteen patients (3 female, 16 male, age 22 to 41, disease duration 1 to 18 years) with AS who satisfied the modified New York criteria were included into the study. BASRI and SASSS were used to evaluate radiologic changes. Disease activity was assessed using Bath Ankylosing Spondylitis Disease Activity Index (BASDAI).

Results There was no correlation between duration of morning stiffness, night pain, laboratory variables (ESR, CRP, haemoglobin, platelets) and any of the radiological scores. No significant correlation was found between BASDAI and both of the radiological scores. BASRI and SASSS correlated significantly with occiput-to-wall distance, Schober test, and finger-to-fibula distance. There was not a significant correlation of radiologic scores with finger-to-floor distance and chest expansion. The scores of right and left SI joints correlated significantly with BASRI and SASSS.

Conclusion Our results indicate that these two radiological scoring methods are measures of disease severity or deformity rather than disease activity. Radiological scoring methods are fundamental for the diagnosis and progression in AS and BASRI may be a more practical and appropriate method.

SAT0018 PULMONARY INVOLVEMENT IN ANKYLOSING SPONDYLITIS

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Background

Objectives To analyse the subclinical pulmonary involvement in a series of patients with ankylosing spondylitis (AS).

Methods Prospective study analysing 52 patients with the diagnosis of AS according to the modified New York criteria. The patients were asymptomatic about lung complaints and were submitted to a pulmonary investigation that included plain chest radiography, pulmonary function test (PFT) and thoracic high-resolution computed tomography (HRCT). The results were compared with sex, race, dorsal spine involvement, thoracic

diameter, smoking status and HLA-B27. There was predominance of male (81%), Caucasoid (75%), non-smoking (64%) and positive HLA-B27 (75%) patients, with dorsal spine involvement in 58%. Mean age was 40 years and mean disease duration was 16 years.

Results There were five patients (10%) with an altered plain chest radiography. PFT presented a restrictive pattern in 52% of the patients. Thoracic HRCT showed abnormalities in 21 patients (40%), predominantly nonspecific linear parenchymal opacities (19%), lymphadenopathy (12%), emphysema (10%), bronchiectasis (8%) and pleural involvement (8%). Male sex was statistically associated with dorsal involvement ($p = 0.012$). Non-Caucasoid race was associated with bronchiectasis ($p = 0.044$) and pleural involvement ($p = 0.044$) at the thoracic HRCT. Smoking patients presented more linear parenchymal opacities ($p = 0.026$) at the thoracic HRCT. Negative HLA-B27 was associated with an altered plain chest radiography ($p = 0.011$). Dorsal spine involvement was associated with restrictive pattern at PFT ($p = 0.001$) and linear parenchymal opacities ($p = 0.032$) at the thoracic HRCT. A lower thoracic diameter was observed in patients with dorsal spine involvement ($p = 0.0001$), restrictive pattern at PFT ($p = 0.023$) and linear parenchymal opacities ($p = 0.015$) at the thoracic HRCT.

Conclusion Subclinical pulmonary involvement is frequent in AS. The restrictive pattern at PFT is associated with dorsal spine involvement and a low thoracic diameter, whilst the thoracic HRCT presents a series of nonspecific alterations, predominating the linear parenchymal opacities.

SAT0019 COMPARISON OF DIFFERENT IMAGING TECHNIQUES IN THE DIAGNOSIS OF SPONDYLARTHROPATHIES

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Background Diagnosis of radiological sacroiliitis is difficult in the early stages with plain radiographs. Advanced methods such as computed tomography (CT), scintigraphy and magnetic resonance imaging (MRI) are suggested for this purpose.

Objectives To compare the role of different imaging techniques in the diagnosis of spondylarthropathy (SpA) patients with inflammatory low back pain.

Methods Thirty-four sacroiliac joints in 17 SpA patients who fulfilled the 1984 European Spondylarthropathy Classification Criteria and had inflammatory low back pain were investigated. Plain radiography, quantitative scintigraphy and MRI were performed for sacroiliac imaging. Plain radiography findings were evaluated blindly by a radiologist and rated on a 0–5 scale according to the modified New York criteria for radiological sacroiliitis. Quantitative sacroiliac scintigraphy was performed with Tc-99m hydroxy methylene diphosphonate (HMDP) and sacroiliac joint/sacrum uptake ratio for each joint was its sacroiliac index (SII). The value of SII >136 was considered as sacroiliitis. The patients also underwent MRI of sacroiliac joints with FSE T2 and SE T1 weighed images.

Results Among SpA patients the sensitivity of scintigraphy, MRI and plain radiography was 79%, 59% and 32% respectively. In 32% of 34 sacroiliac joints in which sacroiliitis was demonstrated with scintigraphy, no pathologic changes were present with MRI. On the other hand, 6% of joints were positive with MRI, but negative with scintigraphy. In cases where plain

radiography showed normal radiographs, scintigraphy showed abnormalities in 44% while MRI showed abnormalities in only 18% of the joints. We couldn't find any relationship between the sacroiliac index and plain radiography scores.

Conclusion These results suggest that the sensitivity of scintigraphy was higher than plain radiography and MRI, especially in early sacroiliitis patients with SpA.

SAT0020 SERUM NITRIC OXIDE, CATALASE, SUPEROXIDE DISMUTASE, XANTHINE OXIDASE AND MALANDIALDEHYDE STATUS IN PATIENTS WITH ANKYLOSING SPONDYLITIS

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Background

Objectives In this study serum antioxidant and oxygen derived free radical status of patients with ankylosing spondylitis (AS) has been investigated and compared with age and sex matched healthy controls.

Methods Thirty patients fulfilling the New York criteria for AS and age and sex matched 16 healthy control subjects were included in the study. Patients who were smoking, under the treatment of DMARDs or any other drugs (except NSAIDs informally used by the patients) excluded.

Catalase (CAT) (EC 1.11.1.6) activity was measured by the determination of rate constant of hydrogen peroxide decomposition. Total (Cu-Zn and Mn) SOD (EC 1.15.1.1) activity was determined by the method based on the inhibition of NBT reduction by the xanthine-xanthine oxidase system. Malandialdehyde (MDA) levels determination was based on the coupling of MDA with thiobarbituric acid (TBA) at +95 °C. XO (EC 1.2.3.2) activity was measured spectrophotometrically by the formation of uric acid from xanthine through the increase in absorbency at 293 nm. Nitrite (NO₂⁻) and nitrate (NO₃⁻) were estimated as an index of NO production. Quantitation of nitrate and nitrite was based on the Griess reaction, in which a chromophore with a strong absorbency at 540 nm is formed by reaction of nitrite with a mixture of naphthylethylenediamine and sulphanilamide.

Results Patients had significantly higher MDA and CAT activity with respect to controls. CAT activity of patients correlated significantly with CRP and ESR levels.

Conclusion Our results indicate that MDA and CAT activity increase in patients with AS, and CAT activity may be related to disease activity.

SAT0021 THE INCIDENCE OF VARICOCELES IN PATIENTS WITH ANKYLOSING SPONDYLITIS EVALUATED BY PHYSICAL EXAMINATION AND COLOUR DOPPLER SONOGRAPHY

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Background A varicocele is an abnormal tortuosity and dilation of the testicular veins within the spermatic cord. The incidence of varicocele in AS, which affects predominantly young male individuals, is unknown.