the diagnosis of sacroiliitis can be missed, particularly in patients B27 negative.

Objectives To determine which signs are the most accurate in the diagnosis of sacroiliitis with MRI.

Methods 15 patients with inflammatory low back pain have been referred to us.

The patients were divided in 2 groups.

Group 1: 8 patients with normal X-rays; 6 were B27 negative and 2 were B27 positive: MRI showed abnormalities related to sacroiliitis.

Group 2: 7 patients with normal X-rays; 6 were B27 positive and 1 was negative: MRI showed inflammatory signs.

Results The examination showed bone marrow oedema, bone erosions, ligamentous contrast enhancement and fluid in the joint space.

Conclusion This study confirms the excellent positive predictive value of MRI for an early diagnosis of active sacroiliitis, especially in B27 negative patients and/or with normal X-rays.

AB0129 IS THE ASSOCIATION SJÖGREN'S SYNDROME-SPONDYLARTHROPATHY FORTUITOUS?

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Background Secondary Sjögren's syndrome is known to occur with rheumatoid arthritis, systemic lupus erythematosus, but apart from a few cases, has not been reported with spondylarthropathy.

Objectives To determine the prevalence of Sjögren's syndrome in spondylarthropathy patients.

Methods Patients with spondylarthropathy (n = 62) with inflammatory back pain and/or peripheral arthritis were diagnosed as ankylosing spondylitis, undifferentiated spondylarthropathy, psoriatic arthritis and arthritis associated with inflammatory bowel disease. The investigation of sicca symptoms in the spondylarthropathy group and healthy controls (n = 102) was based on a validated questionnaire. Patients with spondylarthropathy with sicca symptoms and/or positive antinuclear antibodies (ANA) were investigated for Sjögren's syndrome by minor salivary gland biopsy.

In the spondylarthropathy group, the laboratory variables were: HLA B27, HLA DR, DQ, anti ENA, serology hepatitis B, C.

Results In 17/62 patients (11 undifferentiated spondylarthropathy, 5 ankylosing spondylitis, 16 females, 1 male) Sjögren's syndrome diagnosis by the European criteria indicated a frequency of 27.4%. Of 62 spondylarthropathy, 12 were ANA positive (19.3%), of whom 5 had Sjögren's syndrome. ANA were detected in 8/17 (47%) patients with Sjögren's syndrome. Of 62 spondylarthropathy patients, 20 had sicca symptoms (32.2%), compared to 3 of 102 (2.9%) controls. HLA B27 is positive in 12/17 patients (70.5%). The results of the study of HLA DR, DQ seem to show a high frequency of HLA DR4, and DQ3 in the association group, but the difference is not significant.

Conclusion The frequency of Sjögren's syndrome is 27.4% in the spondylarthropathy group, thus more than in controls. The association Sjögren's syndrome and spondylarthropathy seems to be not fortuitous, and the HLA class II study seems to show a probable genetic predisposition.

AB0130 CHEST EXPANSION IN RHEUMATIC DISEASES

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Background Decreased chest expansion is a time honoured sign in patients with ankylosing spondylitis (AS). However, the clinical usefulness of this measurement and the frequency with which it is used remains largely unknown.

Objectives We studied: 1) the frequency of its clinical use among rheumatologists and 2) its inter and intra-observer variation along with its sensitivity and specificity among a group of patients with AS and suitable controls.

Methods

- A total of 300 rheumatologists in the United States and in Europe were contacted by e-mail. The frequency they measured chest expansion in their daily practices and the characteristics of their patients they performed the test on, were inquired.
- Thirty patients with AS, 36 with rheumatoid arthritis (RA), 31 with systemic lupus erythematosus (SLE) who were regularly followed in the Rheumatology Department of Cerrahpasa Medical Faculty and 76 healthy controls (HC) who consisted of healthy hospital staff were recruited. Chest expansion was measured at the 4th intercostal space by two independent observers in the morning (between 8–10 AM) in the afternoon (between 2–4 PM) and one week after the initial determinations. The relationship between the chest expansion and gender, age and vital capacity (VC), body mass index (BMI) were determined in all the patients and controls.

Results Eighty-two (27%) of the 300 rheumatologists responded. Three of the responders (4%) stated that they measured chest expansion in every patient whereas 72 (87%) said that they performed the test only in patients suspected to have ankylosing spondylitis. Seven rheumatologists (9%) reported that they never measured chest expansion.

There was a good intra and inter-observer agreement in chest expansion measurements as judged by a difference of less than 1 cm in 80% of the calculations. A chest expansion of less than 2.5 cm had a sensitivity of 23% in patients with AS whereas it had a specificity of 49% (2 patients with RA, 1 with SLE and 5 HC had values below 2.5 cm). There was a significant correlation between vital capacity and chest expansion only in male patients with AS ($r = 0.51$, $p = 0.005$). Chest expansion decreased with age in all groups ($r^2 = 0.083$, $F = 0.0001$). There was no relationship between the chest expansion either with gender or with BMI, both among the patients and the controls.

Conclusion Most of the rheumatologists measure chest expansion only in patients suspected to have AS. It is a test that has good intra and inter-observer reliability. However it has a limited sensitivity and specificity in AS and its value in differential diagnosis is limited.

AB0131 ANKYLOSING SPONDYLITIS IN WOMEN

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Background