#### AB0822 FACTORS ASSOCIATED WITH A DELAYED DIAGNOSIS OF SPONDYLOARTHRITIS IN A POPULATION OF THE SOUTH OF MOROCCO

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**Background:** Spondyloarthropathies are chronic inflammatory diseases with predominant axial involvement. Early diagnosis is a major challenge for physicians. Misdiagnosis and diagnostic delays lead to unnecessary paraclinical investigations, inadequate treatment and to poor outcomes including functional impairment and quality of life.

Objectives: We assess the diagnostic delay in spondyloarthritis and identify factors associated with it.

**Methods:** A retrospective study including patients diagnosed with spondyloarthritis between 2004 and 2020 according to ASAS 2010 criteria.Diagnostic delay was defined as period between the first symptom and diagnosis establishment. The potential factors predicting the diagnostic delay were explored through univariable and multivariable linear regression analysis, included epidemiological characteristics (age, gender, educational level, socio-economic level), clinical and biological presentation and sacroiliitis (radiographic or in MRI). Events occurring before the diagnostic were also analyzed.

**Results:** The study included 276 patients: 146 males (53%) and 130 females (47%) with a sex ratio of 1.1 and the mean age at the diagnostic was 38.87 years. Comorbidities included smoking (33 patients), cardiopathy (3 patients), hypertension (19 patients), diabetes (14 patients) and peptic ulcer (5 patients). The mean duration of symptoms was 2.6 years, and average diagnostic delay was 6.5 years with a median of 2.1 years. In univariable and multivariable linear regression analysis, low socio-economic level (p = 0.023) and low educational level (p=0.042) were statistically significant parameters associated with a delayed diagnosis and age, clinical presentation or sacroillitis (radiographic or in MRI). The use of traditional and herbal treatments before consulting a rheumatologist was also associated with a longer delayed diagnosis.

**Conclusion:** Spondyloarthropathies have a delayed diagnosis. This delay, also found in other studies, is responsible for persistent disease activity and important functional consequences. In our context, low socio-economic level, low educational level, and the use of traditional unconventional treatment are factors associated with a delayed diagnosis.

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### AB0823 DUAL ENERGY X-RAY ABSORPTIOMETRY IN PATIENTS WITH SPONDYLOARTHRITIS. CORRELATION WITH DISEASE DURATION, ACTIVITY AND CHANGES IN SACROILIAC JOINTS ON MAGNETIC RESONANCE IMAGING

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**Background:** Bone loss (osteopenia or osteoporosis) and osteoporotic vertebral fractures are well-known complications of spondyloarthritis (SpA), and their prevalence in SpA patients (pts) is higher than in patients with mechanical low back pain [1, 2]. Osteopenia and osteoporosis can develop in both the late and early stages of SpA. The presence of bone marrow edema at the lumbar spine and sacroiliac joints (SIJ) on magnetic resonance imaging (MRI) was more common among pts with low BMD (bone mineral density) than normal BMD [3, 4]. At the same time, the dynamics of osteoporotic and osteosclerotic changes in the spine during the progression of SpA makes the assessment of DEXA results ambiguous. **Objectives:** To determine the presence of osteopenia/osteoporosis in pts with SpA and to establish its correlations with disease duration, disease activity, active changes in SIJ on MRI.

**Methods:** 40 patients with SpA (55% – male, mean age 39.87±9.79, mean disease duration – 6.75±7.43 years) underwent DEXA. Spondyloarthritis Research Consortium of Canada (SPARCC) MRI SIJ score (0-72) was utilized for evaluation of the active inflammatory lesions in SIJ, Danish MRI scoring method (0-48) – for chronic changes. Disease activity was measured by Bath Ankylosing Spondylitis Disease Activity Index (BASDAI, cm), Ankylosing Spondylitis Disease Activity Score (ASDAS), C-reactive protein (CRP, mg/l), and erythrocyte sedimentation rate (ESR, mm/hr). For correlation, the Spearman correlation coefficient was calculated.

**Results:** The mean value of DEXA parameters were: BMD – 0.72±0.15, T-score – -0.16±0.88, Z-score – 0.17±0.89 (forearm); BMD – 0.96±0.17, T-score – -1.13±1.35, Z-score – -0.88±1.31 (spine); BMD – 0.85±0.14, T-score – -0.85±0.93, Z-score – -0.56±0.97 (hip). Mean value (M± $\sigma$ ) of indices and laboratory parameters were: BASDAI – 4.44±1.76, ESR – 30.2±24.1, CRP – 17.9±19.7, ASDAS-CRP – 3.07±1.13, ASDAS-ESR – 3.14±1.14. SPARCC score was 12.3±11.8, Danish score – 15.2±7.77. Osteoporosis was present in 7 (17.5%), osteopenia - in 24 (60%) SpA pts. There was positive correlation between BMD at forearm and Danish MRI score (r=0.331, p=0.02). The CRP level showed negative correlation with BMD at hip (r=-0.322, p=0.02), BMD at spine (r=-0,288, p=0,038) and T-score at spine (r=-0.301, p=0.031). Patient's age showed negative correlation with BMD ta hip (r=-0.268, p=0.05). Disease duration negatively correlated with BMD (r=0.343, p=0.016) and T-score (r=-0.310, p=0.027) at hip. All correlations were weak. No other correlations were found.

**Conclusion:** Among disease activity parameters, only high CRP was associated with a decrease in BMD for both the back and hip. A decrease in hip BMD was also associated with the patient's age and disease duration. Regarding MRI indicators, only chronic changes in SIJ, measured by MRI, positively correlated with BMD at forearm only.

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### AB0824 BREASTFEEDING IN WOMEN WITH ANKYLOSING SPONDYLITIS (AS)

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**Background:** Breast milk is the natural and most physiological nutrition for a child from the first days of life. The benefits of breastfeeding are numerous, including psychological aspects. However, some women with rheumatic diseases are afraid that their disease or therapy is not compatible with breastfeeding.

**Objectives:** To describe frequency, duration and reasons for stopping lactation in women with AS, to compare the activity of AS in women with and without lactation.

**Methods:** 44 women with confirmed AS (modified New York criteria, 1984) were followed within 1 year after childbirth. Visits were carried out in 1, 6 and 12 months after delivery. The average age of patients was  $32,5 \pm 5,8$  years, the duration of the disease was  $149,0 \pm 96,3$  months. BASDAI at 1, 6 and 12 months after giving birth was: 2,4 [1,4; 4,2]; 2,6 [1,4; 4,4]; 2,7 [1,5; 4,1], respectively. ASDAS-CPR was: 2,0 [1,2; 2,7]; 1,9 [1,4; 2,5]; 1,7[1,3; 2,3], respectively.

**Results:** Lactation was established in 41 women (93,2%), duration – 10 [4; 12] months; in 17 patients (41,5%) lactation persisted for 12 months. Lactation was unreasonably medically suppressed in 3 women in an obstetric unit due to therapy of AS (sulfasalazine – 2, certolizumab pegol – 1); in 1 woman lactation was not established for organizational reasons. Lactation lasted less than 6 months in 16 patients (39%), 13 of them had a natural attenuation of lactation, and in 3 cases, drug-induced suppression of lactation was carried out on the recommendation of pediatricians in connection with onset of AS therapy (adalimumab).

During lactation, 51,2%, 74,1% and 88,2% of women received nonsteroidal anti-inflammatory drugs for 1, 6 and 12 months after delivery, respectively; adherence to NSAID therapy did not differ in women with and without lactation.  $TNF-\alpha$