Time from onset symptoms to diagnosis ranged in years, from 3.15 (Guatemala) to 8.2 (Honduras), among the four countries. BASMI scores were higher in Honduras (mean 5.15) and lowest in Panama (mean 1.61). Of note, the time from symptom onset to diagnosis was also longest in Honduras.

NSAIDs and DMARDs were used in most countries. Glucocorticoids were rarely used in this population. Biologics are mainly used in Panama (16%), and Honduras (11%); only 8% of the enrolled patients in Dominican Republic and 2% in Guatemala.

Conclusion: The most prevalent SpA diagnosis in the region is Ankylosing Spondylitis. Patient diagnosis is delayed up to 8.2 years and only 2 to 16% of the patients receive a proper treatment with a biologic therapy.

This data invites to further investigation and brings opportunity to improve patients care.

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AB0507

ASSESSMENT OF FIBRINOGEN TO ALBUMIN RATIO IN RADIOGRAPHIC AXIAL SPONDYLOARTHRITIS: CORRELATION WITH DISEASE ACTIVITY

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Background: Radiographic axial spondyloarthritis is a chronic inflammatory disease that involves the spine and the sacroiliac joints. No specific biomarker that reflects disease activity is yet available.

Objectives: This study aimed to assess the relationship between fibrinogen (Fib) to albumin (ALB) ratio (FAR) and disease activity in radiographic axial spondyloarthritis.

Methods: We performed a cross-sectional study including 51 patients with radiographic axial spondyloarthritis. Disease activity was assessed using Ankylosing Spondylitis Disease Activity Score (ASDAS). C-reactive protein (CRP), fibrinogen (Normal value: 2 -4g/L), erythrocyte sedimentation rate (ESR) and albumin levels (Normal value: 35 -50g/L) were measured. The fibrinogen to albumin ratio (FAR) was calculated. We excluded patients with infectious disease, hematological disease, and those with malabsorption syndrome

Statistical analysis was performed using SPSS 26.

Results: The study included 43 males and 8 females with a mean age of 41.25 ± 10.97 years. The mean disease duration was 117.92 (85.4 months). The mean fibrinogen and albumin levels were 3.94 ± 1.24 g/L and 36.94 ± 5.89 g/L, respectively. Fibrinogen level was elevated in 45% patients and albumin levels was decreased in 51% cases. Mean FAR was 0.11 ± 0.44.

ESR levels were elevated in 67% with a mean of 40.22 ± 34.64 mm. CRP levels were high in 61% with a mean of 28.57 ± 33.25 mg/L. Mean ASDAS was 3.32 ± 1.27 patients had very high disease activity (ASDAS>3.5).

Significant correlation was found between FAR and following parameters: ESR (r = 0.836, p < 0.001), CRP (r = 0.785, p < 0.001), and ASDAS (r = 0.463, P < 0.001).

The ability of FAR to distinguish patients with very high disease activity from those without very high disease activity was excellent, with Airc under the curve of 0.819. The optimal FAR cutoff value with the highest accuracy was 0,1065 with a sensitivity of 0,792 and specificity of 0,852.

Conclusion: Our study showed that fibrinogen to albumin ratio correlate with ESR, CRP and ASDAS. This finding suggests that this ratio may be a used to assess disease activity in radiographic axial spondyloarthritis (1).

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AB0508

PHYSICAL ACTIVITY IN TUNISIAN ADULTS WITH ANKYLOSING SPONDYLITIS

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Background: Physical activity (PA) is associated with multiple health-related benefits among the general population and adults with chronic diseases like Ankylosing spondylitis (AS) [1]. As known, AS affects primarily entheses and can lead to loss of function and decreased mobility.

Objectives: The aim of this study was to explore the PA levels of adults with AS and to examine associations between PA, sociodemographic characteristics, immunological features, disease activity and treatment type.

Methods: Cross-sectional clinical and laboratory data were collected on 68 AS patients. BASDAI (Bath ankylosing spondylarthritis disease activity index) and BASFI (Bath ankylosing spondylarthritis functional index) were calculated. Physical activity was measured using IPAQ-SF (International Physical Activity Questionnaire-Short Form). Its items record the time spent on physical activity of three intensity levels (vigorous, moderate and walking) as well as the time spent on sitting (referred to as sedentary in this study) in the past week. Both continuous (expressed as metabolic equivalent of task (MET)-min /week) and categorical (3 levels proposed: low, moderate and high level of PA) scores of IPAQ-SF were determined. Sedentary time (median) was reported in minutes/week. A p value < 0.05 was considered significant.

Results: Cross-sectional clinical and laboratory data were collected on 68 AS patients. BASDAI (Bath ankylosing spondylarthritis disease activity index) and BASFI (Bath ankylosing spondylarthritis functional index) were calculated. Physical activity was measured using IPAQ-SF (International Physical Activity Questionnaire-Short Form). Its items record the time spent on physical activity of three intensity levels (vigorous, moderate and walking) as well as the time spent on sitting (referred to as sedentary in this study) in the past week. Both continuous (expressed as metabolic equivalent of task (MET)-min /week) and categorical (3 levels proposed: low, moderate and high level of PA) scores of IPAQ-SF were determined. Sedentary time (median) was reported in minutes/week. A p value < 0.05 was considered significant.

Conclusion: Our study proved that physical activity in people with AS decreased with age and activity disease with a concomitant increase in sedentary activity. Given the risks of developing secondary chronic disease as a result of low levels of physical activity, physical exercise should be recommended as part of comprehensive AS care.

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AB0509

FREQUENCY AND RISK FACTORS OF HIP INVOLVEMENT DURING SPONDYLOARTHRITIS IN MILITARY PATIENTS

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Background: Hip involvement can reveal a spondyloarthritis (SA) or appear later. It hampers patient's life quality and can be responsible of significant handicap (1). Military patients are a special population. They are more exposed to physical stress which makes their SA characteristics quite different to other patients.

Objectives: We aimed to determine the frequency of hip involvement in SA and to study its characteristics and associated factors in military patients.

Methods: We conducted a cross-sectional study carried out in Rheumatology department of Military Hospital of Instruction of Tunis over a 10-year period (2010-2020) including SA patients meeting The Assessment of SpondyloArthritis international Society (ASAS). For each patient we collected the following informations: age, characteristics of hip involvement, ASDAS (Ankylosing Spondylitis Disease Activity Score), BASDAI (Bath Ankylosing Spondylitis Disease Activity Index), BASMI (Bath Ankylosing Spondylitis Metrology Index) and BASRI (Bath Ankylosing Spondylitis Radiology Index). We also measured Erythrocyte Sedimentation rate (ESR) and C-reactive protein (CRP).

Results: One hundred forty-one patients were included. They were 103 men and 38 women. The mean age was 43.01 ± 12.9 years. The mean age at the onset was 34.28 ± 12.05 years. The mean delay of the disease was 9.16 ± 8.98 years. The mean BASDAI and IASDAS-CRP were 3.89 ± 2.29 and 3.07 ± 1.83 , respectively.

Hip involvement was noted in 35.5% of the cases ($n=50$). It was bilateral in 41 of the cases. The number of affected hips was thus 91. The mean delay between the onset of SA and the discovery of hip involvement was 32.24 ± 53.58 months [0-264 months].

A significant difference was noted in the axial mobility between patients who have hip involvement and those who don't (BASMI was 3.8 ± 2.45 versus 1.45 ± 1.8 , $p < 0.0001$).

Moreover, functional impact was higher in patients with hip involvement (BASFI was 5.7 ± 2.24 versus 3.45 ± 2.86 , $p < 0.0001$).

Patients with hip involvement had significantly higher BASRI compared to patients with no hip involvement (5.79 ± 3.17 versus 3.14 ± 2.42 , $p < 0.0001$).

However, no difference was found between patients who have hip involvement and those who don't with these following parameters: ESR, CRP, BASDAI and ASDAS-CRP.

Conclusion: Our study showed that hip involvement is quite common in military SA patients. It is responsible of an important functional impact and it seems to be associated to a major limitation of axial mobility. Nevertheless, hip involvement was not associated neither to inflammation parameters levels nor to the disease activity, this suggest that hip involvement may progress independently of the disease activity in military patients due to physical stress and micro traumas.

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AB0510

THE ROLE OF BONE SCINTIGRAPHY FOR THE FOLLOW-UP EVALUATION OF INFLAMMATORY ACTIVITY IN PATIENTS WITH SERONEGATIVE SPONDYLOARTHRITIS

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Background: The use of bone scintigraphy (Sc) in spondyloarthritis (SpA) as a technique for diagnosis, assessment of activity and treatment decision has been questioned by the scientific community. Due to its low cost compared to Magnetic Resonance Imaging - MRI (the gold standard)¹, some studies proposed to evaluate Sc's diagnostic accuracy. These studies have shown that Sc has a

low diagnostic sensitivity of 50-55%². Also, there is a poor correlation between symptoms and scintigraphic uptake³. We aimed to evaluate the use of Sc for management and follow-up of patients with SpA.

Objectives: To determine if Sc activity correlates with patients' complaints (peripheral and axial), inflammatory markers, disease activity scores and whether it influenced physicians' treatment decisions during the follow-up of the disease.

Methods: We performed a retrospective review of all patients at our department with SpA with at least one Sc from 2018 to 2020. The following variables were analyzed: demographic data, spondyloarthropathy subtype (ankylosing, enteropathic, psoriatic and undifferentiated SpA), axial or peripheral pain, Sc findings (inflammatory vs no-inflammatory activity), inflammatory markers (sedimentation rate - ESR and C-Reactive Protein - CRP), disease activity scores within one year since the Sc (Ankylosing Spondylitis Disease Activity Score with Erythrocyte Sedimentation Rate - ASDAS-ESR and Bath Ankylosing Spondylitis Disease Activity Index - BASDAI) and treatment at the time of the Sc (non-steroidal anti-inflammatory drugs, conventional synthetic disease-modifying antirheumatic drugs (DMARDs), target synthetic DMARDs and biologic DMARD. Treatment decisions (escalation, de-escalation or maintenance) in accordance to Sc results were also reviewed.

We used the non-parametric Mann-Whitney's U test for comparisons between ordinal or numerical variables. For correlations between categorical variables we used the Fisher's exact test and the χ^2 -independence test. Tests with $p < 0.05$ were statistically significant.

Results: Fifty-five patients were reviewed, 75% women; median age of 48 years. Seventy-one percent had ankylosing SpA, 15% enteropathic SpA, 5% psoriatic SpA, 5% undifferentiated and 4% reactive SpA. Sixty-two percent of the patients had both axial and peripheral pain and 24% only axial complaints. Sixty-two percent of the patients had a Sc with no inflammatory changes, 27% had peripheral and 25% had axial inflammatory changes; 15% had evidence of both peripheral and axial inflammation. For ankylosing SpA, the median ASDAS-ESR was 2.89 and according to the BASDAI, 66% had active disease. The median CRP and ESR in patients with inflammatory vs a normal Sc was not different ($p=0.02$ vs $p=0.36$, respectively). Similarly, Sc findings were not correlated with patients' axial ($p=0.10$) or peripheral pain ($p=1.0$), neither with the ASDAS-ESR ($p=0.29$) or the BASDAI ($p=0.29$). There was no correlation between inflammatory activity in Sc and the decision to maintain, escalate or de-escalate treatment ($p=0.65$), including the decision to start a biological DMARD ($p=1.0$) or to switch between biological DMARDs ($p=0.19$).

Conclusion: There was no correlation between Sc findings and ESR, patients' complaints, disease activity or treatment decisions. Considering previous research showing a low diagnostic sensitivity, our findings seem to support a limited role of bone Sc for the follow-up and management of patients with seronegative SpA.

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