AB0856

THE IMPACT OF SYSTEMIC INFLAMMATION AND RADIOLOGICAL CHANGES ON MOBILITY IN ANCHYLOSING SPONDYLITIS

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Objectives: The purpose of the study was to investigate the relationship between disease activity, structural lesions and physical function by testing the hypothesis that the level of structural lesions contributes independently to physical impairment.

Methods: For this analysis, the database of Rheumatology Department was used and included 78 consecutive SA patients who have been observed for many years, implying that they have used NSAID's and DMARD for progression disease, no one has used TNF blocking agents.

Results: BASFI and DFI correlated significantly (r 0.88). The correlation coefficient for mSASSS and BASFI was 0.508 and for mSASSS and DFI equal to 0.464, suggesting a moderate correlation relationship. The correlation coefficient for the relationship between BASDAI and BASFI was equal to 0.79 and for BASDAI and DFI equal to 0.69 suggesting a moderate to significant correlation. The correlation between mSASSS and BASFI or DFI was dependent on the BASDAI level.

To further investigate the relationship between mSASSS and BASFI/DFI, concurrently adjusting for BASDAI and other covariates, a multivariate analysis was performed using GEE with BASFI or DFI as dependent variables, and mSASSS and BASDAI as covariates, concurrently adjusting for age, sex, duration of illness, HLA-B27 status and hip involvement.

Both BASDAI and mSASSS contributed independently to the BASFI and DFI explanations with significant parameter estimates. Regression coefficients describe the independent relationship between the explanatory variables and the dependent variable: in the environment, compared to a patient with mSASSS 40, a patient with the mSASSS score 50 has a BASFI of 0.57 times greater, independent of BASDAI.

All mSASSS subscripts contributed independently to the explanation of BASFI variations ($p < 0.001$). Compared to the mSASSS model, which had the best result, the model with the total score of the syndesmofite, the number of the affected vertebral units, the number of vertebral vertebral units, and the model with the non-syndesmofite summary score, it was deduced that the syndesmofites are in much but not exclusively responsible for explaining variations in BASFI. A model with the syndesmofites summary score ($p < 0.001$) and the non-syndesmofite ($p = 0.002$) shows that both components contribute significantly to the explanation of BASFI variations. Results with DFI were similar.

Using mSASSS, the syndesmofite subservices, the affected vertebral units or vertebral vertebral units, we showed that lumbar and cervical spine involvement contributed independently and almost similarly to explaining variations in BASFI and DFI.

Conclusions: The study conducted by us demonstrates that the patient's physical function is not only dependent on signs and symptoms reported by the patient (activity of the disease), but also on the degree of structural lesions. Optimal AS treatment should not only include strategies aimed at removing pain, redness and fatigue, but also strategies aimed at preventing the formation and growth of syndesmofite.

Disclosure of Interest: None declared

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THE BURDEN OF DISEASE IN PATIENTS WITH NON-RADIOGRAPHIC AXIAL SPONDYLOARTHRITIS IS NOT INFERIOR TO THAT OF ANKYLOSING SPONDYLITIS. THE PROOF STUDY

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Background: According to the 2009 ASAS classification criteria, a patient with chronic low back pain (CLBP) may be classified as axial spondyloarthritis (ax-SpA), with or without radiographic evidence of sacroiliitis, if at least one other SpA feature is present in the first case and positive HLA-B27 and at least two SpA features in the second one. There is concern about whether the classification "axial non-radiographic spondyloarthritis" (ax-SpA-nr) includes patients with a mild disease that do not require treatment or special care by rheumatology.

Objectives: To compare disease burden between patients fulfilling criteria for AS and ax-SpA-nr.

Methods: Sub-analysis of Spanish patients from the PROOF study, an international prospective observational longitudinal study conducted in rheumatology clinics. All patients who attended rheumatology clinics due to CLBP (≥ 3 months, start < 45 years of age) from Jan 2015 to Feb 2017 not previously diagnosed were consecutively included. The ASAS criteria were applied to all, with centralised image reading. Patients with AS and ax-SpA-nr were compared.

Results: 192 patients with CLBP were included, of whom 151 (79%) met criteria of SpA-axe, 56 (43%) of AS and 74 (57%) of ax-SpA-nr (21 patients had X-ray missing or no central reading had been done so far). The table shows the description of patients with AS and ax-SpA-nr and their comparison.

Abstract AB0857 – Table 1

Characteristic	AS (n=56)	ax-SpA-nr (n=74)	p
Age, m (SD)	33.8 (8.0)	36.2 (8.6)	0.117
Men, n (%)	41 (73.2)	39 (52.7)	0.019
HLA-B27 positive, n (%)	37 (66.1)	44 (61.1)	0.585
BASDAI, m (SD)	3.9 (2.4)	4.3 (2.3)	0.397
ASDAS-CRP, m (SD)	2.8 (1.2)	2.6 (1.1)	0.224
C-reactive Protein (mg/L), m (SD)	13.9 (15.0)	10.3 (19.9)	0.264
Erythrocyte sedimentation rate (mm/h), m (SD)	18.0 (19.1)	13.6 (17.5)	0.208
BASFI, m (SD)	3.0 (2.5)	3.1 (2.4)	0.828
SF-12 (physical component), m (SD)	44.1 (10.7)	42.2 (9.2)	0.283
SF-12 (mental component), m (SD)	46.9 (10.0)	43.1 (10.5)	0.040
Items from WPAI-SHP			
Active (employed), n (%)	39 (69.6)	54 (74.0)	0.693
Presentism, m (SD)*	26.2 (25.6)	33.9 (29.8)	0.206
Absenteeism, m (SD)*	2.4 (6.9)	11.2 (28.2)	0.041
Impact of work productivity, m (SD)*	27.0 (27.5)	34.0 (29.6)	0.280
Total impact on work activity, m (SD)*	34.2 (29.8)	41.0 (30.2)	0.209
Smokers, n (%)	24 (43.6)	19 (26.0)	0.040
Time in months from pain onset until 1 st study visit, m (SD)	37.5 (42.9)	43.3 (56.1)	0.509
Treatments used in the study visit, n (%)			
Non-steroidal anti-inflammatory drugs	24 (42.9)	24 (32.4)	0.223
Methotrexate	1 (1.8)	1 (1.4)	1.000
Sulfasalazine	1 (1.8)	3 (4.1)	0.634
Glucocorticoids	8 (14.3)	8 (10.8)	0.550
Analgesics	7 (12.5)	13 (17.6)	0.428
TNF inhibitors	0	1 (1.4)	-

*Only among actively employed.

Abbreviations: m, mean; SD, standard deviation; BASDAI, Bath Ankylosing Spondylitis Disease Activity Score; ASDAS-CRP, Ankylosing Spondylitis Disease Activity Score calculated with C-reactive protein; BASFI, Bath Ankylosing Spondylitis Functional Index; SF-12, Short Form questionnaire, 12 items version; WPAI-SHP, Work Productivity and Activity Impairment Questionnaire related to disease; TNF, tumour necrosis factor.

Conclusions: Patients referred by CLBP to rheumatology clinics meeting ASAS criteria for AS or ax-SpA-nr differ little in terms of impact and disease activity; therefore, non-radiographic forms of ax-SpA require as much attention as classic AS.

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IMPACT OF APPLICATION OF ASAS CRITERIA FOR AXIAL SPONDYLOARTHRITIS ON THE DIAGNOSTIC DELAY IN EGYPTIAN PATIENTS

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Background: Diagnostic delay is a major challenge in axial spondyloarthritis (SpA). The 2009 Assessment of SpondyloArthritis international Society