AB0851 CLINICAL ASSOCIATIONS OF UVEITIS IN ASAS DEFINED AXIAL SPONDYLOARTHRITIS GROUP AND MODIFIED NEW YORK CRITERIA DEFINED ANKYLOSING SPONDYLITISGROUP

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Objectives: To identify and compare the associated factors for uveitis in Chinese patients with axial spondyloarthritis (SpA) and ankylosing spondylitis (AS).
Methods: Patients fulfilling the Assessment of SpondyloArthritis (ASAS) axial SpA criteria were recruited consecutively from three rheumatology centres in Hong Kong. Clinical and biochemical parameters were collected. History of uveitis was enquired from both history and medical records. All patients received lumbosacral spine x-rays, and whole spine and sacroiliac (SI) joint magnetic resonance imaging (MRI). MRIs were scored according to the Spondyloarthritis Research Consortium of Canada (SPARCC) scores. Patients were defined as axial SpA if they fulfilled the ASAS criteria, and AS if they fulfilled the modified New York (mNY) criteria. Clinical and radiological findings were compared between patients with and without uveitis in the two groups. Factors associated with uveitis were identified with univariate analyses and multivariate logistic regression analyses.
Results: Among 253 patients, 67 (26.5%) patients had a history of uveitis. The male to female ratio was 55.7 to 44.3. Disease duration was 12.3±11.7 years. In the axial SpA group, univariate analyses showed that the following factors were associated with uveitis: back pain duration, age, HLA-B27 positivity, history of inflammatory bowel disease (IBD), tender joint count, Ankylosing Spondylitis Disease Activity Index (ASDAS) and SPARCC score of spine. Multivariate regression showed that older age (OR 1.05; p=0.01), HLA-B27 positivity (OR 11.79; p=0.01) and history of IBD (OR 9.74; p=0.04) were positively associated with uveitis. In the AS group, univariate analyses showed that the following were associated with uveitis: back pain duration, age, male sex, HLA-B27 positivity, tender joint count, ASDAS, SPARCC score of spine and SPARCC score of SI joints. Multivariate regression showed that back pain duration (OR 1.05; p=0.01) and male sex (OR 3.46; p=0.03) were associated with uveitis.
Conclusions: Clinical factors associated with uveitis are similar in the axial SpA and AS groups. The former group is associated more with IBD, and the latter with male sex.
Disclosure of Interest: None declared
DOI: 10.1136/annrheumdis-2018-eular.2370

AB0852 GENDER DIFFERENCES IN AXIAL AND PERIPHERAL SPONDYLOARTHRITIS: RESULTS FROM THE ESPERANZA COHORT

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Background: In patients with spondyloarthritis (SpA), published data indicate different manifestations and outcomes between genders. Nevertheless, the evidence in patients with early and peripheral disease is lacking.
Objectives: To evaluate differences in the presentation of the disease between genders in patients with early axial and peripheral SpA (axSpA, pSpA).
Methods: This study was carried out within the framework of the ESPeranza program, which was a Spanish multicenter initiative aiming to facilitate early diagnosis and follow-up of patients with SpA between 2008–11. Out of 775 patients referred, 377 patients fulfilled the ASAS classification criteria for SpA:291(77%) axSpA and 86 (23%) pSpA. Demographic and disease characteristics were compared between genders using Chi-square (for categorical variables) and Student t (for continuous variables) tests.
Results: In total, 241 (64%) patients were males (191 axSpA and 50 pSpA). In the axSpA group, males had more frequently radiographic sacroiliac damage, elevated CRP, HLA-B27 positive and morning stiffness, while females had higher values of ESR and more frequency of peripheral arthritis (table 1). Within the pSpA group, male gender was significantly associated with higher diagnostic delay, psoriasis and elevated CRP while women had higher rates of functional limitation and ESR values.

Characteristic	Axial Spondylarthritis (n: 291)			Periferical Spondylarthritis (n:86)		
	Males (n: 191)	Females (n:100)	P value	Males (n: 50)	Females (n: 36)	P value
Age (yrs)	31.6 ± 7.1	32.8 ± 6.8	0.2	33.1 ± 8.4	32.4 ± 6.9	0.7
Family history	67 (35.1)	34 (34.0)	0.9	15 (30.0)	16 (44.4)	0.2
Symptoms dur (m)	13.1 ± 6.9	12.7 ± 6.4	0.6	**10.4 ± 6.4**	**7.7 ± 5.5**	**0.04**
Morning stiffness	**138 (72.3)**	**60 (60.0)**	**0.03**	3 (6.0)	3 (8.3)	0.7
IBP (ASAS criteria)	74 (38.7)	38 (38.0)	0.9			
Arthritis	**42 (22.0)**	**11 (11.0)**	**0.02**	48 (96.0)	35 (97.2)	0.8
Enthesitis	38 (19.9)	19 (19.0)	0.9	28 (56.0)	15 (41.7)	0.2
Dactylitis	13 (6.8)	3 (3.0)	0.2	17 (34.0)	11 (30.6)	0.7
Psoriasis	23 (12.0)	10 (10.0)	0.6	**21 (42.0)**	**7 (19.4)**	**0.03**
IBD	8 (4.2)	1 (1.0)	0.1	6 (12.0)	4 (11.1)	0.9
Uveitis	11 (5.8)	12 (12.0)	*0.06*	1 (2.0)	0 (0)	0.4
HLA-B27+	**151 (79.1)**	**68 (68.0)**	**0.03**	16 (32.0)	12 (33.3)	1.0
CRP (mg/L)	**12.4 ± 16.6**	**7.8 ± 11.7**	**0.01**	17.4 ± 39.5	8.6 ± 11.5	0.1
ESR (mmHg)	**12.3 ± 13.9**	**16.0 ± 12.5**	**0.04**	11.9 ± 14.1	17.4 ± 11.6	*0.09*
SJC (0-68)	0.3 ± 1.6	0.2 ± 0.6	0.2	1.4 ± 2.4	1.3 ± 2.3	0.8
VAS (0-100) physician	30 ± 22	28 ± 22	0.5	22 ± 19	27 ± 25	0.4
VAS (0-100) patient	40 ± 26	45 ± 29	0.2	29 ± 22	35 ± 29	0.4
BASDAI (0-10)	3.7 ± 2.2	4.0 ± 2.3	0.3	3.2 ± 2.1	3.8 ± 2.4	0.2
BASFI (0-10)	2.2 ±2.3	2.6 ±2.4	0.2	**1.3 ± 1.4**	**2.3 ± 2.3**	**0.04**
BAMI (0-10)	1.4 ± 1.3	1.5 ± 1.1	0.4	1.2 ± 1.1	1.4 ± 1.0	0.5
MASES (0-13)	0.5 ± 1.2	0.5 ± 1.5	0.9	0.2 ± 0.6	0.2 ± 0.4	0.6
Sacroiliitis-xRay (mNY)	**81 (42.4)**	**28 (28.0)**	**0.02**			
Sacroiliitis-MRI (ASAS)	72 (37.7)	53 (53.0)	0.3			
Disability to work (%)	24 (12.5)	7 (7.0)	0.2	13 (26.0)	6 (16.7)	0.5
ASQoL (0-18)	5.5 ± 4.9	6.6 ± 4.5	*0.08*	4.1 ± 4.7	4.9 ± 5.3	0.5

Conclusions: In patients with SpA, different disease manifestations between genders are observed already from the first stages of the disease. In patients with axSpA, males have worst prognostic factors compared with females. However, in pSpA, females report poorer functionality despite being diagnosed earlier than male patients. This difference in phenotypes may be relevant when therapeutic decision-making.
Acknowledgements: Project ESPeranza was funded by Pfizer through the Spanish Foundation of Rheumatology (FER), is currently supported by a restricted grant from the of Instituto de Salud Carlos III (FIS PI13/02034) and Fondos FEDER.
Disclosure of Interest: None declared
DOI: 10.1136/annrheumdis-2018-eular.3992

AB0853 THE ASSOCIATION OF VITAMIN D RESEPTOR LEVELS WITH DISEASE ACTIVITY PARAMETERS IN PATIENTS WITH ANKYLOSING SPONDYLITIS

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Background: Ankylosing Spondylitis (AS) is a chronic, systemic, inflammatory disease that involves sacroiliac, axial and peripheral joints with an unknown etiology. The role of vitamin D receptor (VDR) in the regulation of multiple pathophysiologic processes, like inflammation, infection and malignancies and systemic disease is not fully understood.
Objectives: The aim of this study, was to investigate the relationship between serum VDR levels and disease activity parameters in patients with AS.
Methods: Sixty-two patients with AS and 32 healthy volunteers were included into the study. Demographic features like age, duration of illness, medication, history of uveitis and peripheral involvement of the patients were recorded. Erythrocyte sedimentation rate (ESR), serum C-reactive protein (CRP) levels were recorded. The Bath AS Disease Activity Index (BASDAI) scores were calculated to determine disease activity. Serum Vitamin D receptor (VDR) level was measured by ELISA.
Results: There was no difference in Serum VDR levels between the patient and the control group (p=0.658). In patients with active AS (BASDAI score $\geq$4) serum VDR level was significantly high (p=0,000). Also serum VDR levels were statistically significantly high in patients with peripheral joint involvement and enthesis (p=0,000, non-steroidal anti inflammatory drugs (NSAID) compared to patients treated with biological agents (p=0.00). Serum VDR levels were also significantly correlated with BASDAI, CRP and ESR in the patient group (p=0.00, r=0,751, p=0.00, r=0751 p=0.00, r=0806 respectively).
Conclusions: In our study, serum VDR levels are related with disease activity, clinical parameters, peripheral joint involvement and enthesis in patients with AS. Our results suggest that serum VDR level may be used to predict disease activity and prognosis. Further studies in large cohorts are needed to determine the role of Serum VDR level in the pathophysiology of AS.

REFERENCES:

[1] Cistromic and genetic evidence that the vitamin D receptor mediates susceptibility to latitude-dependent autoimmune diseases. Booth DR, Ding N,

Parnell GP, Shahijanian F, Coulter S, Schibeci SD, et al. Genes Immun 2016;17(4):213–9.
[2]
[2] Serum vitamin D and colonic vitamin D receptor in inflammatory bowel disease. Abreu-Delgado Y, Isidro RA, Torres EA, González A, Cruz ML, Isidro AA, et al. World J Gastroenterol 2016;22(13):3581–91.
[1] Cistromic and genetic evidence that the vitamin D receptor mediates susceptibility to latitude-dependent autoimmune diseases. Booth DR, Ding N, Parnell GP, Shahijanian F, Coulter S, Schibeci SD, et al. Genes Immun 2016;17(4):213–9.
[2] Serum vitamin D and colonic vitamin D receptor in inflammatory bowel disease. Abreu-Delgado Y, Isidro RA, Torres EA, González A, Cruz ML, Isidro AA, et al. World J Gastroenterol 2016;22(13):3581–91.

Disclosure of Interest: None declared
DOI: 10.1136/annrheumdis-2018-eular.6890

AB0854 DYSFUNCTIONAL PAIN COMPONENT IN ANKYLOSING SPONDYLITIS PATIENTS

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Background: As a result of chronic inflammation, repetitive activation of primary afferent fibres changes the functional state and activity of Central nervous pathways. On this patients when describing their complaints use neuropathic pain descriptors include numbness, burning, tingling, increased pain response to a stimulus nabulivou etc.
Objectives: The study of chronic pain syndrome in patients with ankylosing spondylitis (AS) to identify dysfunctional component of pain (DCP).
Methods: Was studied 150 patients as 127 men and 23 women. The average age of 35, and 52±10,55, mean disease duration of 7.19±of 6.31. All the patients were performed clinical and rheumatological examination (indices BASDAI, BASFI), the assessment of pain intensity on visual analogue scale (VAS), to identify DCP were investigated neurological status with the use of questionnaires neuropathic pain DN4 and PainDETECT, and identifying the emotional-affective disorders (HADS questionnaire).
Results: 22 patients (14.7%) on the DN4 questionnaire revealed 4 or more points, but lesions of the somatosensory nervous system in these patients was not detected, hence 14,7% of patients were identified DCP. When comparing patients with the presence of TCS group I (22 people) and no DCP group II (128) it has been found that statistically significantly in patients in group I had higher pain intensity on VAS (6,09±185 vs 4,55±2,06, p=0.001, respectively); active disease BASDAI index (of 7.05±vs 1,58 4,87±2,16, p=0.001, respectively); the expression of functional impairment index BASFI (6,46±2,24 vs 4,05±2,81, p=0.001); the indicators of the questionnaire HADS in group I, consistent with the presence of clinically significant anxiety and lack of it in group II (10,09±2,86 vs 6,17±3,35, p=0.0001). However, duration of disease distinguish authentic in the groups was not (9,41±6,89 6,81 vs ±6,13 p=0,07). Correlation analysis revealed a significant relationship between DCP and the intensity of the pain in VAS back, as well as with the severity of anxiety, disease activity, functional disorders (p=0.05)
Conclusions: The study identified 22 patients, the presence of neuropathic pain descriptors in combination with anxiety disorders, resulting in the conclusion that, along with nociceptive component of pain in 14.7% of cases detected by the DCT. So the pain of some AS patients should be considered as a multicomponent syndrome, providing a comprehensive approach with the use of antidepressants (TCA and SSRI's).
Disclosure of Interest: None declared
DOI: 10.1136/annrheumdis-2018-eular.2312

AB0855 IDENTIFYING PATIENTS WITH AXIAL SPONDYLOARTHRITIS BY DATA MINING MRI RADIOLOGY REPORTS

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Background: Axial Spondyloarthritis (axSpA) encompasses ankylosing spondylitis (AS) and non radiographic axSpA (nr-axSpA) as part of the ASAS classification criteria[1] [2]. The role of MRI is now central in identifying patients early in the disease course [3], but our use of this needs to be standardised to ensure appropriate requesting and correct interpretation of MRI axSpA features.
Objectives: ([1] To identify the MRI protocols used to investigate patients with back pain
([2] To describe the prevalence of axSpA associated spinal lesions in patients with known axSpA
([3] To describe the prevalence of axSpA associated spinal lesions in patients with back pain and their relevance in subsequently diagnosed axSpA
Methods: MRI reports between 4th [January 2015] and 25th February 2017 containing the key words 'ankylosing spondylitis' (AS), 'bone marrow oedema' (BMO), 'spondyloarthritis' and 'sacroiliitis' were identified using a computerised word finding programme, in a tertiary referral hospital for Rheumatology.
Results: 194 patients had MRI features of axSpA. 60.8% were female; mean age 39.3 years (SD 13.3). 96.4% (n=187) contained the term 'sacroiliitis', with 'AS, 'BMO' and 'spondyloarthritis' in 2.6%, 0.5% and 0.5% respectively. 63.4% were referred by a rheumatologist, and 19.1% from primary care. Musculoskeletal radiologists reported 16.0%, general radiologists 37.1%, and external radiology services 46.4%. The most common MRI protocol was the inflammatory spinal protocol (ISP-MRI, 57.2%), with sacroiliac (SIJ) MRI in 17%. 87.4% ISP-MRI and 48.5% MRI SIJ were requested by Rheumatology. GPs requested more ISP-MRI than other sequences (29.7% of their total MRIs). 144 cases had a diagnosis stated on the MRI request; 100 (69.4%) had an existing diagnosis of axSpA, and 20 (13.9%) of a peripheral arthritis. In patients with known AxSpA, the most frequent findings were BMO (70.3%), and erosions (67%). Ankylosis was only seen in 4 patients. Features of axSpA were identified in 26 MRIs requested for mechanical back pain, and 11 for unrelated medical reasons. 33 cases of BMO and 29 of SIJ erosions were identified in patients who did not have a pre existing diagnosis of AxSpA, and one showed ankylosis. 16 patients went on to have a diagnosis of axSpA.

Abstract AB0855 – Table 1. Radiological features seen on MRI imaging, and by diagnosis

MRI finding	Frequency	Pre existing axSpA diagnosis,	Without pre existing axSpA diagnosis, Total n=44		
			peripheral arthritis,	back pain as yet undiagnosed,	alternative diagnosis,
	n (%)	n (%)	n (%)	n (%)	n (%)
Total n	194	100	20	13	11
Oedema	150 (77.3)	78 (70.3)	15 (13.5)	8 (7.2)	10 (9.0)
Irregularity or erosions	111 (57.2)	59 (67.0)	16 (18.2)	6 (6.8)	7 (8.0)
Sub-articular sclerosis	81 (41.8)	39 (63.9)	13 (21.3)	4 (6.6)	5 (8.2)
Fatty infiltration	29 (14.9)	18 (75.0)	5 (20.8)	0	1 (4.2)
Corner inflammatory spinal lesions	30 (15.5)	18 (69.2)	4 (15.4)	2 (7.7)	2 (7.7)
Ankylosis	5 (2.6)	4 (80.0)	0	1 (20.0)	0
Fracture	4 (2.1)	4 (100)	0	0	0
Post MRI diagnosis:	axSpA, n (%)		16 (36.4)		
	Mechanical, n (%)		8 (18.2)		
	Seronegative arthritis, n (%)		8 (18.2)		
	Isolated sacroilitis (without full criteria for axSpA), n (%)		7 (15.9)		

Conclusions: Through data mining of MRI reports, we have found that appropriate MRI sequences are being requested when features of AxSpA are suspected. The rate of chronic features of AxSpA such as ankylosis was low, suggesting this cohort may have short disease durations. Multiple features of AxSpA were identified in patients without an existing diagnosis prior to imaging. 16 new cases of AxSpA were identified.

REFERENCES:

[1] Rudwaleit M, van der Heijde D, Landewé R, et al, The development of assessment of spondyloarthritis international society classification criteria for axial spondyloarthritis (part II): validation and final selection. Ann Rheum Dis 2009; 68:77783.doi:10.1136/ard.2009.108233,
[2 Baraliakos X, Braun J]
Non-radiographic axial spondyloarthritis and ankylosing spondylitis: what are the similarities and differences? RMD Open 2015;1:e000053.doi:10.1136/rmdopen-2015-000053.
[] 3
Hoffstetter P et al, Magnetic Resonance Imaging of the Axial Skeleton in Patients With Spondyloarthritis: Distribution Pattern of Inflammatory and Structural Lesions, Clin Med Insights Arthritis Musculoskelet Disord. 2017; 10: 1179544117728081, Published online 2017 Aug 29.

Disclosure of Interest: None declared
DOI: 10.1136/annrheumdis-2018-eular.5881