

2016. Only were included the adult patients with rheumatoid arthritis (RA), spondyloarthritis (SpA) or psoriatic arthritis (PsA) having accepted the transition from Infliximab reference product (IFX^R) to its biosimilar (IFX^B). For SpA patients, transition monitoring was based on the end-of-dose "wearing off" (WO) phenomenon assessment before and after the switch, disease activity score BASDAI and also the inflammatory marker CRP. Transition was considered as unsuccessful after 2 IFX^B infusions with patient complain. In this case, the drug level was determined using ELISA before switching back to IFX^R, and any spacing infusions because a concomitant health disorder was sought.

Results: Of the 99 patients treated with IFX^R for more than 2 years, 91% (90/99) accepted the transition: 53 SpA, 23 RA and 14 PsA. Fourteen patients (12 SpA, 2 RA) didn't reach the 3rd IFX^B administration. SpA patients reported the occurrence of arthralgia (12/12) and a partial (8/12) or total (4/12) efficacy loss. Only 5 patients reported a 2 point-increase or more regarding the BASDAI score, and only 3 patients had an increase in the CRP level (Cf. Table 1). Except for P1, the efficacy loss was associated in each case with WO phenomenon already reported before the transition (8/12) or undetectable IFX level (3/12). For these 3 last patients, the IFX^B drug administration rate was increased by at least 2 weeks than usual because of a concomitant infection.

Table 1: SpA patients discontinued IFXB outcomes

SpA patients	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12
Arthralgia	+	+	+	+	+	+	+	+	+	+	+	+
Partial or total efficacy loss	+	+	+	+	+	+	+	+	+	+	+	+
γBASDAI	-	+	+	+	-	-	-	+	-	-	-	+
γ CRP	+	-	-	-	-	+	-	+	-	-	-	-
Existing WO	-	+	+	-	+	+	+	-	+	+	-	+
Undetectable IFX level	-	-	-	+	-	-	-	+	-	-	+	-
Spacing infusions	-	-	-	+	-	-	-	+	-	-	+	-

+: Yes; -: No

Conclusions: This observational study showed a transition failure rate at 16% (76/90) in global, which reached 23% (12/53) if limited to SpA. All SpA patients with supposed transition failure reported either a disease escape beforehand or a concomitant infection requiring to spacing infusions. In order to complete these results, an anti-IFX antibodies monitoring is in progress so to highlight any IFX activity loss. Any failure observed with the transition would be actually more complex than the presumably inefficacy of the biosimilar IFX^B especially for SpA patients. So, it seems difficult to assess robustly the inefficacy of the transition to IFXB in SpA patients only according to patient complain.

References:

- [1] Park W et al. *Arthritis Res Ther.* 2016 Jan 20;18:25.
- [2] Fiorino G et al. *Expert Rev Clin Immunol.* 2016;12(4):361-3.
- [3] Jacobs I et al. *BioDrugs.* 2016 Dec;30(6):525-570.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.4823

Spondyloarthritis - clinical aspects (other than treatment)

AB0709 THE RELATIONSHIPS BETWEEN THORACIC REGION INVOLVEMENT AND FUNCTIONS OF UPPER EXTREMITY, SCAPULAR KINEMATICS IN PATIENTS WITH ANKYLOSING SPONDYLITIS: PILOT STUDY

O. Mete¹, D. Oskay¹, A. Tufan². ¹Physiotherapy and Rehabilitation; ²Internal Medicine, Division of Rheumatology, Gazi University, Ankara, Turkey

Background: Ankylosing spondylitis (AS) is a chronic inflammatory rheumatic disease that mainly affects the axial skeleton. As the disease progresses, increased thoracic kyphosis can be seen in these patients. Because of increase in thoracic kyphosis, the orientation of the scapula on the thorax and thus the functions of upper extremity may change.

Objectives: The aim of the study is to investigate the relationships between thoracic region involvement and functions of upper extremity, scapular kinematics in patients with AS.

Methods: Fifteen (15) patients with AS and eleven (11) healthy control were participated in the study. Thoracic kyphosis angle and shoulder range of motions were assessed by using digital inclinometer, scapular and shoulder muscle strength were assessed by using digital dynamometer, three dimensional (3D) scapular kinematics were assessed by using electromagnetic tracking system, disability level of upper extremity were assessed by Turkish Version of Disability of Arm, Shoulder and Hand Questionnaire (DASH-T). Spearman correlation coefficient, Pearson correlation coefficient, Mann-Whitney U Test and Independent Sample T-test were used for statistical analysis.

Results: DASH-T, thoracic kyphosis angle, shoulder abduction, internal rotation, external rotation of dominant side, shoulder abduction, internal rotation of non-dominant side, anterior deltoid, middle deltoid, serratus anterior, downward trapezius muscle strengths of dominant and non-dominant side, upward rotation of scapula during 30,60,90 degrees humerothoracic elevations at sagittal plane of dominant and non-dominant side showed significantly differences between two groups. Thoracic kyphosis angle showed correlations with DASH-T ($p < 0,05, r: 0,619$), shoulder flexion, abduction, internal rotation, external rotation of dominant side ($p < 0,05, r: -0,867$), ($p < 0,05, r: -0,580$), ($p < 0,05, r: -0,657$), ($p < 0,05, r: -0,599$) and shoulder flexion, abduction, internal rotation of non-dominant side ($p < 0,05, r: -0,813$), ($p < 0,05, r: -0,665$), ($p < 0,05, r: -0,741$), respectively. Thoracic kyphosis angle showed correlations with anterior deltoid, middle deltoid, serratus anterior, middle trapezius, downward trapezius muscle strengths of dominant side and non-dominant side, respectively ($p < 0,05, r: -0,899$), ($p < 0,05, r: -0,854$), ($p < 0,05, r: -0,805$), ($p < 0,05, r: -0,791$), ($p < 0,05, r: -0,633$), ($p < 0,05, r: -0,877$), ($p < 0,05, r: -0,796$), ($p < 0,05, r: -0,884$), ($p < 0,05, r: -0,724$), ($p < 0,05, r: -0,673$). Correlations between thoracic kyphosis angle and anterior tilt of scapula during 90 degree humerothoracic elevations at sagittal plane of dominant side were obtained ($p < 0,05, r: 0,522$).

Conclusions: Scapulothoracic joint biomechanics and functions of upper extremity were affected by kyphotic posture in patients with AS. One of the most important causes of biomechanical impairment in AS patients is the deterioration of scapular kinematics with kyphosis. For preventing functional impairment, treatment programs should be supplemented with scapular kinematic exercises.

References:

- [1] Braun (2007). Ankylosing spondylitis. *The Lancet.*
- [2] Kebaetse (1999). Thoracic position effect on shoulder range of motion, strength, and three-dimensional scapular kinematics. *Archives of physical medicine and rehabilitation.*

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.5866

AB0710 REVIEW OF PREGNANCY OUTCOMES IN SPONDYLOARTHROPATHY IN A UNIVERSITY TEACHING HOSPITAL

A. Shajpal¹, M. Khare², A. Moorthy³. ¹Obstetrics; ²Maternal Fetal Medicine; ³Rheumatology, University Hospitals of Leicester, Leicester, United Kingdom

Background: Spondyloarthropathy (SpA) is a chronic inflammatory condition of the spine affecting mainly the male population however the incidence amongst the female population is increasing. The peak incidence of SpA is in the reproductive age group. There has been a lack of focus on pregnancy in SpA as compared to other autoimmune condition such as Lupus and Rheumatoid arthritis, but this is changing. There is a paucity of information (1) on fertility and pregnancy outcomes in this condition compared to other diseases and this may lead to inequality in healthcare delivery.

Objectives:

- To review the pregnancy outcomes in women with SpA in our unit
- To review ankylosing spondylitis activity during pregnancy
- To improve the quality of care in this group of patients by developing local pathways and appropriate MDT involvement

Methods: This is a retrospective case review of pregnancies in women with SpA booked at a large tertiary teaching hospital over three years between January 2014 and December 2016. We have an annual delivery rate of 11,000 maternities. The maternity electronic database and clinic diaries were used to identify the cases. A standardised proforma was used to collect and collate the data for demographics, pre pregnancy counselling, disease activity and pregnancy outcome.

Results: Six pregnancies were identified in the study period. All patients were under the care of a Rheumatologist. The maternal age range was between 28 and 35 years. The BMI ranged between 18 and 37. Ethnicity included 5 caucasian and one Asian woman. Five women had previous pregnancies and one was in her first pregnancy. Two of the multiparous women had previously delivered by caesarean section. Three of the six women suffered from anxiety and/or depression and one had fibromyalgia. Two of the six patients were not on any medication at the start of pregnancy and didn't require any during pregnancy. Four women needed various analgesics and one patient was on sulfasalazine but stopped this at 5 weeks' gestation. NSAIDs was stopped in 3 women after confirmation of pregnancy. One patient who was on Anti TNF therapy discontinued the drug preconception. We observed 50% attended specialist maternal-fetal medicine and anaesthetic services. One patient saw a physiotherapist and accessed hydrotherapy during pregnancy.

Two of six patients delivered preterm (<37 weeks) and 4 delivered at term (>37 weeks). Of the preterm deliveries, 1 went into spontaneous labour not related to disease flare and the other was delivered electively for fetal concerns. All the women delivered by caesarean section. One was planned as an elective caesarean for maternal request due to difficulty abducting legs. All the remaining caesarean deliveries were for obstetric indications not related to SpA.

Conclusions: This small observational case series did not highlight any worsening SpA disease activity or poor pregnancy outcome. Further larger studies are required. However a care pathway for managing this group of patients would help to standardise the care during pregnancy. A multidisciplinary approach is essential to optimise the quality of care for these patients.

References:

[1] Pregnancy outcomes in patients with ankylosing spondylitis: a nationwide register study Gustav L Jacobson, Olof Stephansson, Johan Askling and Lennart T H Jacobsson *Ann Rheum Dis* 2016 75: 1838–1842.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.3842

AB0711 REVIEW OF MANAGEMENT OF HLA B27 POSITIVE UVEITIS PATIENT ATTENDING A TERTIARY HOSPITAL – HOW GOOD ARE WE?

B. Kapoor¹, K. Periyasamy¹, M. Babbington¹, A. Moorthy². ¹*Ophthalmology;* ²*Rheumatology, Leicester Royal Infirmary, Leicester, United Kingdom*

Background: Delay in diagnosing Spondyloarthropathy is well documented. One of the reasons for the delay is the presentation of these group of patients to different specialities due to variety of extra articular manifestations. Acute anterior uveitis (AAU) is the most common extra-articular manifestation in HLA B27 positive spondyloarthropathies, occurring in 30–50% of cases [1]. It can occur before the onset of rheumatologic symptoms [2,3]. However quite often this group of patients is not routinely referred to or seen by the rheumatologist for further evaluation.

Objectives:

- To assess the ophthalmologist practice in evaluating patients with AAU for inflammatory back pain or other Rheumatological diagnoses.
- To identify the number of HLA B27 requests made for uveitis patients.
- To identify the referral rate of HLA B27 uveitis patients to Rheumatologists for evaluation.

Methods: We conducted a retrospective pilot study to assess all patients with AAU presenting over a period of one-week to our busy teaching hospital eye casualty which serves over one million population. All patients with Iritis were identified from eye casualty records and medical case notes were obtained. A standard proforma was designed and piloted with few case notes initially. Modified proforma was subsequently used to collect the data which was collated and analysed using EXCEL spread sheet.

Results: A total of 62 patients (n=62) with AAU presented to eye casualty over a one-week period. Case notes of 49 patients could be procured. Majority of the patients were Caucasians (n=35) while the rest were Asians (n=12) and blacks (n=2). Sex ratio was nearly equal with 25 patients being males and the rest females. Most of our patients' age ranged between 20 to 60 years. 60% patients had a history of recurrent iritis. Out of these 9 patients had bilateral uveitis and 14 were unilateral. In 6 patients, the laterality was not documented. A history for spondyloarthropathy was elicited in only 14 patients by the ophthalmologist at the time of initial assessment. Out of these 14 patients Inflammatory back pain history was positive in 10 patients. Only 17 out of 62 (27%) patients had HLA B27 checked and it was noted to be positive in 5. Amongst the 5 HLA B27 positive patients 2 patients were referred to rheumatology whereas 2 patients were already under rheumatology.

Conclusions: We observed that there is a clear lack of understanding in eliciting effective rheumatology history in patients with recurrent anterior uveitis and requesting HLA B27 appropriately. Therefore, a need for a clear pathway for managing patient presenting with recurrent uveitis and HLA B27 positivity for evaluation of Inflammatory back pain. Clear local guidelines and pathway need to be developed to provide effective care. Good communication between the Ophthalmologist and Rheumatologist is key in early diagnosis and effective management of this deforming condition.

References:

- [1] Khan AK. A worldwide overview: the epidemiology of HLA-B27 and associated spondyloarthritides. In: Calin A, Taurug JD, eds. *The Spondylarthritides*. Oxford: Oxford University Press, 1998: 17–26.
- [2] Careless DJ, Inman RD. Acute anterior uveitis: clinical and experimental aspects. *Semin Arthritis Rheum*. 1995 Jun. 24(6):432–41.
- [3] Chang JH, McCluskey PJ, Wakefield D. Acute anterior uveitis and HLA-B27. *Surv Ophthalmol*. 2005 Jul-Aug. 50(4):364–8.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.4511

AB0712 CLINICAL CHARACTERISTICS OF SPONDYLARTHROSIS (SPA) WITH AND WITHOUT PERIPHERAL ENTHESITIS – DATA FROM THE DESIR COHORT

V. Nardon¹, A. Molto², A. Etcheto², L. Bessette³, L. Michou³, P. Claudepierre⁴, D. Wendling⁵, C. Tkaczyk⁶, B. Haraoui¹, M. Dougados². ¹*Institut de Rhumatologie de Montreal, Montreal, Canada;* ²*Hôpital Cochin, Paris, France;* ³*CHUL, Quebec, Canada;* ⁴*Hôpital Henri Mondor, Créteil;* ⁵*CHRU, Besançon, France;* ⁶*Janssen, Montreal, Canada*

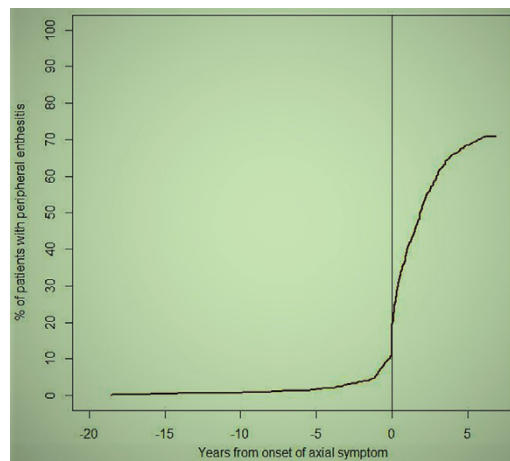
Background: Peripheral enthesitis, mostly in the lower limbs, is a major feature of spondyloarthritis (SpA). Its prevalence is highly variable depending on the population studied, estimated between 10% and 70%. The probability to develop a peripheral enthesitis over time and the factors associated with it are mostly unknown.

Objectives: The aims of the present study were: 1) To describe the prevalence

and characteristics of peripheral enthesitis in early axial SpA population, at the inclusion in the DESIR cohort; 2) to estimate the incidence of peripheral enthesitis over time; 3) to determine the factors associated with the presence of peripheral enthesitis.

Methods: We used data from the DESIR cohort, a prospective multi-center, longitudinal French cohort of 708 patients with inflammatory back pain suggestive of early axial SpA (<3 years since axial symptoms onset). We performed a descriptive analysis to evaluate the prevalence and characteristics of the peripheral enthesitis at time of inclusion (location, number of enthesitis, and mean time between first enthesitis and axial symptoms). We also estimated the incidence of peripheral enthesitis over a follow up period of 60 months, using Kaplan-Meier curves. Finally, we determined the baseline characteristics associated with the presence of a peripheral enthesitis by multivariable analysis (logistic regression, including the variables significantly associated in the univariable analysis).

Results: At inclusion, 395 patients (55.8%) had peripheral enthesitis in their past medical history. The locations were mainly the plantar fascia (212/395, 53.7%) and the Achilles tendon (152/395, 38.5%). Seventy-seven (19.4%) of these patients developed peripheral enthesitis before their axial symptoms, with a mean time interval of 773 days. During the 5-year follow-up period, 109/708 (15.4%) patients developed new peripheral enthesitic symptoms, resulting in 504/708 (71.2%) patients who had presented with at least one episode of peripheral enthesitis at 5 years. Variables associated to peripheral enthesitis according to the univariable analysis were: older age, male gender, HLA B27 positivity, MRI sacroiliitis, Modified NY criteria fulfilled, presence of either anterior chest wall pain, peripheral arthritis, dactylitis or psoriasis, high BASDAI, BASFI or mean score ASAS-NSAID. Only the history of anterior chest wall pain and of peripheral arthritis were significantly and independently associated with the presence of peripheral enthesitis in the multivariable analysis (Odds Ratio (OR) =1.6 [95% Confidence interval (1.6 [1.1–2.3], and OR=2.1 [1.4–3.0], respectively)



Conclusions: This prospective study highlights the high prevalence of peripheral enthesitis in early axial SpA and stresses the importance of researching any signs and symptoms of enthesitis, especially in those patients with anterior chest wall pain and peripheral arthritis.

References:

- [1] Sampaio-Barros, PERCIVAL DEGRAVA, et al. Primary ankylosing spondylitis: patterns of disease in a Brazilian population of 147 patients. *The Journal of rheumatology* 28.3 (2001): 560–565.

Disclosure of Interest: V. Nardon: None declared, A. Molto: None declared, A. Etcheto: None declared, L. Bessette: None declared, L. Michou: None declared, P. Claudepierre: None declared, D. Wendling: None declared, C. Tkaczyk Grant/research support from: This projet was partly supported by an unrestricted grant from Janssen Canada, B. Haraoui: None declared, M. Dougados: None declared

DOI: 10.1136/annrheumdis-2017-eular.5087

AB0713 UVEITIS SECONDARY TO SPONDYLARTHROSIS IN AN OCULAR INFLAMMATION INTERDISCIPLINARY UNIT

D. Peiteado¹, A. Pieren¹, A. Schlinker², V. Hidalgo², C. Millán¹, E. De Miguel¹, A. Balsa¹. ¹*Rheumatology;* ²*Ophthalmology, Hospital Universitario la Paz, Madrid, Spain*

Objectives: To describe the characteristics of ocular involvement in spondyloarthritis in an ocular inflammation interdisciplinary unit.

Methods: This descriptive study include the patients with uveitis secondary to spondyloarthritis or inflammatory bowel disease (IBD) treated by the rheumatologist from January 2012 to December 2016 in an ocular inflammation multidisciplinary unit. Demographic characteristics, aetiology, ocular involvement pattern, and systemic therapy data were collected and analysed.

Results: From 276 patients evaluated by the rheumatologist, 111 (40.2%) were uveitis secondary to systemic inflammatory diseases. Within this group, the uveitis