showed an average reduction in the BASDAI score by more than 30% at each 3 monthly interval.

Figure 1. BASDAI percentage reduction at 3 monthly intervals between the two second line treatment groups using anti-TNF and Secukinumab.

Conclusion: A significant difference could not be demonstrated between the anti-TNF and secukinumab groups in this observational cohort. Interestingly, at 6 months, anti-TNF demonstrated better outcomes according to BASDAI scores than Secukinumab but this efficacy was lost at 12 months. It was difficult to interpret these isolated results without further testing, as this is a small non-randomised study. We observed similar outcomes to the Navarro-Compán review where there was a low percentage change in the BASDAI improvement in patients on second line therapy when compared to first line treatment BASDAI scores. Therefore, exploring the mechanism for the reduction in the BASDAI response would be an interesting future study. Moreover, to fully understand these results, randomised controlled studies would need to be conducted.

References:

- [1] Baeten et al. NEJM 2015.
- [2] van der Heijde et al. ARD 2018.
- [3] Navarro-Compán et al. RMD Open 2017.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2020-eular.6089

FRIDAY, 05 JUNE 2020

Spondyloarthritis - clinical aspects (other than treatment)

FRI0298

ASAS MODIFICATION OF THE BERLIN ALGORITHM AND THE DUET ALGORITHM FOR DIAGNOSING AXIAL SPONDYLOARTHRITIS: RESULTS FROM THE SCREENING IN AXIAL SPONDYLOARTHRITIS FOR PSORIASIS, IRITIS, AND COLITIS COHORT

U. Weber¹, G. Kröber¹, R. Carmona², J. Yeung³, J. Chan⁴, S. Aydin⁵, L. Martin⁶, A. Masetto⁷, S. Keeling⁸, O. Ziouza⁹, S. Rohekar⁹, R. Dadashova¹⁰, A. Carapellucci¹⁰, J. Paschke¹⁰, R. G. Lambert⁸, W. P. Maksymowych^{8,10}.

¹University of Southern Denmark, Sønderborg, Denmark; ²St. Joseph's Healthcare Hamilton, Hamilton, Canada; ³James Yeung Rheumatology, Richmond, Canada; ⁴Artus Health Centre, Vancouver, Canada; ⁵The Ottawa Hospital, Ottawa, Canada; ⁶University of Calgary, Calgary, Canada; ⁷Université de Sherbrooke, Sherbrooke, Canada; ⁸University of Alberta, Edmonton, Canada; ⁹Lawson Health Research Institute, London, Canada; ¹⁰CARE Arthritis, Edmonton, Canada

Background: Patients presenting with back pain and psoriasis, iritis, or colitis, represent a high-risk population for the presence of axial spondyloarthritis (axSpA). The Dublin Evaluation Tool (DUET)¹, the Berlin algorithm², and the ASAS modification of this algorithm³ are recommended referral strategies aimed at early diagnosis of axSpA. DUET was developed for patients presenting with AAU. Validation of these algorithms in inception cohorts is limited.

Objectives: 1. To assess the performance of referral algorithms for diagnosis of axSpA when tested against the final local rheumatologist diagnosis in an inception cohort of patients presenting with undiagnosed back pain and extra-articular manifestations. 2. To determine whether different criteria for inflammatory back pain (IBP) impact the performance of the algorithms.

Methods: The multicenter Screening for Axial Spondyloarthritis in Psoriasis, Iritis, and Colitis (SASPIC) Study at 11 sites is aimed at early detection of axial SpA in patients presenting with undiagnosed back pain to the rheumatologist. Consecutive patients ≤45 years of age with ≥3 months undiagnosed back pain with any one of psoriasis, acute anterior uveitis (AAU), or colitis diagnosed by the relevant specialist undergo routine clinical evaluation by a rheumatologist for axial SpA. The rheumatologist determines the presence or absence of axial SpA at 3 consecutive stages: 1. After the clinical evaluation; 2. After the results of labs (B27, CRP) and radiography; 3. After the results of MRI evaluation. Final diagnosis by the rheumatologist was used as external standard to test the performance of the algorithms. We tested the following criteria for IBP in the algorithm: ASAS, Berlin, rheumatologist global for likelihood of IBP >5 (0-10 scale), and DUET algorithm in AAU patients.

Results: A total of 246 patients were recruited, 73 presented with iritis, 46 with psoriasis, and 127 with colitis, 47.6% were diagnosed with axSpA. The diagnosis of axSpA was established in 45.7%, 61.6%, and 40.2% of patients with psoriasis, AAU, and IBD, respectively. The performance of the ASAS-modification of the Berlin algorithm was superior to the original algorithm as reported previously³, primarily for enhanced sensitivity, and this was observed irrespective of the criteria used to define IBP (Table 1). Conversely, the performance of the Duet algorithm in the subset of patients with AAU was substantially worse than previously reported¹.

Conclusion: The ASAS modification of the Berlin algorithm is the preferred referral strategy for patients presenting with undiagnosed back pain to the rheumatologist.

References:

- [1] Haroon M, et al. Ann Rheum Dis 2015; 74: 1990-5
- [2] Poddubnyy D, et al. J Rheumatol 2011; 38: 2452-60
- [3] Van den Berg R, et al. Ann Rheum Dis 2013;72:1646-53

Algorithm	Sensitivity (%)	Specificity (%)	Correct diagnosis (%)	False negative (%)	False positive (%)
Original Berlin	65.3	76.6	71.1	16.7	12.2
(ASAS criteria for IBP)					
Original Berlin	64.4	76.6	70.7	17.1	12.2
(Berlin criteria for IBP)					
Original Berlin	67.8	78.1	73.2	15.4	11.4
(IBP global >5)					
ASAS Modification of Berlin algorithm (ASAS criteria for IBP)	73.7	75.8	74.8	12.6	12.6
ASAS Modification of Berlin algorithm (Berlin criteria for IBP)	73.7	75.0	74.4	12.6	13.0
ASAS Modification of Berlin algorithm (IBP global >5)	76.3	77.3	76.8	11.4	11.8
DUET	84.4	50.0	71.2	9.6	19.2

Disclosure of Interests: Ulrich Weber: None declared, Georg Kröber: None declared, Raj Carmona: None declared, James Yeung: None declared, Jon Chan: None declared, Sibel Aydin: None declared, Liam Martin: None declared, Ariel Masetto: None declared, Stephanie Keeling: None declared, Olga Ziouza: None declared, Sherry Rohekar: None declared, Rana Dadashova: None declared, Amanda Carapellucci: None declared, Joel Paschke: None declared, Robert G Lambert: None declared, Walter P. Maksymowych Grant/research support from: AbbVie, Novartis, Pfizer, and UCB, Consultant of: AbbVie, Boehringer Ingelheim, Celgene, Eli Lilly, Galapagos, Janssen, Novartis, Pfizer, and UCB, Employee of: Chief Medical Officer of CARE Arthritis Limited, Speakers bureau: AbbVie, Janssen, Novartis, Pfizer, and UCB

DOI: 10.1136/annrheumdis-2020-eular.5828

FRI0299

EVALUATION OF ENTHESITIS INDICES AND RESPONSE TO BDARD THERAPY IN PORTUGUESE PATIENTS WITH SPONDYLOARTHRITIS

F. Pinheiro¹, M. Rato¹, B. M. Fernandes¹, S. Garcia¹, S. Ganhão¹, P. Madureira¹, M. Bernardes¹, L. Costa¹. ¹Centro Hospitalar e Universitário de São João, Rheumatology Department, Porto, Portugal