SAT0355

IRRITABLE BOWEL SYNDROME SYMPTOMS IN AXIAL SPONDYLOARTHRITIS AND HEALTHY CONTROLS, AND THEIR RELATION TO DISEASE CHARACTERISTICS – IS IT AN OVERLOOKED COMORBIDITY?

Johan K. Wallman¹, Elisabeth Mogard¹, Jan Marsal², Kristofer Andréasson¹, Anna Jöud³, Mats Geijer⁴, Lars Erik Kristensen⁵, Elisabet Lindqvist¹, Tor Olofsson¹. ¹Lund University, Department of Clinical Sciences Lund, Rheumatology, Lund, Sweden; ²Lund University, Department of Clinical Sciences Lund, Gastroenterology, Lund, Sweden; ³Lund University, Division of Occupational and Environmental Medicine, Lund, Sweden; ⁴University of Gothenburg, Sahlgrenska Academy, Department of Radiology, Gothenburg, Sweden; ⁵The Parker Institute, Department of Rheumatology, Copenhagen University Hospital, Frederiksberg and Bispebjerg, Copenhagen, Denmark

Background: While inflammatory bowel disease (IBD) is a well-known comorbidity in axial spondyloarthritis (axSpA), little is known about the prevalence, drivers and impact of irritable bowel syndrome (IBS). In the general population, the IBS prevalence has been estimated to ~11%.[1]

Objectives: To compare the frequency of gut symptoms meeting IBS criteria between axSpA patients and controls, and to examine how such symptoms relate to disease characteristics.

Methods: Consecutive axSpA patients were examined and classified as non-radiographic axial SpA (nr-axSpA; ASAS criteria; n=63) or ankylosing spondylitis (AS; modified New York criteria; n=119), excluding cases with known IBD. Proportions reporting gut symptoms meeting the ROME III IBS criteria were compared between axSpA patients and sex and age matched controls (without rheumatic disease or IBD; n=50) by logistic regression.[2] Within the axSpA group, separate logistic regression models were also applied to examine whether the presence of IBS symptoms differed according to disease subtype (nr-axSpA/AS), sex, disease activity, level of systemic and gut inflammation, NSAID and DMARD use, and comorbid fibromyalgia (according to the 1990 fibromyalgia criteria).[3] Finally, we analysed associations between the presence of IBS symptoms and standard patient-reported axSpA outcomes and evaluator's VAS global assessment of disease activity. All analyses were sex and age adjusted.

Results: Symptoms meeting IBS criteria were significantly more common among axSpA patients (30%) than controls (16%; OR 2.5 [95%CI 1.1-5.7]; **Figure 1A**). Within the axSpA group, no difference was observed between nr-axSpA and AS (**Figure 1B**). Furthermore, no associations were observed with markers of systemic or gut inflammation, whereas the presence of IBS symptoms was significantly more frequent among patients with higher disease activity (OR 2.2 [95%CI 1.1-4.5] for ASDAS-CRP ≥ 2.1 vs. <2.1), in females (OR 3.0 [1.5-5.8] vs. men), among NSAID users (OR 2.3 [1.1-4.6] vs. non-users), and in patients fulfilling fibromyalgia criteria (OR 3.0 [1.0-8.6] vs. not); **Figure 1B**). All patient-reported outcomes, but not evaluator's VAS global, were significantly worse in patients reporting IBS symptoms (**Table**).

Statistical comparisons by logistic regression, adjusting for sex and age (or only for age regarding the sex analysis). Missing data ranging from 0-14%. IBS symptoms assessed by the ROME III criteria. IBS, Irritable bowel syndrome; AxSpA, Axial spondyloarthritis; nr-axSpA, Non-radiographic axial spondyloarthritis; AS, Ankylosing spondylitis; F-CRP, Fasting C-reactive protein (mg/L); ASDAS, Ankylosing spondylitis disease activity score; CRP, C-reactive protein (mg/L); NSAID, Non-steroidal anti-inflammatory drug; DMARD, Disease-modifying anti-rheumatic drug.

	No IBS symptoms n=127	IBS symptoms n=55	p-value *
VAS global (mm)	30 (25)	44 (25)	0.010
VAS pain (mm)	30 (26)	43 (26)	0.020
VAS fatigue (mm)	32 (27)	50 (27)	0.001
EQ-5D utility †	0.75 (0.22)	0.61 (0.30)	0.004
BASFI	1.8 (2.2)	2.9 (2.2)	0.016
BASDAI	2.6 (2.1)	4.3 (2.1)	<0.001
Evaluator's VAS global (mm)	16 (14)	19 (14)	0.569

Values are mean (SD). * Adjusted for sex and age by ANCOVA. † UK preference set. Missing data ranging from 3-9%.

Conclusion: In axSpA patients without an IBD diagnosis, gut symptoms meeting IBS criteria were twice as common as in healthy controls. While IBS symptoms do not appear to be driven by subclinical gut inflammation or systemic inflammation, the associations with criteria-assessed fibromyalgia, female sex, and worse levels of patient-reported outcomes indicate a link to central pain sensitization, although side effects of NSAIDs may also play a role.

REFERENCES

- [1] Lovell RM, et al. Clin Gastroenterol Hepatol. 2012;10:712-21.
- [2] Drossman DA. Gastroenterology. 2006;130:1377-90.
- [3] Wolfe F, et al. Arthritis Rheum. 1990;33:160-72.

Acknowledgement: Miriam Walsh Ingelström, research nurse.

Disclosure of Interests: Johan K Wallman Consultant for: Consultant for AbbVie, Celgene, Eli Lilly, Novartis, and UCB Pharma., Elisabeth Mogard: None declared, Jan Marsal Grant/research support from: Grant/research support from AbbVie, Ferring, and Pfizer., Consultant for: Consultant for AbbVie, BMS, Ferring, Hospira, Janssen-Cilag, MSD, Otsuka, Pfizer, Sandoz, Svar Life Science, Takeda, Tillotts, and UCB Pharma., Kristofer Andréasson: None declared, Anna Jöud: None declared, Mats Geijer Consultant for: Consultant for AbbVie, Novartis, and Pfizer., Lars Erik Kristensen Grant/research support from: UCB, Biogen, Janssen Pharmaceuticals, and Novartis, Consultant for: Consultant for AbbVie, Amgen, Biogen, BMS, Celgene, Eli Lilly, Janssen Pharmaceuticals, MSD, Novartis, Pfizer, Roche, Sanofi, and UCB Pharma., Speakers bureau: Pfizer, AbbVie, Amgen, UCB, BMS, Biogen, MSD, Novartis, Eli Lilly and Company, and Janssen Pharmaceuticals, Elisabet Lindqvist: None declared, Tor Olofsson: None declared

DOI: 10.1136/annrheumdis-2019-eular.956

SAT0356

DACTYLITIS IN EARLY SPONDYLOARTHRITIS. DATA FROM THE DESIR COHORT

Daniel Wendling¹, Clément Prati¹, Alain Saraux², Anna Moltó³, Thao Pham⁴, Maxime Dougados³, Xavier Guillot⁵. ¹CHRU, Rheumatology, Besançon, France; ²CHU, Rheumatology, Brest, France; ³Hopital Cochin, Rheumatology, Paris, France; ⁴CHU, Rheumatology, Marseille, France; ⁵CHU Réunion, Rheumatology, Saint Denis de la Réunion, France

Background: Dactylitis is a particular feature shared across the several phenotypical forms of spondyloarthritis (SpA), part of the classification criteria. There are only few data available about impact of dactylitis in early stage of SpA, and factors associated with the presence/history of dactylitis.

Objectives: To study, at baseline and after 5 years in the DESIR cohort, the presence/history of dactylitis in an attempt to evaluate frequency of dactylitis in SpA and to look at the factors associated with presence of dactylitis.

Methods: DESIR is a prospective observational cohort of patients with recent onset (less than 3 years) inflammatory back pain, beginning before 50 years, suggestive of axial SpA. All available factors in the database (clinical, biological, imaging and medico economic) were compared between patients with and without past or present dactylitis at baseline (for categorical variables : odds-ratio +/- 95% CI and chi-square/Fisher tests, for continuous variables : unpaired t-tests/Mann-Whitney), by uni and then multivariate analysis(logistic regression). Significance: p less than 0.05.

Results: At baseline, 708 patients were analyzed. 97 had a past history or a concomitant dactylitis [prevalence 13.7% (CI 95% : 11.6 – 16.2)]. Dactylitis occurred before axial symptoms in 41.3% and before any other symptom in 14.1% of the cases. By univariate analysis, dactylitis was significantly associated with history of arthritis, enthesitis, psoriasis, with elevated CRP and ESR, enthesitic and arthritis scores, BASDAI, ASDAS, BASFI, SF-36, HAQ, ASQoL, shorter disease duration, systemic and local steroids use, and with lower structural damage (sacro iliac, spine). Table shows the result of the multivariate analysis at baseline.