Disclosure of Interests: Nuria Barbarroja Puerto Grant/research support from: ROCHE and Pfizer., Speakers bureau: ROCHE and Celgene., Iván Arias de la Rosa: None declared, Carmen Torres-Granados: None declared, Maria del Carmen Alvarado-Aguilera: None declared, Gómez García Ignacio: None declared, Isabel Áñón Oñate: None declared, María José Pérez Galán: None declared, Desiree Ruiz: None declared, Alejandra M. Patiño-Trives: None declared, María Luque-Tévar: None declared, Eduardo Collantes Estevez Grant/research support from: ROCHE and Pfizer, Speakers bureau: ROCHE, Lilly, Bristol and Celgene, Chary Lopez-Pedrera Grant/ research support from: ROCHE and Pfizer., Alejandro Escudero Contreras Grant/research support from: ROCHE and Pfizer, Speakers bureau: ROCHE, Lilly, Bristol and Celgene., María Dolores López Montilla Speakers bureau: Celgene

DO: 10.1136/annrheumdis-2020-eular.5447

THU0382

ARTICULAR MANIFESTATIONS IN PATIENTS WITH INFLAMMATORY BOWEL DISEASES TREATED WITH ANTI-TNF

L. Cachen1, G. Nocturne1, M. Collins2, A. Meyer2, F. Carbonne2, X. Mariette1, R. Seror1.
1Hopital Bicêtre, Université Paris-Sud, Rheumatology, Le Kremlin-Bicêtre, France; 2Hopital Bicêtre, Université Paris-Sud, Gastroenterology, Le Kremlin-Bicêtre, France

Background: Articular manifestations are the most frequent extra-digestive manifestations of Inflammatory Bowel Disease (IBD). Anti-TNF have proved to be as effective on articular symptoms as on IBD’s ones, but have been suspected to induce paradoxical articular manifestations.

Objectives: The aims of this study were to describe the frequency, the type and the management of all articular manifestations occurring in patients treated with anti-TNF for IBD and to look for factors associated with their occurrence.

Methods: In this retrospective monocentric study, we included all patients who received an anti-TNF for an IBD in our tertiary hospital referent for inflammatory rheumatic and bowel diseases. We searched for all incident articular manifestations occurring during treatment with anti-TNF, including new or recurrent articular manifestations. Characteristics of patients with paradoxical articular manifestations (defined as inflammatory articular symptoms occurring while IBD was in remission, without immunization against anti-TNF) were compared to that of patients without articular manifestations to identify factors associated with their occurrence.

Results: Through a systematic search of all IBD patients seen in our tertiary hospital between February 2013 and May 2017, we identified 442 patients (36.2±15 years, 50.5% men) who had ever received an anti-TNF for IBD: Crohn’s disease (n=277), ulcerative colitis (154) and undetermined colitis (n=11). 74 (16.7%) had already a history of inflammatory articular manifestations including 37 patients with a diagnosis of spondyloarthropathy (SpA) made before anti-TNF’s beginning. Among them, 115 (26.1%) patients developed a new articular manifestation after a mean of 20 (±22) months of treatment: mechanical in 56 (12.6%) and inflammatory in 59 (13.3%). Within patients with new inflammatory articular manifestations: 39% were paradoxical, 27% were concomitant of an IBD flare, 27% were associated to an immunization against anti-TNF, 3% were induced by other outcomes assessed (Table 1).

Prior MRI sacroiliitis, % 149 75.7 68.0 0.36
Enthesitis, % 158 80.5 85.2 0.53
HLA-B27, % 149 75.7 68.0 0.36
Enthesitis, % 158 80.5 85.2 0.53
BASDAI 148 5.3±2.0 6.3±1.6 0.003
ASDAS 140 3.3±1.0 3.4±0.7 0.29
ASDAS 140 3.3±1.0 3.4±0.7 0.29

Conclusion: Inflammatory articular manifestations occurred in about 13% of patients treated with anti-TNF for IBD. More than a quarter were linked to an immunization against anti-TNF, which has to be searched in this situation. Less than half of them (39%) were paradoxical. In most of cases, they were transitory and did not require anti-TNF’s discontinuation. The only predictive factor of paradoxical articular manifestations was having a history of SpA.

References:
[1] Thiebault H, et al. Paradoxical articular manifestations in patients with inflammatory bowelle diseases treated with infliximab. Eur J Gastroenterol Hepatol, 2016.

[2] Fiorino G et al. Paradoxical immune-mediated inflammation in inflammatory bowel disease patients receiving anti-TNF-a agents. Autoimmun Rev, 2014.

Disclosure of Interests: Laurie Cachen: None declared, Gaetane Nocturne: None declared, Michael Collins Consultant of: Abbvie, Takeda, MSD, Celgene, Antoine Meyer: None declared, Frank Carbonnel Consultant of: Msd Abbvie Amgen, Xavier Mariette Consultant of: BMS, Gilead, Medimmune, Novartis, Pfizer, Servier, UCB, Raphaële Seror Consultant of: BMS UCB Pfizer Roche

DO: 10.1136/annrheumdis-2020-eular.2563

THU0383

GENDER DIFFERENCES IN NONRADIOGRAPHIC AXIAL SPONDYLOARTHRITIS: FROM CLINICAL CHARACTERISTICS TO EFFECTIVENESS OF TNF INHIBITORS

R. Neueschwander1, M. Hebeisen2, R. Micheroli1, K. Buergi2, P. Exer3, K. Niedermann Schneider4, M. Nissen2, A. Scherer2, A. Ciornea5.
1University Hospital Zurich, Switzerland; 2UCM Foundation, Zurich, Switzerland; 3University Hospital Zurich, Dep. of Rheumatology, Zurich, Switzerland; 4Rheuma-Basel, Basel, Switzerland; 5HAK, Wintertthur, Switzerland; 6HUG, Geneva, Switzerland

Background: While a male predominance is found in radiographic axial spondyloarthritis (r-axSpA), an equal male to female distribution was repeatedly reported for the nonradiographic disease form (nr-axSpA). Some important differences in clinical manifestations and response to treatment with tumor necrosis factor inhibitors (TNFi) between the sexes have been delineated for r-axSpA. It remains unclear, whether comparable sex differences can be assumed for nr-axSpA. Indeed, existing data on gender differences in nr-axSpA is limited to subgroups and is particularly scarce regarding effectiveness of treatment.

Objectives: To investigate sex differences with regard to demographics, clinical manifestations and response to TNFi in nr-axSpA after exclusion of patients with co-morbidity fibromyalgia (FM).

Methods: Response to a first TNFi was assessed in 85 women and 78 men with nr-axSpA and without concomitant FM in the Swiss Clinical Quality Management Cohort. The primary outcome was the proportion of patients achieving a 40% improvement in the Assessment of Spondyloarthritis international Society criteria (ASAS40) at 1 year. Additional response outcomes were evaluated as secondary outcomes. Patients having discontinued TNFi were considered non-responders. Logistic regression analyses were adjusted for baseline differences (Bath Ankylosing Spondylitis Disease Activity Index (BASDAI), Maastricht ankylosing spondylitis enthesitis score (MASES), diagnostic delay, body mass index (BMI)).

Results: Baseline characteristics of women and men are shown in Table 1. Significant differences were restricted to diagnostic delay, BASDAI, MASES and BMI. An ASAS40 response was achieved by 17% of women and 38% of men (OR 0.34, 95% CI 0.12; 0.93, p=0.02). A lower response rate in women was confirmed in the adjusted analysis (OR 0.19, 95% CI 0.05; 0.62, p=0.005) as well as for the other outcomes assessed (Table 2).

Table 1. Baseline characteristics of women and men with nr-axSpA starting a first TNFi (after exclusion of patients with co-morbid FM).

| Parameter | N | Men | Women | p |
|-----------|----|-----|-------|---|
| Age, years | 163 | 35.6±10.8 | 39.1±11.4 | 0.10 |
| Age at onset, years | 162 | 27±8.6 | 28.1±8.5 | 0.66 |
| Diagnostic delay, years | 162 | 4.1±7.6 | 7.8±9.9 | 0.005 |
| HLA-B27 positive, % | 149 | 75.7 | 68.0 | 0.36 |
| Prior MRI sacroiliitis, % | 154 | 70.8 | 68.3 | 0.86 |
| BASDAI | 148 | 5.3±2.0 | 6.3±1.6 | 0.003 |
| ASDAS | 140 | 3.3±1.0 | 3.4±0.7 | 0.29 |
| Elevated CRP, % | 154 | 42.5 | 38.3 | 0.62 |
| BASFI | 148 | 3.6±2.4 | 3.8±2.5 | 0.54 |
| BASMI | 141 | 1.2±1.1 | 1.4±1.2 | 0.42 |
| EQ-5D | 141 | 5.8±2.2 | 5.8±1.8 | 0.37 |
| Peripheral arthritis, % | 159 | 41.6 | 52.4 | 0.20 |
| Enthesitis, % | 158 | 80.5 | 85.2 | 0.53 |
| MASES | 157 | 3.3±1.0 | 3.9±1.3 | 0.002 |
| csDAMRs ever, % | 163 | 34.6 | 42.4 | 0.34 |
| Taking NSAIDs, % | 150 | 92.9 | 86.2 | 0.29 |
| Current smoking, % | 139 | 28.3 | 22.8 | 0.55 |
| BMI | 160 | 25.9±4.2 | 24.0±4.4 | <0.001 |