GENDER DIFFERENCES IN DISEASE STATUS, QUALITY OF LIFE AND TREATMENT PATTERNS AMONG AXIAL SPONDYLOARThRITIS PATIENTS: FINDINGS FROM A GLOBAL SURVEY

Irene van der Horst-Bruinsma, Theresa Hunter, Rebecca Bolce, Elizabeth Holdsworth, NICOLA Boots, Amsterdam University Medical Center, Amsterdam, Netherlands; *Eli Lilly and Company, Indianapolis, United States of America; **Adelphi Real World, Macclesfield, United Kingdom

Background: Axial spondyloarthritis (axSpA) is a chronic inflammatory disease of the axial skeleton associated with impaired health-related quality of life (HRQoL) and disability. 1,2 Gender differences in clinical and quality of life (QoL) measures have been demonstrated in axSpA (ankylosing spondylitis (AS) and non-radiographic axSpA (nr-axSpA)), but not well quantified in a real-world clinical setting.

Objectives: To compare the clinical characteristics, QoL and treatment patterns of male and female AS and nr-axSpA patients from a multinational survey.

Methods: Data from a cross-sectional, multi-national survey conducted in Australia, Canada, France, Germany, Italy, Japan, Spain, United Kingdom and the United States were analyzed. Demographics, disease status and medication use were reported by the physician, while work disability and QoL measures were reported by the patient. Gender comparison analyses were conducted for AS and nr-axSpA subgroups.

Results: Data from 432 physicians (407 rheumatologists, 13 orthopedists, 12 internists) 2,300 AS patients (male: 1,673[72.74%]; female: 627[27.26%]), and 2,099 nr-axSpA patients (male: 1,146 [54.60%]; female: 953 [45.40%]) were included in this analysis. Male AS and nr-axSpA patients were more likely to be younger (AS: p=0.0141; nr-axSpA: p=0.1327), smokers (AS: p<0.0001; nr-axSpA: p<0.0001), have full-time employment (AS: p<0.0001; nr-axSpA: p<0.0001), and currently be in remission (AS: p<0.0001; nr-axSpA: p<0.0001) when compared to female AS and nr-axSpA patients. Male AS patients were more likely to be prescribed biologic treatment when compared to female AS patients (p=0.0070); however, rates of biologic use between male and female nr-axSpA patients were comparable (p=0.2148). Male AS and nr-axSpA patients also had lower Bath Ankylosing Spondylitis Disease Activity Index (BASDAI) scores than female patients (AS: p<0.0001; nr-axSpA: p=0.0001). In addition, female AS and nr-axSpA patients were more likely to report worse QoL and more activity impairment, as assessed by the Ankylosing Spondylitis Quality of Life (ASQoL) (AS: p<0.0001; nr-axSpA: p<0.0001). Assessment of SpondyloArthritis international Society Health Index (ASAS HI) (AS: p<0.0001; nr-axSpA: p<0.0001) and Work Productivity and Activity Impairment (WPAI) (AS: p<0.0006; nr-axSpA: p=0.0002). Male AS and nr-axSpA patients were more likely to have hip joint involvement, compared with sporadic patients (58.6% VS 9.6%, p<0.01). 186 (70.5%) patients suffered from morning stiffness with median time of 61.6 minutes. Degree of morning stiffness was 3.5±3.0. Sporadic patients had more morning stiffness than familial patients (p=0.007). There was no difference in the presentation of peripheral arthritis (p>0.05). Mean BASDAI score was 3.6±2.0, and mean BASFI score was 1.4±1.8. The BASDAI score was slightly higher in sporadic group (p=0.027).

Conclusion: Familial AS patients had more hip joint involvement, less morning stiffness and an earlier disease onset, especially in male patients, compared with sporadic patients.

Disclosure of Interests: None declared


SAT0334 DOES DEPRESSION PREDICT FUTURE DISEASE STATUS AND IMPROVEMENTS IN DISEASE PARAMETERS? RESULTS FROM THE COMPLETE STUDIES, A CANADIAN REAL WORLD OBSERVATIONAL COHORT

Majed Khraishi, Valencia P. Remple, Louis Bessette. 1Memorial University of Newfoundland, St. John’s, Canada; 2AbbVie Corporation, Montreal, Canada; 3Laval University, Centre Hospitalier de l’Université Laval, Quebec, Canada

Background: Depression is a common comorbidity in rheumatic diseases such as Psoriatic Arthritis (PsA) and Ankylosing Spondylitis (AS), whereby it is associated with increased disease activity, decreased functionality, and lower persistence with treatment.

Objectives: The objective of this analysis was to assess if baseline depression in Canadian patients with PsA or AS predicts future disease status and improvement in disease parameters.

Methods: COMPLETE is a Canadian observational cohort of anti-TNF naïve adults with PsA and AS who require a change in their treatment. 365 patients analyses were performed for each disease group. Depression was defined as BDI score ≥20 (or use of anti-depressants and/or anxiolytic medication). Multivariate logistic regression was used to assess the
CLINICAL COURSE OF ANKYLOSING SPONDYLITIS (AS) IN PREGNANCY: INTERIM DATA FROM PROSPECTIVE STUDY

Olga Krichevskaya,1,2 Zuleykhon Gandaloeva,2 Anastasiya Demina,3 Tatiana Dubinina,4,5 V. A. Nasonova Research Institute of Rheumatology, Medical social research laboratory, Moscow, Russian Federation; 2V. A. Nasonova Research Institute of Rheumatology, Moscow, Russian Federation

Objectives: To study the dynamics of clinical signs, AS activity and patients’ functional status during gestation.

Methods: 19 pregnant females with confirmed AS based on modified NY criteria (1984) were included. Patients’ mean age was 32.2±1.1y, mean age at AS diagnosis 22.2±3.1y, mean disease duration was 147±20.7 months. Control visits were scheduled at 10-11, 20-21 and 31-32 weeks of pregnancy. BASDAI and ASDAS-CRP calculator were used to assess AS activity, while patients’ functional status was assessed using BASFI and BASMI scores, and MASES score was used for evaluation of enthesitis.

Results: Pregnancy outcomes included 18 full-term births at 37.6±1.1 weeks of gestation, and a non-developing pregnancy at 18 weeks in one case. Newborns’ weight – 3516±17g, length – 49±2 cm, Apgar score 8-10.

Inflammatory low back pain at conception was reported by 78.9% of participants with mean pain intensity 2.2±0.4 scores by NRS. Pain during pregnancy was observed in 95% of all patients, its intensity increased by the II trimester (4.6±0.7) and persisted at the same level in the III trimester (p<0.05 between conception and II & III trimesters). Patients reported changing pain patterns by the III trimester: 55.5% noticed pain improvement at rest, and 61.1% indicated exacerbation of pain after physical exercise. Enthesitis rates and intensity were also increasing in the course pregnancy: MASES score was higher in the III trimester (2.3±0.5) vs I trimester (0.4±0.22, p<0.05). Meanwhile the rates of AS non-axial and non-skeletal manifestations were not changing during gestation. BASDAI score was increasing from the moment of conception (1.7±0.3) until the II trimester (3.3±0.5, p<0.05), staying thereafter at the same level in the III trimester. Multivariate regression revealed BASDAI score (R^2=0.7) and low back pain (R^2=0.9) at conception, as well as biological therapy at 3 months prior to conception (R^2=0.7) as orchestrated predictors of relevant BASDAI score in III trimester. During all pregnancy the BASDAI score was predetermined by assemblage of low back pain intensity (β=0.6), fatigue (β=0.6), and enthesitis-associated pain (β=0.3). Increasing fatigue (by 68.5%), and low back pain (by 24.1%) generated BASDAI score increment by the end of the I trimester. While during the II trimester further increase in BASDAI score was provided by exacerbation of enthesitis (30.7% increment), and back pain (27% increment). ASDAS-CRP score was relapsing stable throughout gestation (OR: 0.51, p=0.021) during treatment. In these analyses, positive HLA B27 status was also identified as a significant positive predictor of either outcome (OR: BASDAI LDA: 1.91, p=0.016; OR: BASFI LDA: 1.98, p=0.029), while older age was identified as a negative predictor of BASFI LDA achievement (OR: 0.98, p=0.044). Similarly, patients with depression experienced significantly lower improvements in BASDAI (LSM: -1.72 vs. -2.44; p<0.007), and BASFI scores (-1.46 vs. -2.02; p=0.029) compared to those without depression.

Among patients with PsA, presence of depression appeared to be associated with lower odds of achieving DAS28 remission (OR: 0.35, p=0.070). No association was observed between presence of depression and DAPSA LDA, DAS28 LDA or remission, and BSA-3%. In terms of disease improvement, significant lower improvement in DAPSA score (LSM: -11.00 vs. -14.66, p=0.047) and SF-12 MCS (LSM: -3.01 vs. 4.36; p=0.007) were observed among patients with depression.

Conclusion: A significant proportion of AS and PsA patients suffer from depression. Baseline depression seems to negatively affect treatment outcomes in both AS and PsA patients. Whether this is due to differences in the assessment of patient-reported outcomes or due to physiological differences remains to be confirmed.

Acknowledgement: The authors wish to acknowledge JSS Medical Research for statistical analysis, medical writing and editorial assistance during the preparation of this abstract.

Disclosure of Interests: Majed Khrisht Consultant for: AbbVie, Speakers bureau: AbbVie, Valencia P. Remple Shareholder of: AbbVie, Employee of: AbbVie, Louis Bessette Grant/research support from: Amgen, BMS, Janssen, Roche, UCB, AbbVie, Pfizer, Merck, Celgene, Sanofi, Lilly, Novartis, Consultant for: Amgen, BMS, Janssen, Roche, UCB, AbbVie, Pfizer, Merck, Celgene, Sanofi, Lilly, Novartis, Speakers bureau: Amgen, BMS, Janssen, Roche, UCB, AbbVie, Pfizer, Merck, Celgene, Sanofi, Lilly, Novartis