for the % of work time missed. PtGA scores were higher than PhGA, in each group and gender.

Conclusion: At diagnosis, SpA patients perceive a slightly higher disease burden than assessed by Physicians. For PROs other than BASDAI, AxSpA reported a worse impact than pSpA. Overall, women showed a higher disease impact than men.

References: [1]Michelsen B. et al. PLoS ONE 2015; 10(4): e0123582.

Disclosure of Interests: Rosario Foti Speakers bureau: Speaker bureau honoraria from Eli Lilly, Sanofi, MSD, Janssen, AbbVie, Bristol-Myers Squibb, Celgene, Roche, Consultant of: Consultancy fees from Eli Lilly, Sanofi, MSD, Janssen, AbbVie, BMS, Celgene, Roche, Gabriella Cardinale: None declared., Luisa Costa: None declared., Franco Franceschini: None declared., Francesco Ciccia Speakers bureau: Speaker bureau honoraria from AbbVie, Abiogen, Bristol-Myers Squibb, Celgene, Janssen, Eli Lilly, Pfizer, Novartis, Roche, Consultant of: Consultancy fees from Novartis, Pfizer, Janssen, Eli Lilly, Roche, Celgene, Grant/research support from: Grant/research support from Pfizer, Novartis, Celgene, Janssen, Roche, Antonio Marchesoni: None declared., Giuliana Guggino Speakers bureau: Speaker bureau honoraria from Celgene, Sandoz, Pfizer, Grant/research support from: Grant/research support from Pfizer, Celgene, Maurizio Rossini: None declared., Ennio Lubrano Di Scorpaniello: None declared., Bruno Frediani: None declared., Maria Sole Chimenti: None declared., Gerolamo Bianchi: None declared., Giuseppe Galfo: None declared., Silvia Marelli Employee of: Employee of Janssen-Cilag SpA Italy, Ennio Favalli Speakers bureau: Consulting fees and/or speaking engagements from AbbVie, Bristol-Myers Squibb, Lilly, Merck Sharp & Dohme, Pfizer, Galapagos, Sanofi-Genzyme, and UCB.

DOI: 10.1136/annrheumdis-2021-eular.624

AB0489 CORRELATION BETWEEN DISEASE ACTIVITY AND SERUM TNF-ALPHA LEVELS IN PATIENTS WITH ANKYLOSING SPONDYLITIS

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Background: Ankylosing spondylitis (AS) is an immune-mediated rheumatic disease, it belongs to the spectrum of the axial spondyloarthritis. Several elements are important for the pathogenesis of AS - they include interactions in the context of a specific genetic origin between the intestinal microbiome, innate immunity, lymphoid cells and anatomical structures, which are the entheses of the axial skeleton and peripheral joints. The main mediators of the inflammatory process are TNF- α , IL-17 and IL-17A.

Objectives: To study the level of TNF-alpha in the serum of patients with ankylosing spondylitis and to assess its relationship with the indices of disease activity before starting therapy with TNF-alpha blockers and in the dynamics after initiation of treatment.

Methods: The present study included 50 patients with ankylosing spondylitis and 31 healthy controls similar in age, sex, and BMI. Clinical and non-clinical methods of examination and evaluation were used for proper assessment and follow-up of patients. The disease activity indices that were used were BASDAI and ASDAS. Statistical analysis was performed with the IBM SPSS program, v.24.. To prove the relationship between the level of TNF-alpha in the serum of patients and disease activity, a correlation analysis of Spearman Rho was used.

Results: The level of TNF- α in patients with AS was highest before treatment initiation with biologics, 89.77 ± 36.89 pg / ml, and was significantly higher than that of healthy controls. At the next visit, the TNF- α level decreased to 27.59 ± 23.88 pg / ml, the difference being significant from baseline. 24 months after initiation of treatment with biological therapy average level of TNF- α in patients with AS did not differ reliably from its levels in 6 and 12 month after initiation of treatment, respectively, 22.36 ± 22.38 pg/ml, 19.29 ± 21.07 pg/ml. The level of this cytokine significantly correlates with the activity of the disease, measured by the activity indices BASDAI, ASDAS.

Conclusion: The level of the pro-inflammatory cytokine TNF-alpha is significantly higher in patients with ankylosing spondylitis and significantly correlates with the disease activity in them, measured by the respective indices (BASDAI, ASDAS).

REFERENCES:

- Arends S., N. Lebbink, A. Spoorenberg et al., "The formation of autoantibodies and antibodies to TNF- α blocking agents in relation to clinical response in patients with ankylosing spondylitis", Clin Exp Rheumatol, 2010, 28: 661- 668.
- Bal A., E. Unlu, G. Bahar et al., "Comparison of serum IL-1 beta, sIL-2R, IL-6, and TNF-alpha levels with disease activity parameters in ankylosing spondylitis." Clin Rheumatol, 2007, 26: 211-215.

Disclosure of Interests: None declared.

DOI: 10.1136/annrheumdis-2021-eular.931

AB0490 IMPACT OF SPONDYLOARTHRITIS ON WORK PRODUCTIVITY: A REAL LIFE STUDY

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Background: Work productivity of patients with spondyloarthritis is frequently affected by their disease.

Objectives: We aim to identify disease-related factors associated with poor work productivity in patients with spondyloarthritis.

Methods: A cross-sectional study was performed in patients with spondyloarthritis. Data on disease characteristics were collected as well as specific indices: Visual analogue scale (VAS) for fatigue and pain, Bath Ankylosing Spondylitis Disease Activity Index (BASDAI), Ankylosing Spondylitis Disease Activity Score with CRP (ASDAS-CRP), Bath Ankylosing Spondylitis Functionnel Index (BASFI) and Bath Ankylosing Spondylitis Metrology Index (BASMI). EuroQol-5D (EQ5D) was used to assess health-related quality of life. Work productivity was assessed by the Work Productivity and Activity Impairment scale (WPAI:SpA). Factors associated with presenteeism, absenteeism and work productivity loss were evaluated.

Results: One hundred patients were enrolled (73 men and 27 women); mean age was 43.68 ± 10.3 years. Fifty nine percent of patients were employed, 26% were off work and 15% were retired of which 8% were in early retirement. Sixty seven percent of patients had ankylosing spondylitis, 17% had rheumatism associated with inflammatory bowel disease and 16% had psoriatic rheumatism. The average disease duration was 12.24 ± 8.73 years. Mean age at onset was 33.2 ± 10 years [18-59]. The average diagnostic delay was 2.41 ± 3 years; it was more than five years in 17% of cases. Sacroiliac pain has been noted in 69 patients, lumbar or cervical stiffness in 78 patients and peripheral joint involvement in 18 cases. Thirty one percent of patients had hip joint involvement and 49% had extra-articular manifestation. Fifty percent had inflammatory biological syndrome, 63% were treated with anti-TNF α and 58% needed symptomatic treatment regularly. The mean fatigue and pain VAS was respectively 5.58 ± 2.5 and 5.56 ± 2.9 . The mean BASDAI was 4.4 ± 2.4 , the average BASFI was 4.6 ± 2.7 and the average ASDAS-CRP was 2.77 ± 1.18 . The mean BASMI was 4.4 ± 2.8 . The mean EQ5D score was 0.485 ± 0.378 . Among employed patients, mean absenteeism, presenteeism and work productivity loss was $21.8 \pm 33.13\%$, $42 \pm 32\%$ and $46.5 \pm 35.31\%$, respectively. These work outcomes were correlated to diagnostic delay ≥ 2 years ($p < 0.03$), peripheral joint involvement ($p = 0.006$), psoriasis ($p = 0.02$), inflammatory biological syndrome ($p < 0.001$), need of symptomatic treatment ($p = 0.001$), fatigue and pain VAS ≥ 4 ($p < 0.001$), BASDAI ≥ 4 ($p < 0.001$), ASDAS-CRP ≥ 2.1 ($p < 0.001$), BASFI ≥ 4 ($p < 0.001$), BASMI ≥ 4 ($p = 0.002$) and low EQ5D score ($p < 0.001$). Work productivity loss was in addition correlated to age at onset < 25 years ($p = 0.03$).

Conclusion: Active disease, reduced physical function and poorer quality of life are associated with reduced work productivity. Early diagnosis and good disease management especially fatigue and pain can potentially improve work outcomes in patients with spondyloarthritis.

Disclosure of Interests: None declared.

DOI: 10.1136/annrheumdis-2021-eular.1079

AB0491 THE IMPORTANCE OF MUSCULOSKELETAL SYMPTOM QUESTIONING IN INFLAMMATORY BOWEL DISEASES

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Background: Spondyloarthritis (SpA) occurs in up to 13% of patients with inflammatory bowel disease (IBD) (1). Early diagnosis and treatment of SpA in IBD patients prevents irreversible musculoskeletal diseases.

Objectives: The aim of this study is to emphasize the importance of questioning musculoskeletal symptoms in patients with IBD.

Methods: In the Hacettepe University Gastroenterology Clinic, patients with IBD were questioned for musculoskeletal symptoms between March 2019 and September 2020. For this purpose, a validated DETAIL questionnaire (2) consisting of six questions was asked (1. Have you ever had a finger or a toe and/or another joint swollen and painful for no apparent reason? 2. Occasionally, has an entire finger or toe becomes swollen, making it look like a 'sausage'? 3. Have you had pain in your heels? 4. Have you ever had back pain lasting at least 3 months that was not injury related? 5. Do you have low back pain in the morning and/or after resting that improves with exercise? 6. Do you wake up at night because of low back pain?). Patients with at least 1 positive out of 6 questions were consulted in the rheumatology clinic, and patients were evaluated for SpA by physical examination, laboratory, and imaging. Demographic and clinical characteristics of IBD patients with and without SpA were compared.