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THU0479 ASSOCIATION BETWEEN CENTRAL SENSITIZATION AND CLINICAL AND ULTRASONOGRAPHIC PARAMETERS IN INFLAMMATORY ARTHRITIDES

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Background: Central sensitization (CS) is an important feature of patients with chronic pain, especially rheumatoid arthritis (RA) and psoriatic arthritis (PsA) patients. CS might interfere with the clinical evaluation of inflammation. Central Sensitization Inventory (CSI) is a validated instrument for assessing central sensitization.

Objectives: We seek to investigate the inference of central sensitization (assessed with the CSI) on clinical (disease activity scores) and ultrasound parameters (US 7-joints score) in RA and PsA patients.

Methods: We conducted a cross-sectional analysis on patients with an established diagnosis of RA or polyarticular PsA. Demographic, anamnestic and clinical parameters were collected. Disease activity was measured with SDAI in RA patients and with DAPSA in PsA patients. The presence and severity of synovitis was measured with the US 7-joints score. Exclusion criteria included: diagnosis of fibromyalgia, depression and patients with PsA with enthesitis predominant and/or spondylitis subtypes. Differences between variables were analysed with t-test and ANOVA for multiple comparisons. Correlation between continuous variables was analysed with Pearson correlation. CSI was analysed either as positive\negative (threshold 40 points) or divided in four categories, i.e., subclinical (≤29), mild (30-39), moderate (40-49), severe (50-59) and extreme (≥60).

Results: We enrolled 42 patients in the study. Descriptive characteristics of the study population are presented in table 1. We found no difference in clinical parameters between diseases, sex or age. Women had a higher CSI score compared to men (mean 39.3 vs 26.7 p=0.005). We found a correlation between CSI score and DAPSA (r^2 0.39, p =0.001), number of tender joints (r^2 0.13, p=0.02) and HAQ (r^2 0.47, p<0.001) (Figure 1) while we found no correlation between CSI score and SDAI or other clinical parameters. We found a significant difference in DAPSA, tender joints count and HAQ between CSI categories (ANOVA p=0.01, p=0.02 and p<0.001 respectively). US 7-joints score was associated with SDAI (r^2 0.33, p=0.03), number of swollen joints (r^2 0.28, p=0.002) and disease duration (r^2 0.35, p<0.001) but not with DAPSA or tender joints.

Table 1. Descriptive characteristics of the study population

Age (mean, SD in years)		55.9 (12.3)
BMI		25.9 (3.9)
CSI questionnaire score (mean)		35 (16)
CSI categories (n, %)	**Subclinical**	18 (42.9%)
	Mild	9 (21.4%)
	Moderate	8 (19.0%)
	Severe	4 (9.5%)
	Extreme	3 (7.1%)
Diagnosis (n, %)	**PsA 52.4%**	9 men 13 women
	RA 47.6%	2 men 18 women
CSI score in PsA (mean, SD)		34.4 (16.5)
CSI score in RA (mean, SD)		34.8 (15.5)
CRP (median, IQR in mg/L)		1.85 (1.0-4.6)
Tender joints (mean, SD)		2 (2)
Swollen joints (mean, SD)		1 (2)
SDAI categories (n, %)	**Remission**	4 (20.0%)
	Low disease activity	8 (40.0%)
	Moderate disease activity	7 (35.0%)
	Severe disease activity	1 (5.0%)
DAPSA categories (n, %)	**Remission**	6 (33.3%)
	Low disease activity	4 (22.2%)
	Moderate disease activity	7 (38.9%)
	Severe disease activity	1 (5.6%)
US 7-joints score (mean, SD)		6 (7)
HAQ (mean, SD)		0.6 (0.6)
Prednisone equivalent (mean, SD in mg/day)		1.47 (3.2)
Biological DMARD (n, %)	**No**	15 (35.7%)
	Yes	27 (64.3%)
Conventional DMARD (n, %)	**No**	13 (31.0%)
	Yes	29 (69.0%)

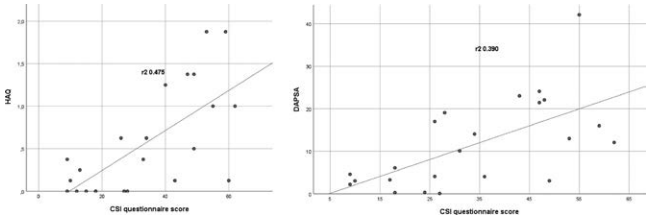

Figure 1. Correlation between DAPSA score and CSI score and between HAQ and CSI score

Conclusion: We found an association between CS and sex, functional disability, tender joints count and disease activity score in PsA patients while there was no correlation between RA disease activity and central sensitization. US 7-joints score was associated with swollen joints count, disease duration and disease activity in RA patients but not in PsA patients. In PsA patients, DAPSA might be more influenced by central sensitization, especially in female individuals.

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THU0480 EXPERIENCE USING DIFFERENT CRITERIA OF FIBROMYALGIA IN PATIENTS WITH ANKYLOSING SPONDYLITIS: 1990 AMERICAN COLLEGE OF RHEUMATOLOGY CLASSIFICATION CRITERIA VS. NEW

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Background: Fibromyalgia (FM) is a very frequent condition in patients with diseases associated with pain syndrome, such as rheumatoid arthritis (RA), ankylosing spondylitis (AS) and other chronic rheumatic diseases. FM, RA and AS has different clinical characteristics, but can share symptoms such as pain, fatigue and sleep disturbance that leads to delay in appropriation correct diagnosis [1]. For today well known many different criteria for FM: 1990 American College of Rheumatology (ACR) classification criteria, modified 2010 ACR diagnostic criteria, 2016 Fibromyalgia Diagnostic Criteria and new AAPT Diagnostic Criteria for

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Fibromyalgia. According to the literature, prevalence FM in AS patients can reach from 12.6 to 28.5%, but prevalence estimates should be interpreted with care as no data that the criteria for FM have been validated for use in patients with AS and other chronic inflammatory arthritis [1, 2]. The lack of appropriate information needs further investigation for better identification FM.

Objectives: The aim of our study was to compare the presence of FM by 1990 ACR classification criteria, modified 2010 ACR diagnostic criteria, 2016 Fibromyalgia Diagnostic Criteria and new criteria FM 2019 - AAPT Diagnostic Criteria for Fibromyalgia in AS patients.

Methods: One hundred and thirteen AS patients (19 women and 94 men) with mean age (M ± SD) 42.3±10.94 years were enrolled in the study. Diagnosis AS was established according to modified New York criteria. For FM detection were used 1990 ACR classification criteria, modified 2010 ACR diagnostic criteria, 2016 Fibromyalgia Diagnostic Criteria and AAPT Diagnostic Criteria for Fibromyalgia. All patients were asked to complete self-reported disease-related questionnaires for patients with AS.

Results: According 1990 ACR criteria, FM met in 26 patients (23%). 38.1% patients were positively screened for FM due to modified 2010 ACR diagnostic criteria, and in 31.9% patients according 2016 Fibromyalgia Diagnostic Criteria, and in 41.6% patients due to AAPT Diagnostic Criteria for Fibromyalgia. All new criteria correlated with 1990 ACR classification criteria with p<0,01: r=0.654, r=0.664, r=0.520, concordantly. Using the ROC analysis, we evaluated the sensitivity and specificity of different FM criteria in patients with AS. Our results showed high diagnostic value of all new criteria, but the most sensitive for detection FM in patients with AS were the modified 2010 ACR diagnostic criteria with sensitivity of 96% and specificity of 79%.

Conclusion: Our study results confirmed very high prevalence FM in patients with AS.The most sensitive tool for detection FM in patients with AS were the modified 2010 ACR diagnostic criteria with sensitivity of 96% and specificity of 79%.The similar percentages of FM due to different classification criteria might be a good sign in context of the validity of these criteria for AS patient.

References:

[1] Zhao, S. S., Duffield, S. J., & Goodson, N. J. (2019). The prevalence and impact of comorbid fibromyalgia in inflammatory arthritis. *Best Practice & Research Clinical Rheumatology*, 1014-23.

[2] Salaffi, F., De Angelis, R., Carotti, M., Gutierrez, M., Sarzi-Puttini, P., & Atzeni, F. (2014). Fibromyalgia in patients with axial spondyloarthritis: epidemiological profile and effect on measures of disease activity. *Rheumatology international*, *34*(8), 1103-1110.

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THURSDAY, 04 JUNE 2020

Back pain, mechanical musculoskeletal problems, local soft tissue disorders

THU0481 THE PREVALENCE OF CHRONIC MUSCULOSKELETAL PAIN IN PATIENTS WITH ULCERATIVE COLITIS IN COMPARISON TO CONTROLS FROM THE GENERAL POPULATION: A CROSS-SECTIONAL STUDY

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Background: Musculoskeletal symptoms are common in patients with ulcerative colitis (UC) but the knowledge of the prevalence of chronic regional pain (ChRP) and chronic widespread pain (ChWP) in patients with UC is scarce.

Objectives: To compare the prevalence of ChRP, ChWP and chronic pain in different body locations in patients with UC with controls from the general population and to investigate if disease activity in UC is related to chronic pain.

Methods: From a national inflammatory bowel disease (IBD) Register (SWIBREG), all living patients with a confirmed UC diagnosis, aged 20-74 years (n=1134), who were residents in two counties in Northern Sweden were posted a validated questionnaire. Persons from the general population from a previous study (1) using the same questionnaires was used as controls (n=3867). The questionnaire comprises demography, history of pain and body localisation of pain. The disease activity of UC was measured by Patient- Simple Clinical Colitis Activity Index (P-SCCAI). ChRP and ChWP was defined as having pain for at least three months the last year. ChWP was defined as having pain on both left and right side of the body and both above and below the waist, and in the axial part of the body.

Results: The response rate for the patients with UC was 49.0% and for the controls 62.7%. The patients were older than the controls (mean age 52.8 vs 46.5 years; p<0.001) but there was no difference in gender (men 50.5% vs 46.7%; p=0.086). The reported prevalence of any chronic pain, ChRP and ChWP was higher in patients with UC versus controls (54.4% vs 39.5%; p<0.001; 32.5% vs 24.2%; p<0.001 and 19.4% vs 12.5%; p<0.001). The differences for reported chronic pain (any pain) was seen in all age groups. The patients with UC reported significantly more pain in the regions "lower back", "hip/upper leg" and "lower leg/foot" compared to controls (Table). The patients with P-SSCAI >5 (n=121) reported more ChWP than patients with P-SSCAI <5 (n=426) (46.3% vs 12.7%; p<0.001) and controls (46.3% vs 12.5%; p<0.001) with significant differences compared to controls in all body regions. No significant difference in ChWP was found between patients with P-SSCAI <5 and controls (12.7% vs 12.5%; p=0.917). There was a slightly higher prevalence of reported any chronic pain between patients with P-SSCAI <5 and controls (46.5% vs 39.5%; p=0.007).

Table. The prevalence of reported chronic musculoskeletal pain in different body regions in patients with ulcerative colitis and controls.

Body region	Ulcerative colitis (n = 556)	Controls (n = 2425)	P-value
Anterior chest	32 (5.8 %)	115 (4.7 %)	0.2
Neck	119 (21.4 %)	460 (19.0 %)	0.3
Dorsal chest	63 (11.3 %)	236 (9.7 %)	0.3
Lower back	168 (30.2 %)	557 (23.0 %)	0.0008
Shoulder/upper arm	126 (22.7 %)	482 (20.0 %)	0.2
Elbow/lower arm/hand	103 (18.5 %)	405 (16.7 %)	0.4
Hip/upper leg	113 (20.3 %)	319 (13.1 %)	<0.0001
Knee	95 (17.1 %)	335 (13.8 %)	0.07
Lower leg/foot	97 (17.4 %)	300 (12.4 %)	0.003

Conclusion: Patients with UC reported more chronic pain than controls from the general population, especially from the lower back and hip region. Higher UC disease activity was associated with more pain in all body regions.

References:

[1] Bergman S, Herrstrom P, Hogstrom K, Petersson IF, Svensson B, Jacobsson LT. Chronic musculoskeletal pain, prevalence rates, and sociodemographic associations in a swedish population study. J Rheumatol 2001;28:1369-77.

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THURSDAY, 04 JUNE 2020

Pain in rheumatic diseases, including fibromyalgia

THU0482 PAIN CATASTROPHIZING AND DISEASE PERCEPTION DIFFERS BETWEEN NORWEGIAN AND FINNISH OUTPATIENT CLINIC PSORIATIC ARTHRITIS PATIENTS DESPITE COMPARABLE OUTCOMES ON OBJECTIVE MEASURES OF DISEASE

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Background: Pain catastrophizing (the tendency to describe a pain experience in more exaggerated terms than the average person, to ruminate on it more, or to feel more helpless about it), has been associated with reduced likelihood of achieving remission in rheumatoid arthritis patients (1). Cultural and societal differences between countries may have an impact on outcome such as patients' perceptions of disease.

Objectives: To compare patient pain catastrophizing, patient perception of disease, objective measures of disease and treatment in psoriatic arthritis (PsA) patients between a Norwegian and a Finnish outpatient clinic. Further, to explore for associations with pain catastrophizing.

Methods: All PsA patients followed at the outpatient clinics are routinely monitored using a structured medical support system (GoTreatIT® Rheuma). Data collection, done in 2018-19 is listed in the table.

Patients reported their pain catastrophizing answering the two questions, "When I feel pain it is terrible and I feel it is never going to get any better. When I feel pain, I can't stand it anymore." Each question is scored 0-6 and mean value of both is calculated. Pain catastrophizing was defined if mean score ≥4.

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