using the Paykel's Interview for Recent Life Events. Pain was assessed using a visual analogue scale (VAS). The Fibromyalgia Impact Questionnaire (FIQ) was also used.

Results: Seventy-seven patients were originally screened, but seven were excluded because of current depressive episode or having a ZSDS of ≥ 60 or categorized as minimizers of childhood maltreatment at CTQ. The final analysis therefore involved 70 patients, all Caucasians: 30 with PFM and 40 with AR+FM. All patients with PFM and 38 (95%) of the 40 with AR+FM were treated for FM symptoms (antidepressants, pregabalin). The lifetime rates of MDD were significantly higher in PFM vs AR+FM (76.7 % and 40% respectively, $p=0.003$), as well as the rates of PD (50 % and 15% respectively, $p=0.003$), whereas there was no difference in PTSD rates. The PFM patients reported significantly higher levels of physical ($p=0.020$) and sexual abuse ($p=0.011$) and physical neglect ($p<0.001$), whereas there was no between-group difference in the levels of emotional abuse ($p=0.912$) and neglect ($p=0.542$); consistently, the proportion of sexually abused ($p=0.005$) or physically neglected patients was also higher in the PFM group ($p=0.023$). The rates of emotional neglect were high in both groups, without any significant difference between them. The vast majority of AR+FM patients (90%) said that only event occurring in the year preceding the onset of FM was RA, whereas the PFM patients mainly reported non-physical events (36%, particularly the ending of a relationship, or working or financial problems) or no event at all (40%), ($p<0.001$). Binary logistic regression used to identify the factors predicting association of PFM/AR+FM status, showed an association with lifetime major depression, life events preceding the development of FM, and BMI ($p<0.05$ at all).

Conclusion: PFM and SFM differ in psychiatric co-morbidities and environmental adversities, suggesting that the putative common pathogenetic condition of CS may develop through different pathways.

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THU0456

THE "JOINT CRITERIA" FOR FIBROMYALGIA DIAGNOSIS IN RHEUMATOID ARTHRITIS PATIENTS: RELIABILITY COMPARED TO THE 2010 ACR CLASSIFICATION CRITERIA FOR FIBROMYALGIA

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Background: A significant proportion of rheumatoid arthritis (RA) patients have concomitant fibromyalgia (FM) (1). Associated FM diagnosis in RA patients can determine worse treatment outcomes compared to patients without FM (1). A difference between tender joint count (TJC) and swollen joint count (SJC) ≥ 7 , also named the "joint criteria" was proposed as being diagnostic for FM in patients with RA. The "joint criteria" were validated against the 1990 ACR Classification Criteria for FM and are easy to apply to patients with RA (2). Since then, the 2010 ACR Classification criteria for FM, which include somatic symptoms besides pain sensitivity, were developed and validated.

Objectives: We aimed to determine the reliability of the joint criteria for fibromyalgia in RA compared to the ACR 2010 Classification Criteria for FM and to compare RA patients diagnosed with FM (FRA) to those without FM in terms of clinical variables.

Methods: We performed a cross-sectional study on RA patients who presented in our department during a 3 months period. Tender joint count (TJC), swollen joint count (SJC), patient global assessment of disease activity (PGA) were determined. DAS28 scores were calculated using CRP. We applied the 2010 ACR Classification Criteria and the joint criteria for FM diagnosis. Kappa agreement coefficient was used to determine the reliability of the joint criteria against the 2010 ACR Classification Criteria for FM in patients with RA. Differences between groups were assessed using Mann-Whitney U test for numerical data or Chi square test for ordinal data.

Results: We included 100 consecutive RA patients, 84% female, with a mean age of 57.3(12) years and mean disease duration of 14(9) years. Twenty-four patients (24%) had associated FM according to the ACR 2010 Classification Criteria and 22 (22%) patients satisfied the joint criteria for

associated FM. The level of agreement between the joint criteria and the ACR 2010 classification criteria for FM was $\kappa=0.66$, $p<0.001$, with a sensitivity of 70% and a specificity of 93%. FRA patients had similar demographic and disease characteristics compared to RA patients. Patients with FRA according to the joint criteria had significantly higher PGA, DAS28, and HAQ scores, but similar CRP values and SJC compared to RA patients (Table 1).

Table 1 Demographic and clinical data of FRA and RA patients

Variable	FRA n=22	RA n=78	p-value
Age (years)	60 (10.7)	59 (12.2)	0.093
Disease Duration (years)	13.3 (13)	12.2 (7.5)	0.589
ACPA seropositivity(%)	69	55	0.1
SJC	2(4)	2(4)	0.7
CRP (g/dl)	12.8(14.2)	8.1(13.7)	0.06
DAS28CRP	4 (1.7)	3.5 (1.2)	0.009
HAQ	1.75 (0.5)	1 (0.7)	<0.001
PGA (mm)	70(11)	44(23)	<0.001

Data are expressed as mean (SD) or median (IQR)

FRA- Fibromyalgic Rheumatoid Arthritis; RA- Rheumatoid Arthritis;

ACPA- Anti- citrullinated Protein Antibodies; CRP- C-reactive Protein; SJC- Swollen Joint Count;

DAS28CRP- Disease Activity Score; HAQ- Health Assessment Questionnaire; PGA- Patient Global Assessment

Conclusion: The joint criteria are diagnostic for FM in RA patients with moderate reliability compared to the ACR 2010 Classification criteria. When diagnosed with the joint criteria, FRA patients have higher disease activity scores despite having similar clinical and laboratory inflammatory markers compared to RA patients.

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THU0457

LONGITUDINAL ASSOCIATION OF SEDENTARY TIME AND PHYSICAL ACTIVITY WITH SLEEP QUALITY IN WOMEN WITH FIBROMYALGIA: THE AL-ÁNDALUS PROJECT

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Background: Sleep disturbances are common in fibromyalgia, and influences quality of life. Recent literature has suggested that non-pharmacological treatments (e.g., physical exercise and cognitive behavioural therapy) may help to improve sleep quality (SQ) and the management of fibromyalgia¹. In this regard, sedentary time (ST) and physical activity (PA) intensity levels could play a role on SQ in this population². However, evidence is scarce and mainly based on cross-sectional data.

Objectives: This study aimed to examine the longitudinal associations (2- and 5-year follow-up) of ST and PA intensity levels with SQ in women with fibromyalgia.

Methods: In this prospective cohort study, women diagnosed with fibromyalgia (age: 51.4±7.6 years) with completed data were included at baseline ($n=409$), at 2-year follow-up ($n=214$) and at 5-year follow-up ($n=218$). Sedentary time and PA intensity levels (light and moderate-to-vigorous [MVPA]) were assessed using triaxial accelerometers worn for consecutive 7 days. The percentage of time spent in different behaviours was calculated (e.g., (ST/accelerometer wear time) × 100). The SQ global score was calculated as a sum of all components (score

ranges from 0 to 21 where higher values indicate worse SQ) of the Pittsburgh Sleep Quality Index. Linear regressions were performed to analyse the association of changes in ST and PA over time (predictor variables) with SQ at 2- and 5-years follow-up (dependent variables) while considering baseline SQ, age, fat percentage, marital status, educational level, sleep or relaxation medication, and regular menstruation as confounders.

Results: Overall, after adjusting for confounders, non-statistical significant associations were found between changes in ST and PA intensity levels from baseline to 2-years follow-up with SQ at 2-year follow-up ($P>0.05$); except for the change in MVPA from baseline to 2-years follow-up, which showed evidence of statistical significance ($B=-0.207$; $P=0.059$). Regarding the 5-year follow-up, we did not observe either any association between changes in ST or PA intensity levels from baseline to 5-year follow-up with SQ at 5-year follow-up ($P>0.05$).

Conclusion: The main findings suggest that neither ST nor PA intensity levels over time predict SQ at 2- and 5-year follow-up in women with fibromyalgia. Future PA-counselling randomised controlled trials might shed more light on the role that ST and PA could play on SQ.

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THU0458 HIGH PREVALENCE OF JOINT HYPERMOBILITY IN INFLAMMATORY BOWEL DISEASE PATIENTS WITH PAIN UNRESPONSIVE TO BOWEL-TARGETED THERAPY

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Background: Musculoskeletal manifestations occur in 20-50% of patients (pts) with inflammatory bowel disease (IBD). A substantial number of patients complain of non-inflammatory musculoskeletal pain.

Objectives: To assess the incidence of joint hypermobility (JHM), benign joint hypermobility syndrome (BJHS) among patients with inflammatory bowel disease (IBD) examined in the inter-disciplinary rheumatology service at a tertiary referral center and the impact on IBD manifestations and outcome.

Methods: Medical records of 180 consecutive IBD pts referred to the inter-disciplinary clinic were retrospectively reviewed. Data regarding age, gender, diagnosis, disease duration, clinical and laboratory features, previous and current therapy, Harvey-Brandshaw Index were entered into a database and analyzed. Beighton's scoring of $\geq 4/9$ was used to define patients with JHM. The 1998 Brighton's criteria were used to identify patients with BJHS. Outcome was defined as improvement of joint pain. The statistical methods used included descriptive statistics, T test, Spearman's correlation and multiple logistic regression analysis.

Results: Forty-six patients (mean(SD) age 36.2(12.4), disease duration 13.9(8.8) years) out of 180 IBD patients (mean(SD) age 40.4(14.3), disease duration 15.7(9.1) years) fulfilled the criteria for JHM. Twelve patients had active inflammatory joint disease (2 with axial involvement, 10 with peripheral joint disease and 2 with axial and peripheral joint involvement). The other 32 answered both major criteria for BJHS. The median Beighton scoring was 7 (range 5-9). Most of them were on biological treatment. Patients with JHM suffered frequently of arthralgia and abdominal pain, in spite of endoscopic remission and normal levels of calprotectin and inflammatory markers ($p=0.02$, $r=0.17$). JHM and BJHS were associated with poorer outcome ($p=0.004$, $r=0.2$). In a multiple logistic regression analysis, only JHM reached borderline significance for predicting worse outcome.

Conclusion: Joint and abdominal pain did not improve with immunomodulatory therapy in IBD patients with JHM. JHM may have a negative impact on achievement of clinical remission, in a significant subset of IBD patients. Rheumatologists and gastroenterologists should be aware of this.

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THU0459 CHRONIC MUSCULOSKELETAL PAIN AND CHRONIC WIDESPREAD PAIN IN CHILE: PREVALENCE AND ASSOCIATED FACTORS

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Background: Chronic musculoskeletal pain (CMP) is a key cause of health loss worldwide. Cultural factors may affect pain processing and it is key to have more information regarding CMP epidemiology in Latin America.

Objectives: We aimed to determine the prevalence of CMP and Chronic Widespread Pain (CWP) in Chile and to explore risk factors.

Methods: We used data recollected in the 2017 Chilean National Health Survey. Using COPCORD we defined CMP as non-traumatic pain for more than three months. CWP was defined by the presence of CMP in five body regions. Associations between CMP and CWP and risk factors was investigated through univariate and multivariate logistic regression models.

Results: After excluding subjects with missing information our final sample was 4045 subjects. CMP was present in 21.8% (95% CI 19.6%, 24.1%) and CWP in 4.2% (95% CI 3.3%, 5.1%). Significant risk factors for CMP in multivariate analysis were older age, female gender, lower educational level, and depressive symptoms. Protective factors for CMP were not being married and moderate alcohol consumption. CWP shared risk factors with CMP. (Table 1)

Conclusion: We found a high prevalence for CMP and CWP similar to values previously described. Female gender, older age, depressive symptoms and diabetes were the main risk factors associated with chronic pain, while moderate alcohol consumption was found to be protective.

References: x

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THU0460 PHYSICAL FITNESS AND QUALITY OF LIFE IN WOMEN WITH FIBROMYALGIA: LONGITUDINAL ANALYSES FROM THE AL-ÁNDALUS PROJECT

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Background: Optimizing the highly deteriorated quality of life (QoL) of patients with fibromyalgia is one of the main goals in the management of the disease¹. Physical fitness has been identified as a powerful marker of health that is positively related to QoL in this population², although previous evidence is mainly based on cross-sectional data.

Objectives: This study aimed to examine the longitudinal associations (2- and 5-year follow-up) between physical fitness and QoL in women with fibromyalgia.

Methods: In this prospective cohort study, women diagnosed with fibromyalgia (age: 51.3 ± 7.6 years) with completed data were included at baseline ($n=441$), at 2-year follow-up ($n=220$) and at 5-year follow-up ($n=227$). The Senior Fitness Tests battery was used to assess physical fitness components and a standardized global fitness index was calculated. The eight dimensions plus the two physical and mental component summaries of the Short-Form health survey-36 questionnaire were used to assess QoL. To examine whether changes in fitness predicted QoL at follow-up, multiple linear regression models were built. The bidirectionality of the associations (whether changes in QoL predicted fitness at follow-up) was also tested. Outcome values at baseline and age, fat percentage, analgesic consumption, educational level, and occupational status at follow-up were entered as potential confounders in all analyses.

Results: Changes in fitness were associated with physical function ($\beta=0.160$), physical role ($\beta=0.275$), bodily pain ($\beta=0.271$), general health ($\beta=0.144$), and