further interest in investigation of any links between these conditions. Therefore, prevalence of FM in patients with painful knee OA is of considerable interest.
Objectives: The purpose of this study was to evaluate the prevalence of fibromyalgia (FM) in patients with painful knee OA.
Methods: The study involved 92 patients (63 females and 29 males) with painful knee OA[ACR 1986] Osteoarthritis Knee Criteria) with non-surgical management aged 59.4±14.3 (M±SD) yrs.[4] Radiographic findings for OA were classified according to Kellgren-Lawrence scale grading.[5] FM was diagnosed in these subjects if both [ACR 1990] and [2010] criteria were met.[5–6]
Results: FM was diagnosed in 21painful knee OA patients (22.83%). Among female patients FM was confirmed in 19 from 63 subjects (30.16%) compared to 2 from 29 male patients (6.90%). No relationship was found between the radiologic stage of the knee OA and FM prevalence in the investigated subjects.
Conclusions: FM prevalence is relatively high in painful knee OA patients, mostly female. Further studies investigating possible FM impact on pain modulation, functional disability and quality of life in painful knee OA are needed.

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AB1068 PAIN, FATIGUE AND FUNCTIONAL IMPAIRMENT IN FIBROMYALGIA PATIENTS MAY BE RIDUCED BY ADDING A CYCLE OF HYPERBARIC OXYGEN THERAPY (HBOT) TREATMENT

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Background: Fibromyalgia Syndrome (FM) is a persistent and debilitating disorder estimated to impair the quality of life of 2%–4% of the population. FM is an important representative example of central nervous system sensitisation and is associated with abnormal brain activity. The syndrome is still elusive and refractory. Hyperbaric oxygen therapy (HBOT) can rectify abnormal brain function underlying the symptoms of FM patients. Increasing oxygen concentration by HBOT may change the brain metabolism and glial function to rectify the FM-associated brain abnormal activity.[1]
Objectives: To evaluate the effect of HBOT on clinical symptoms in FM resistant to the usual pharmacological treatment
Methods: Thirty female patients, aged 21–67 years and diagnosed with FM at least 2 years earlier, and resistant to any pharmacological treatment were assigned to be added on with HBOT. The treated group patients were evaluated at baseline and after 10 and 20 HBOT sessions. Evaluations consisted of physical examination, including tender point count, extensive evaluation of quality of life. Study endpoints included assessments of pain (VAS), the FACIT Fatigue Scale which is a short, 13-item, that measures an individual's level of fatigue during their usual daily activities over the past week. A validated Italian version of the Fibromyalgia Impact Questionnaire (FIQ-R) was used to evaluate the level of functional impairment as weel as the FAS index which is a short and easy to complete self-administered index combining a set of questions relating to non-articular pain, fatigue and the quality of sleep that provides a single composite measure of disease activity ranging from 0 to 10. The HBOT protocol comprised 20 sessions, 3 days/week, 90 min, 100% oxygen at 2.5 ATA.
Results: The effect of the hyperbaric oxygen treatment on the clinical symptoms are summarised in table 1. HBOT treatments of treated group led to statistically significant improvements in the mean scores of pain and fatigue (FACIT) after 10 and 20 HBOT sessions (mean change of pain after 20 sessions −1.76±2.5, p<0.001) (mean change of fatigue after 20 sessions 5.93±2.10, p<0.001)The FIQ-R score significantly improved following HBOT in the treated group (mean change after 20 sessions −12.89±17.04, p=0.001). The FAS score showed a positive trend after 10 sessions and a significant improvement after 20 sessions (mean change −2.02±3.14, p=0.006).

Abstract AB1068 – Table 1. Clinical data at baseline and after HBOT treatment

	Baseline	Follow up (10 sessions)	Paired samples t-test	Follow up (20 sessions)	Paired samples t-test
VAS PAIN	8.11±1.81	6.84±2.07	p=0.0062	6.32±2.58	p=0.0023
FACIT	20.42 ±7.06	23.76±6.82	p=0.0836	26.36±8.25	p=0.0069
FIQ-R total score	68.04 ±3.90	59.83±4.41	p=0.0090	55.56±5.19	p=0.0019
FAS total score	8.14±0.47	7.07±0.50	p=0.0928	5.99±0.49	p=0.0065

Conclusions: These preliminary data show that HBOT may determine a significant clinical improvement in patients affected by FM and resistant to the common pharmacological treatment. However, further studies of large numbers of patients are required in order to confirm this preliminary finding and modify treatment strategies accordingly.

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AB1069 CHRONIC WIDESPREAD PAIN, SLEEP PROBLEMS AND PRESSURE PAIN THRESHOLDS IN A POPULATION SAMPLE

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Background: Chronic musculoskeletal pain is common in the general population and 11% report chronic widespread pain (CWP). A sensitisation of the nociceptive system has been proposed to be one possible mechanism behind CWP, a prerequisite for fibromyalgia (FM). A reduced pressure pain threshold (PPT) has been reported in subjects with FM, but also as an effect of bad sleep.
Objectives: The aim was to study pain thresholds in people with CWP in comparison with those having no chronic pain (NCP) or chronic regional pain (CRP), but also in relation to self-reported sleep problems.
Methods: From a 21 year follow-up of the Swedish population based Epipain cohort (n 1321), 146 subjects, with and without a report of chronic pain, were invited to a clinical assessment including measurement of PPT. Subjects were classified as having NCP, CRP or CWP, according to the definition of CWP in the [ACR 1990] criteria for FM, based on a pain mannequin presenting 0–18 body regions. Sleep problems (initiating sleep, frequent awakenings, not feeling rested, early awakening) were reported by Uppsala Sleep Inventory (four items scored from 1–5, best to worst). PPTs were measured in kPa at eight different anatomical sites representing upper, lower, left and right side of the body using the AlgoMed Computerised Pressure Algometer FPIX (Medoc Ltd. Advanced Medical Systems, Israel). A mean was calculated from all eight points to create a global pressure pain threshold (PPTg), where a lower PPTg indicated a higher sensitivity to pain. ANCOVA regression analysis was performed to study associations between PPTg and reports of chronic pain and sleep problems, controlled for age and gender.
Results: Out of 146 subjects, 89 (61%) were women. Mean age was 64.6 (SD 12.7) years. This sub-population from the Epipain cohort reported a high prevalence of CWP without significant difference between men and women (33.9% vs 44.9%; p=0.411). Women had lower PPTg than men (345.0 kPa vs. 563.9 kPa; p<0.001). Subjects classified as CWP had lower PPTg than those classified as NCP (362.0 kPa vs. 479.9 kPa; p=0.003). A report of CRP did not affect PPTg in

comparison with those reporting NCP (471.8 kPa vs. 479.9 kPa; p=0.855). The number of reported pain regions correlated negatively with PPTg in women (r=−0.384; p<0.001) but not in men (r=−0.195; p=0.149). Subjects having a score of ≥4 for the sleep problem "frequent awakenings" had lower PPTg than those with a lower score (332.9 vs. 464.7; p<0.001). This was also true, but with less difference, for the sleep problems "not feeling rested" (335.7 vs. 449.1: p=0.023), and "early awakening" (353.0 vs. 452.6; p=0.020), but not for "initiating sleep" (361.5 vs. 436.8: p=0.199). In the ANCOVA analysis both a higher number of painful regions (B=−9.2; p=0.016) and more problems with frequent awakenings (B=−40.1; p=0.003) were associated to a lower PPTg, controlled for age and gender.

Conclusions: Subjects with CWP according to self-reported pain distribution were more sensitive to pain pressure than those with CRP and NCP, and so were also subjects reporting problems with sleep. In the clinic, self-report of CWP can be used as an indicator of pain sensitivity, but it is also important to assess sleep problems, and especially frequent awakenings and reports of not feeling rested.

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Back pain, mechanical musculoskeletal problems, local soft tissue disorders

AB1070 VARIATIONS IN THE LENGTH OF MUSCULOSKELETAL TEMPORARY WORK DISABILITIES IN PATIENTS INCLUDED IN AN EARLY INTERVENTION PROGRAM

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Background: Musculoskeletal disorders cause in Spain 23% of temporary work disability (TD) and they are the first cause of permanent work disability (PD). A study of early intervention (early assessment and immediate treatment by a rheumatologist) reduced TD days (39%) and evolution to PD (50%)[1]. Using the "Fit for Work" European coalition led by AbbVie, the program is implemented nationwide.

Objectives: The aim of this study is to analyse the variation in the number of days of sick leave in the patients included in an early intervention program comparing to usual average.

Methods: Observational cross-sectional study of a hospital cohort of outpatients referred during 18 consecutive months. The patients were referred for the first time to the Rheumatology Early Intervention consultation program because of temporary work disabilities due to musculoskeletal disorders. All of them received medical treatment; and underwent joints ultrasound, joint injections and learned exercises when needed. Patients whose disabilities were due to trauma or surgery were not included in the study.

Results: We evaluated 270 patients with a mean age of 48.9 years. 64% were women. The most frequently reported diseases were lumbar/sciatic pain (28.5%), shoulder pain (20%), neck pain (8%), knee pain (5.6%) and other arthralgias and tendinopathies (20%).

All patients received medical treatment, 38.5% underwent ultrasound examination and 19,2% received joint injections.

The pathologies with longest lengths of TD after the first visit to the rheumatologist were lumbar/sciatic pain (mean 40.6 days), neck pain (mean 33 days) and shoulder pain (mean 23.8 days). If we compare this data with the existent control group from San Carlos Hospital (Madrid), we can see a decrease of the days in sick leave of 29,5% in lumbar/sciatic pain (from 57.6 to 40.6 days), 11,7% in neck pain (from 37.4 to 33 days) and 36,3% in shoulder pain (from 37.4 to 23.8 days).

Conclusions: Early intervention by rheumatologists in patients with temporary work disability due to musculoskeletal disorders reduces the length of sick leaves. A quick diagnosis and assessment by specialists can improve the patient outcomes saving costs to health system.

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AB1071 WHAT FACTORS AFFECT THE EFFECTIVENESS OF NSAIDS FOR ACUTE LOW BACK PAIN?

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Background: Nonsteroidal anti-inflammatory drugs (NSAID) are the main instruments for acute LBP (LOW BACK PAIN) treatment. However, up to now, factors that influence the effectiveness of NSAIDs have not been determined fully.

Objectives: To assess effects of some clinical and anamnestic factors on NSAIDs effectiveness in acute LBP.

Methods: The study group comprised 2078 patients (46.3±13.4 years, women 56.6%) with acute LBP treated in real clinical practice. 34.8% had first episode of LBP, 65.2% had second episode (an average of 2.6±1.4 episodes a year). Numerical rating scale (NRS) of 0–10 points estimated the level of pain. Initially, the pain level was 6.69±1.65, 57.0% of patients had severe pain (≥7 NRS). Pain remained at rest in 32.0%, at night in 19.0%, stiffness was noted in 60.7%, radiating leg pain in 28.2%, sciatica at 9.6%. NSAIDs used 70.2% of patients in the history of LBP, 28.0% rated their effectiveness as good, 54.6% as moderate and 17.4% as low. Meloxicam 15 mg once daily was prescribed for a period of up to 2 weeks for all the patients. 86.1% of patients received meloxicam intramuscular injection (i/m) for 2 days, then per os, 13.9% only per os. 52.3% received muscle relaxants, 17.4% – B vitamins, per os or i/m. 21.6% of patients received PPI for the prevention of gastrointestinal complications. The study evaluated the frequency of LBP complete relief with NSAIDs for up to 2 weeks.

Results: The complete pain relief was in 75.2% of patients, the average NSAID use duration before pain ceased was 8.6±5.5 days. 83.7% of patients rated the effect of treatment as "good" or "excellent." Adverse reactions were noted only in 4.6% of patients, there were no serious complications. Female sex and the use of B vitamins did not influence the outcome of the treatment: odds ratio (OR, 95% confidential interval) 0.967 (0.795–1.177), p=0.763 and 0.917 (0.804–1.1201), p=0.452. Age <65 years, the first episode of LBP and a good effect of NSAIDs in a history were associated with the best result of treatment: OR 2.053 (1.592–2.642), p=0.000; 1.415 (1.09–1.836), p=0.009; 1.937 (1.513–2.481), p=0.000. Severe pain (≥7 NRS), pain at rest and at night, radiating leg pain and especially sciatica were associated with worse results: OR 0,599 (0,487–0,737), p=0,000; 0.481 (0.393–0.588), p=0.000; 0.559 (0.441–0.709), p=0.000; 0.511 (0.413–0.631), p=0.000; 0.346 (0.256–0.466), p=0.000. The combination of NSAIDs and muscle relaxants, in comparison with the monotherapy of NSAIDs, was associated with a lower incidence of pain: OR 0.827 (0.594–0.889), p=0.02.

Conclusions: Meloxicam 15 mg/day dosage is effective and safe for treating acute LBP. The sex of patients does not affect the outcome of treatment. Age <65 years, first episode of LBP and a good "response" to NSAIDs in history are associated with better treatment outcomes. Severe pain, the pain at rest and pain at night, radiating leg pain and sciatica are associated with the worst result. The combination of NSAIDs with muscle relaxants and B vitamins did not improve the outcome of the treatment.

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AB1072 THE MEDIAN NERVE CROSS-SECTIONAL AREA MAY BE A PARAMETER OF FOLLOW- UP AFTER TREATMENT IN PATIENTS WITH CARPAL TUNNEL SYNDROME?

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Objectives: Carpal tunnel syndrome (CTS) is the most common entrapment neuropathy in general population. Diagnosis of CTS depends on clinical symptoms, physical examination and electrophysiological findings. In recent years, diagnostic value of median nerve ultrasonography has increased particularly for the CTS. To aim of this study compare the electrophysiological and ultrasonographic findings at CTS patients who treated with splinting at night during three months.

Methods: The patients, who were diagnosed with mild or moderate CTS, received a fabricated night orthotic which held the wrist in a neutral position during three months. All patients were evaluated clinically, electrophysiologically, and ultrasonographically before treatment and at 3 months by blind physicians. Pain was evaluated using Visual Analogue Scala (VAS) Boston Carpal Tunnel Questionnare was used to evaluated symptom severity and functional capacity. In electrophysiologic evaluation median nerve conduction studies was recorded. Median nerve cross-sectional areas (M-CSA) were measured by ultrasonography at the level of radio-ulnar joint, pisiform bone, and hook of hamate. After treatment, 68