looking at LBP occurrence over the past month in a sample of 633 subjects. The third was in an occupational setting addressing past history of LBP and included 201 individuals.

Results Among adults, prevalence of LBP at any given day was 13.1 (CI:11.0–14.2). Mean age is 41.8(SD:16.3) and M/F ratio is 0.7. A history of trauma was recorded by 13.2% (7.5–18.9) of LBP cases.

Among nurses, 54% had experienced LBP over the past month. Handling patients was related to LBP by 60% (CI:55–65) of nurses.

In an occupational setting, heavy workload is associated with higher frequency of LBP. 30.7% of those seeking medical care were offered a sick leave.

Conclusion At any given day, 13.1% (CI: 11.0–14.2) of adult population would report acute LBP. Workload is related to LBP occurrence. Sick leave is commonly prescribed for LBP.

FRI0234 THE CORRELATION OF SPINAL CANAL DIMENSIONS AND CLINICAL FINDINGS IN LUMBAR SPINAL STENOSIS

N Keser, OF Sendur, G Gurer, A Aydeniz. *ADU Physical Medicine and Rehabilitation, ADU Medical School Hospital, Aydıń, Turkey*

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Background Spinal stenosis is narrowing of spinal canal, nerve root canal and intervertebral foramen under a critical value. Spinal degeneration is the most important reason for spinal stenosis. In most of the patient locomotor system examination is non-specific. Therefore detailed radiological examination should be done in order to make a definite diagnosis of spinal stenosis.

Objectives This study was carried out to investigate the correlation between lumbar spinal canal dimensions and clinical findings of patients who have suspected to have spinal stenosis.

Methods Forty patients (29 female, 11 male) were taken into this study. Detailed physical examination of locomotor system was done for each patient (lumbar range of motion, pain in lumbar extension, milligram test, muscle strength, deep tendon reflexes and sensory deficit).

CT scan of L3-L5 vertebrae level were done in order to measure A-P diameter of spinal canal, interpedicular distance, pedicular height.

Mann-Whitney U test was used for statistical analysis of data.

Results We observed significant correlation between clinical findings of milligram test, pain in lumbar extension, sensory deficit in lower extremities, deep tendon reflexes deficiency and some of CT scan results (A-P diameter and interpedicular distance of L4-L5) of patients who have spinal stenosis. There was no significant correlation between spinal stenosis and clinical findings of muscle strength deficit and lumbar ROM limitation.

Conclusion We concluded that CT scan measurement and clinical findings of spinal stenosis correlate well. However soft tissues couldn't be evaluated properly and it is well known that these tissues may lead to spinal stenosis too. MRI is expensive and CT-myelography is not so easy to apply. Because of that CT is a useful technique when compared to others.

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FRI0235 ANALGESIC EFFICACY OF TRAMADOL/PIROXICAM COMBINATION: CLINICAL ASPECTS

K Sekelj-Kauzlaric, B Matanovic, N Kauzlaric, R Cop, S Potrebica. *Special Hospital for Medicine Rehabilitation, Hospital of Toplice, Toplice, Croatia, Outpatient Clinic for Rheumatology, FM&R, Zagreb, Croatia*

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Background

Objectives To evaluate the efficacy and safety of combination analgesic tramadol/piroxicam for the treatment of low back pain.

Methods This 2-week study took place in two REHA-Centres in Croatia. Patients took medication as needed for the treatment of acute low back pain and/or osteoarthritis pain. They were given 20 mg of piroxicam in the morning and 50 mg of tramadol every 12 h for 15 days. Patients reported maximum pain relief (VAS scale 0 to 10) and rated overall efficacy (scale 1 = poor to 5 = excellent) at the final visit. Adverse events (AEs) were monitored throughout the study.

Results A total of 70 patients from two REHA-Centres provided data. We present the analysis of age, sex and profession. Most of our patients (61%) were employed. Our patients needed therapy for osteoarthritis pain (52%), low back pain (40%) and other (osteoporosis, RA, SA) 8%. After 15 days combination tramadol/piroxicam provided pain relief (range 2,5 ? 3,5). Overall efficacy of combination was rated 35% ?very good? or ?excellent? by 20%, ?good? by 35% and ?poor? by 10% only. There were no serious or unexpected AEs. The most common AEs were: nausea 20%, constipation 18%, headache 16%, dizziness 12% and somnolence 8%.

Conclusion This study demonstrated that the combination analgesic tramadol/piroxicam is effective and well tolerated in patients with low back pain and/or osteoarthritis.

FRI0236 THE EFFECTS OF LOW-ENERGY LASER AND EXERCISE THERAPY IN PATIENTS WITH CHRONIC LOW BACK PAIN: A DOUBLE-BLIND CONTROLLED TRIAL

M Karakoç, A Gür, K Nas, R Çevik, AJ Saraç, F Erdoğan, M Karakoç (Çelik). *Physical Medicine and Rehabilitation, Dicle University, Diyarbakır, Turkey*

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Background Low back pain is a ubiquitous health problem and leads to major problems. Low-energy laser biostimulation can be used to treat low back pain in last years.

Objectives The aim of this double-blind controlled clinical study is to evaluate the effectiveness laser and combined exercise + laser in patients with chronic low back pain.

Methods Forty patients with chronic low back pain randomly divided into two groups of 20 patients. 20 patients in the first group received low-energy laser + exercise treatment, other group received low-energy laser treatment alone. The parameters such as pain and muscle strength were assessed in all patients pretreatment and posttreatment. Pain measurement was done using the visual analogue scale. Muscle strength measurement (m. rectus abdominus, obliquus, hip abductors, hip adductors, extensors and internal rotators, knee flexors and extensors, foot flexors and extensors, and dorsal extensors) was done using the manual muscle strength testing.

Results Both groups demonstrated significant improvements visual analogue scale and rectus abdominus, hip adductors and abductors in posttreatment ($p < 0.05$), but no relative advantage was found for either group ($p > 0.05$).

Conclusion In conclusion, under the conditions of this study, low-energy laser stimulation plus exercise did not provide a significant advantage over exercise alone.

FRI0237 ASSESSMENT OF A FUNCTIONAL RESTORATION PROGRAM FOR PATIENTS WITH CHRONIC LOW BACK PAIN

G Casso, C Cachin, JC Gerster. *Service d'Anesthésiologie, Centre Hospitalier Universitaire Vaudois, Lausanne Et Hôpital d'Orbe, Orbe, Switzerland*

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Background

Objectives The aim of this open study was to evaluate the effectiveness of a functional restoration program for patients suffering from chronic disabling low back pain. Return to work 12 months after the end of the program was chosen as the main outcome.

Methods A questionnaire was sent to 125 patients (115 M, 10 F, mean age 40 years). The mean duration of absence from work before entry in the program was 4 months. All patients had followed an identical functional restoration program in a hospital setting 12 months before. The program included 6 h of physical therapy and ergonomics, 5 days per week for 3 weeks.

Results 109 questionnaires could be assessed. 57 patients (52%) were back to work, 39 (36%) full time and 18 (17%) at half time. 42 patients were not working. A shorter duration out of work before entry in the program, an improvement of the isokinetic trunk strength at the end of the program, a positive self assessment of the program and the absence of psychiatric comorbidity were all separate predictors of a favourable outcome.

Conclusion Our results are in agreement with those of the European literature. An intensive restoration functional program had positive effects in 53% of our selected population.

FRI0238 EFFICACY AND SAFETY OF LOXOPROFEN IN ACUTE LOW BACK PAIN

J Natour, E Puertas, A Radu, M Freire, R Bonfiglioli. *Rheumatology, Federal University of São Paulo, São Paulo, Brazil*

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Background Nonsteroidal anti-inflammatory drugs (NSAIDs) are the most frequent and effective prescribed medication to treat patients with low back pain (LBP) but are associated with a high incidence of GI adverse events. Loxoprofen sodium, a NSAID prodrug from phenylpropionic group, claimed to have lesser GI and renal toxicity, has a large clinical experience in Japan, but its use in occidental people is scarce. Thus, it was conducted a clinical trial with Loxoprofen in the treatment of acute LBP in comparison with diclofenac K, using a validated assessment questionnaire for monitoring the outcome.

Objectives Objective of this double blind, randomised, controlled, multicentre study was compare efficacy and safety of Loxoprofen with that of diclofenac in the treatment of acute LBP.

Methods Patients of both gender, aged >18 years, with non-specific lumbar pain complying with exclusion criteria were admitted to the study. After the informed consent, patients were randomly allocated into the treatment groups – Loxoprofen 60 mg t.i.d. (LOX) or diclofenac 50 mg t.i.d. (DIC). Duration of

treatment was 2 weeks. Patients were evaluated at pre-treatment and weekly during therapy for the following parameters: overall severity of symptoms; pain at rest, on pressure, and on movement using a visual analogue scale (VAS); physical examination (Schober and lateral flexion indexes, finger-floor distance); physician and patient global impression; side-effects; and Roland-Morris Questionnaire for LBP duly validated to Brazilian patients.

Results A total of 96 patients were treated in 5 centres ? 47 with LOX (19 M and 28 F), and 49 with DIC (16 M and 33 F). There was no significant difference between groups. 83% of cases were classified as acute in LOX; in DIC, 57% of cases were acute, 29% were sub acute and 14% recurrent. Severity of symptoms, pain (at rest, on movement, and on pressure), and objectives indexes showed statistically significant improvements compared with baseline ($p < 0.001$? chi square) with both treatments; there were no statistically significance differences between groups. Roland-Morris Questionnaire showed a good correlation with evolution of symptoms. 14 patients in LOX reported adverse events, being 12 GI effects (25.5%), and 23 patients in DIC, with 18 GI effects (36.7%) ($p < 0.001$). Epigastralgia was the most prevalent GI event reported. Four patients in LOX and 7 in DIC discontinued therapy due to GI adverse events. Tolerability assessments were classified as both very good and good in 97% in LOX and in 90% in DIC ($p < 0.05$). Physician and patient overall assessment were >95% as either very good or good in both groups (n.s.).

Conclusion Loxoprofen 60 mg, t.i.d., showed efficacy and excellent tolerability and safety in acute low back pain, superior to that of an established NSAID, diclofenac 50 mg, t.i.d. Roland-Morris Questionnaire was a useful tool to assess the disease outcome.

FRI0239 PAIN THERAPY OF FAILED BACK SURGERY SYNDROME PATIENTS (FBSS): SUCCESSFUL LONG-TERM TREATMENT WITH FENTANYL TTS

¹H Haentzschel, ²S Schwalen, ³J Kraemer, ³T Theodoridis. *¹Medizinische Klinik Und Poliklinik IV, University of Leipzig, Leipzig; ²Medical and Scientific Affairs, Janssen-Cilag GmbH, Neuss; ³Orthopaedic Department, University of Bochum, Bochum, Germany*

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Background Patients with a FBSS suffer from chronic severe back pain. Most of these patients have had a postlaminectomy in the lumbosacral region. 10% of patients with a postlaminectomy develop chronic pain after the surgery. The percentage of positive outcomes after a re-surgery amount about 30–75%. In general the outcome of these patients is unfavourable. At present pain therapy with opioids is not generally recommended in patients with FBSS.

Objectives Documentation of long-term efficacy and safety of fentanyl TTS treatment for patients who have had at least one surgical intervention for chronic back pain and who continue to suffer from severe back pain.

Methods Subgroup analysis of an open, international, multicentre study (FEN-INT-13) with a duration of 12 months. 85 patients (mean age 50 years; 46 women; mean pain duration 9 years) with failed back surgery syndrome received fentanyl TTS in an initial dosage of equivalent analgesic strength to prior opioid therapy. The dose was subsequently adjusted to provide optimum pain therapy. Visits have been scheduled day 1, week 1, month 1–12. The primary target parameter was the subjective weekly assessment of pain control (very good, good, moderate,