physiotherapist, who was blinded to treatment assignment, evaluated the patients immediately before and after treatment as well as 4, 12 and 24 weeks later.

Results: Immediately after the completion of treatment, the mean VAS dropped from 78 to 66 mm in the acupuncture group (G1) but increased at the follow up visits to 76 mm after 24 weeks. In contrast, VAS scores decreased from 80 to 48 mm in the laser acupuncture group. Although it increased in the follow up visits 60 mm after 24 weeks, it remained significantly better (24 mm $P < 0.0001$) than at the initial assessment. The mean of fingertips and floor distance decreased significantly in G2 from 41 cm to 15 cm immediately after the completion of the first session (the difference from baseline was 26 cm) compared to a decrease from 44 to 35 after the first session in G1. Forward flexion of the lumbar spine improvement remained stable between the first assessment and the other four assessments in patients exposed to prayers with the difference between the baseline and 24 week assessments highly significant ($p < 0.0001$) compared to G1 ($p > 0.05$).

Conclusions: Both measures were decreased in both groups but laser acupuncture resulted in a significant improvement in functional and symptomatic outcomes in this group of patients with CLBP even after 24 weeks follow up.

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THU0529 THE COMPARISON OF PHYSICAL ACTIVITY LEVEL IN PREGNANT WOMEN WITH AND WITHOUT LOW BACK PAIN

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Background: Low back pain (LBP) is one of the most common musculoskeletal problems during pregnancy that occurs due to a combination of mechanical, hormonal, circulatory and psychological factors. The changes in the load, body mechanics and centre of gravity, increased levels of relaxin, and decreased venous circulation in the pelvic and lumbar region may contribute to LBP in pregnant women.^{1,2} It has been reported that the prevalence of LBP ranges between 50% and 80%. Pregnant women suffer from LBP may experience significant physical, psychological and social problems which adversely affect their quality of life.³

Objectives: The aim of the study was to compare the physical activity level of pregnant women with and without LBP.

Methods: A total of 151 pregnant women without obstetric and medical complications were included in this study. Sociodemographic and obstetric characteristics of the participants were assessed with a standart questionnaire. The presence of LBP was recorded as "yes" and "no". The level of physical activity was assessed with the Pregnancy Physical Activity Questionnaire (PPAQ). The PPAQ is self-administered and asks respondents to report the time spent participating in 32 activities including household/caregiving, occupational, sports/exercise, transportation and inactivity. Independent samples t test was used to determine whether there was a difference in physical activity level between two independent groups (Group 1: Pregnant women with LBP, Group 2: Pregnant women without LBP).

Results: 77 pregnant women (mean age: 29.28±5.14 years, mean body mass index (BMI): 25.95±3.86 kg/m²) had no LBP. However, 74 pregnant women (mean age: 29.22±4.90 years, BMI: 26.85±2.78 kg/m²) have experienced LBP. There was no statistically significant difference in gestational week between two groups ($p > 0.05$). Exercise-sports activity (mean: 5.69±7.29 MET-h.week⁻¹) and vigorous activity (mean: 2.39±3.80 MET-h.week⁻¹) scores of PPAQ were significantly lower in the pregnant with LBP than in those without LBP. Other activity scores were similar between groups ($p > 0.05$).

Conclusions: The presence of LBP during pregnancy causes decreased levels of sports and exercise activities in the pregnant women while household/caregiving and occupational activities are being carried out. LBP can be a barrier to perform physical activities and exercises for pregnant women. Therefore, it should be treated with appropriate methods and pregnant women should be encouraged to regularly participate to exercise programs.

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THU0530 CHRONIC LOW BACK PAIN AND DEPRESSION: SIGNIFICANT DECREASE WITH GLUCOSAMINE-CHONDROITIN SULFATE TREATMENT IN A LARGE, COMMUNITY-BASED, PILOT, OPEN PROSPECTIVE INTERVENTIONAL STUDY

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Background: Low back pain (LBP) is the leading cause of Years Lived with Disability worldwide.¹ The number of people suffering from LBP grew more than 50% from 1990 to 2013, to 651 million.¹ Chronic low back pain can often lead to depression. Data on 1 90 593 community-dwelling adults aged ≥18 years from the World Health Survey (WHS) 2002–2004 in 43 Low and middle-income countries show a strong correlation between chronic back pain and depression.² Glucosamine-chondroitin sulfate (GCS) combination is widely used in the treatment of OA; however, there are few prospective scientific investigations of its therapeutic merits in severe LBP.

Objectives: To study the efficacy of GCS in the decreasing depression in patients with chronic low back pain in a large open pilot prospective observational study.

Methods: We enrolled patients between 40 and 65 years of age who had LBP for at least 12 weeks with a pain intensity >3 on a 0–10-point visual analogue scale (VAS) in a single-arm, open-label prospective interventional study. Major exclusion criteria were the presence of fibromyalgia, degenerative spondylolisthesis, and alcohol and/or drug abuse. All patients were treated with a combination of glucosamine hydrochloride 500 mg and chondroitin sulfate 500 mg in tablet form (Unipharm Inc.) at a dose of 1 tablet bid for the first month and then 1 tablet daily for the next two months. The primary endpoint was pain intensity (at rest and movement) as measured on a 0–10 point VAS. Depression was measured by the 13-questionnaire Beck's Depression Inventory (BDI). There are 13 questions in this score with highest possible score of 39 (5–7 is mild depression; 8–15 moderate depression, 16 and over severe depression).³

Results: A total of 8598 subjects (mean age 52.1 years, 67.3% women, mean BMI 27.4) were enrolled in the study, and formed the intent-to-treat (ITT) population. All but 95 subjects (1.1%) completed the study. Previously-reported ITT analysis with worst observation carried forward (WOCF) showed an improvement in pain at rest from mean (±SD) of 5.2±1.9 at study entry to 1.4±1.6 at 3 months ($p < 0.0001$). Pain at movement decreased from 6.8±1.6 to 2.2±1.8 ($p < 0.0001$). Baseline BDI scores showed a highly significant correlation with baseline pain scores at rest and movement ($p < 0.0001$ for both). After 12 weeks of GCS treatment, the mean BDI score dropped from 8.7 (95% CI 8.6 to 8.9) to 2.9 (95% CI 2.8–3.0) (paired-test $p < 0.0001$). An adverse event (AE) was reported by 604 (7.0%) patients (mostly gastrointestinal in origin, such as nausea, abdominal pain and dry mouth) but only 85 (1.0%) patients deemed it severe enough to discontinue therapy.

Conclusions: Although open and uncontrolled, this large pilot community-based study shows dramatic reductions in pain and depression in patients with LBP treated with GCS. With its benign safety profile, GCS therapy deserves serious evaluation in the management of LBP in a prospective randomised double-blinded clinical trial.

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THU0531 COMPARISON OF THREE DIFFERENT TRIGGER POINT TREATMENT IN THE MANAGEMENT OF LOW BACK PAIN: A PILOT STUDY

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Background: Low-back pain is a common health problem worldwide. In the majority of cases, the pathoanatomical source of an individual's pain cannot be identified and are therefore defined as non-specific in nature. Although there are many potential contributing factors to low back pain, one area that has received