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 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.

**Disclosure of Interest:** None declared

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**THU00529**

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

E. Ünelçesen1, S. Topuz1, C. Oral1, E. Baran1, G. Nakış1, S. Özgoğ1, S. Beksaç2, T. Akbayrak2.
1Physical Therapy and Rehabilitation, Hacettepe University Faculty of Health Sciences; 2Department of Obstetrics and Gynecology, Hacettepe University Faculty of Medicine, Ankara, Turkey

**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 standard 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 the association 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 pointVAS. 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 = 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 4.1±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). Ascertainment With highest possible score of 39 (5–7 = mild depression; 8–15 moderate depression; 16 and over severe depression).3

**Conclusions:** 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

**REFERENCES:**


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**THU00530**

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

G. Singh1, L. Alexeeva2, D. Goryachev3, A. Barinov2, A. Mitha3, 1Rheumatology And Hematology, Stanford University, Woodside, USA; 2State Nil of Rheumatology of Russian Academy of Sciences; 3M. Sechenov First Moscow State Medical University, Moscow, Russian Federation; 3ICORE, Woodside, USA

**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 190 593 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 = 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 4.1±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). Ascertainment With highest possible score of 39 (5–7 = mild depression; 8–15 moderate depression; 16 and over severe depression).3

**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 consideration.

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**THU00531**

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

I.O. Dayans1, E. Kaya Mutlu2, M.A. Akçetin2, A.O. Akdemir2, 1Institute of Health Science, Istanbul University, Bakırköy, 2Faculty of Health Science, Istanbul University, Bakırköy, 3Haseki Eğitim ve Araştırma Hastanesi, Haseki, Turkey

**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

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