THU0526

ACUTE PARASPINAL MUSCLE NECROSIS WITH CRACK COCAINE AND HEROIN; A CASE REPORTA. Masood¹, L. Attipoe¹, D. D'Cruz¹, S. Al-Saraj², S. Williams¹, K. Sabzevari¹.¹Rheumatology, Guys and St Thomas Hospital Trust; ²Clinical Neuropathology, Kings College Hospital, London, UK

Background: Cocaine can cause serious muscle injury ranging from asymptomatic creatine phosphokinase (CK) elevation to massive rhabdomyolysis with acute renal failure. Muscle injury is more common after intravenous use or after smoking the alkaloid freebase (crack cocaine) because of the more rapid effect and higher blood levels of the drug achieved via those routes. The onset of symptoms is acute and can even happen with one time drug use.

Objectives: to broaden the knowledge about severe focal myositis as a consequence of crack cocaine abuse

Methods: We report a case of Acute Paraspinal myositis and Rhabdomyolysis in a previously healthy African gentleman after smoking crack cocaine and heroin.

Results: 35 years old gentleman, previously well, presented to the emergency with 12 hour history of severe lower back pain and stiffness in the absence of any trauma or systemic symptoms. On admission he was conscious and alert with tenderness and stiffness of paraspinal muscles, urinary retention requiring catheterization but no muscle weakness. Serum Creatinine was elevated at 597 µmol/L and Creatine Kinase was 66000 U/L. Urinalysis showed haematoproteinuria (3 +blood, 4+protein). Patient reported smoking crack cocaine and snorting heroin, as well as drinking alcohol 12 hours before the onset of symptoms. Drug screen was positive for cocaine and benzodiazepines while autoimmune serology was negative for ANA, muscle specific antibodies anti-GBM and ANCA-antibody. Infection screen was negative and Urine and blood cultures were sterile. STIR images on MR scan revealed ill-defined areas in the paraspinal muscles consistent with Myositis. The muscle biopsy showed necrosis and focal intense infiltration by sheets of macrophages associated with proliferation of myoblast forming multinucleated giant cells but no evidence of granuloma formation the overall appearances being consistent with focal myositis. Serum Creatinine and CK improved progressively. He was treated with a tapering dose of steroids for 8 weeks while clinical and biochemical markers continued to improve.

Conclusions: Drug induced Rhabdomyolysis can occur with cocaine, heroin and alcohol but it is the first reported case of focal myopathy affecting Paraspinal Muscles alone. There is one case report in the literature suggesting isolated myopathy with cocaine in the absence of central nervous system manifestations. One of the main differentials in such a scenario is Pyomyositis which requires early identification and prompt treatment to prevent systemic complications.

REFERENCES:

- [1] Zuckner J. Drug-related myopathies. *Rheum Dis Clin North Am* 1994;20 (4):1017–1032.
- [2] Pogue VA, Nurse HM. Cocaine-associated acute myoglobinuric renal failure. *Am J Med* 1989;86(2):183–186.
- [3] Brazeau GA, McArdle A, Jackson MJ. Effects of cocaine on leakage of creatine kinase from skeletal muscle: in vitro and in vivo studies in mice. *Life Sci* 1995;57(17):1569–1578.
- [4] Brody SL, Wrenn KD, Wilber MM, et al. Predicting the severity of cocaine-associated rhabdomyolysis. *Ann Emerg Med* 1990;19(10):1137–1143.
- [5] Grob D. Rhabdomyolysis and drug-related myopathies. *Curr Opin Rheumatol* 1990;2(6):908–915.
- [6] Roth D, Alarcón FJ, Fernandez JA, et al. Acute rhabdomyolysis associated with cocaine intoxication. *N Engl J Med* 1988;319(11):673–677.

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THU0527

EFFECTS OF MANUAL THERAPY, SACROILIAC AND LUMBAR EXERCISES IN PATIENTS WITH SACROILIAC JOINT DYSFUNCTION SYNDROMEA. Javadov, A. Ketenci. *Dept. of Physical Medicine and Rehabilitation, Istanbul Medical Faculty, Istanbul, Turkey*

Objectives: The aim of this study was to determine the effects of sacroiliac joint (SIJ) manipulation, sacroiliac and lumbar home exercises on pain, sacroiliac mobilisation levels and functional status in patients with sacroiliac joint dysfunction syndrome (SIJDS).

Methods: In a prospective, randomised interventional trial 69 eligible women were assigned to SIJ manual therapy +sacroiliac home exercise group (Group 1, n=23), SIJ manual therapy +lumbar home exercise group (Group 2, n=23) (n=19), or lumbar home exercise group (Group 3, n=23). All the patients who were included in the study were evaluated on the 0 th, 28 th day and 90 th day of the treatment. Specific tests (motion palpation and pain provocation tests) for SIJ were performed. Activity and rest pain was assessed by using the Visual Analogue Scale (VAS). Functional status and quality of life were assessed using the Modified Oswestry Disability Index (MODI) and Short Form-36 (SF-36), respectively.

Results: The VAS scores significantly decreased in all three groups (p<0,05). Gillet test, Vorlauf test, Posterior Shear Test (POSH), Irritation point test and Compression test showed significant decrease after treatment in both training groups (p<0.05). A significant improvement was determined in functional disability score (MODI), quality of life scores, Short Form-36 (SF-36) and neuropathic pain in all three groups (p<0.05). However, a more significant improvement was detected with manual therapy and sacroiliac home exercise program compared to patients in group 2 and group 3.

Conclusions: Our data suggest that manual therapy, sacroiliac and lumbar exercises programs can be effective in patients with sacroiliac joint dysfunction syndrome. In SIJDS, a pathology that should be considered in patients with low back pain, it is necessary to know that special SIE exercises and SIE manipulation therapy can be applied in combination with lumbar exercises and SIE manipulation therapy, or that exercises alone can be given but the benefit expected from exercise alone is less than combined treatment revealed.

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THU0528

THE RELIEF OF CHRONIC LOW BACK PAIN (CLBP) IMMEDIATELY AFTER ONE SESSION OF LOW LEVEL LASER ACUPUNCTURE THERAPY (LLLAT)D. Houssien¹, A. Houssien². ¹Dr Dhiya Center for Rheumatism, Dr Dhiya Center for Rheumatism, Jeddah, Saudi Arabia; ²Immunology, King's college, London, UK

Background: Low-level Laser acupuncture therapy (LLLAT) is defined as the stimulation of acupuncture points with low-intensity, laser irradiation and is widely used in treating musculoskeletal pain.

Objectives: To determine whether the use of a single session of LLLAT for Chronic Low Back Pain (CLBP) will result in better outcome than using acupuncture alone.

Methods: 40 patients with CLBP were randomly assigned to two treatment groups: G1 (Acupuncture; 20 patients) and G2 (laser acupuncture; 20 patients). All patients received a single session only. The Acupuncturists inserted a stainless steel needle in local low back (Du3,4, UB23,5,6), distal (UB36, 40,54,7,8,60, GB30,1,4, Li4) and auricular points. laser-acupuncture treatment with a 20 Hz 200 mW 820 nm Gallium Aluminium Arsenide diode laser was used the same previous points. Pain intensity was assessed on a 100 mm visual analogue scale (VAS). The lumbar range of motion was measured by fingertip-to-floor method. A

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.

REFERENCES:

- [1] Ryan, Cormac G, et al. Individuals with chronic low back pain have a lower level, and an altered pattern, of physical activity compared with matched controls: an observational study. *Australian Journal of Physiotherapy* 2009; 55(1): 53–58.
- [2] Katonis P, et al. Pregnancy-related low back pain. *Hippokratia* 2011;15 (3):205.
- [3] Lima ACDN, Oliveira FBD, Avolio GP, Silva GDD, et al. Prevalence of low back pain and interference with quality of life of pregnant women. *Revista Dor* 2017;18(2):119–123.

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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.

REFERENCES:

- [1] Global Burden of Disease Study, C. *Lancet* 2015;386(9995): 743–800.
- [2] Stubbs B, et al. *Gen Hosp Psychiatry* 2016;43:63–70.
- [3] Beck AT, Beck RW. *Postgrad Med* 1972;52(6): 81–5.

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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