8th Interdisciplinary World Congress on Low Back & Pelvic Pain
Dubai
October 27 ~ 31/2013
Intercontinental Hotel Dubai Festival City
SCIENTIAL COMMITTEE

Andry Vleeming, Belgium
Abduladheem Kamkar, Dubai UAE
Britt Stuge, Norway
Lieven Danneels, Belgium
Jeffrey Wang, U.S.A.
Hanne Albert, Denmark
Colleen Fitzgerald, U.S.A.
Jaap van Dieën, The Netherlands
Maurits van Tulder, The Netherlands
Paul Hodges, Australia
Robert Schleip, Germany
Bengt Sturesson, Sweden

LOCAL ORGANIZING COMMITTEE

Abduladheem Kamkar, Veena Raigangar, Meer Ibrahim, Amr El Shawarby, Abdul Karim Msaddi, Rashid Buhari, Shereen Sam, Naima Saleh, Amal Alshamlan

KEYNOTE SPEAKERS AND MODERATORS

Andry Vleeming, Belgium
Colleen Fitzgerald, U.S.A.
Jaap van Dieën, The Netherlands
Peeter Reeves, U.K.,
Mark Schuenke, U.S.A.
Haiko Wagner, Germany
Thorleifur Palsson, Denmark
Mel Cusi, Australia
Alobaid Abdurrazzaq, Kuwait
Teijji Lund, Finland
Heidi Prather, U.S.A.
Ted Dreisinger, U.S.A.
Jo Nijs, Belgium
Simon Brumagne, Belgium
Paul Strutton, U.K.
Siobhan Schabrun, Australia
Sergio Teixeira da Fonseca, Brazil
Carla Stecco, Italy
Thomas Findley, U.S.A.
Michael Kjaer, Denmark
Bart Koes, The Netherlands
Margreth Grotle, Norway
Tjitske Haanstra, The Netherlands
Annelie Gutke, Sweden
Narelle Stubbs, U.S.A.
Jan Hartvigsen, Denmark
Jonathan Hill, U.K.
Linda van Dillen, U.S.A.
Ron Donelson, U.S.A.
Ben Wand, Australia
Helen Elden

14.35 Mode of delivery and persistence of pelvic girdle syndrome 6 months postpartum
Elisabeth Bjelland

14.45 Lumbo pelvic pain in pregnancy, association between sick-leave, pain and disability in Norway and Sweden
Hilde Stendal Robinson

14.55 A clinical evaluation of self-administered tests for pelvic girdle pain in pregnancy
Monika Fagevik Olson

15.05 Finger joint mobility and previous pregnancies as antenatal markers of pregnancy induced back pain
Anne Lindgren

15.15 Diagnostic sacroiliac joint injections: is a control block necessary?
Bruce Mitchell

15.25 Prolotherapy for sacroiliac joint pain
Bruce Mitchell

15.35 Developing a dynamic elastomeric fabric or orthosis (DEFO) to aid in the management of athletic pelvic pain
Leanne Sowel

15.45 Research insights in the pathophysiology of pelvic pain: implications for diagnosis and treatment
Ursula Wesselmann

15.55 Discussion

Parallel Session V - Al Bahara Ballroom

Neuroplasticity and Lumbopelvic Pain: New Insights and Implications for Rehabilitation

Moderator: Paul Hodges

14.00 Introduction
Paul Hodges

14.05 A randomized controlled trial: the investigation of the effectiveness of transversus abdominis and multifidus muscle training on female patients with low back pain in physical treatment and rehabilitation
Yildiz Erdoganoglu

14.15 Effects of pain expectancies on neuromuscular control of the spine in patients with chronic low back pain and healthy participants
Yves Henchaz

14.25 Changing movement/motor control patterns using bio-feedback with motion sensor technology in people with back pain: a pilot trial
Rob Laird

14.35 Association between core muscle endurance, stress urinary incontinence and low back pain: a case-control study
Elina Al-Eisa

14.45 Inspiratory muscle training improves proprioceptive postural control in individuals with recurrent non-specific low back pain
Lotte Janssens

14.55 Anticipatory postural activity in chronic low back pain patients after trunk muscle fatigue
Sanaz Davarian

15.05 The influence of center pressure on trunk and hip extensor muscle activity during lifting
David MacDonald

15.15 Morphological change of transverse abdominis and multifidus in patients with recurrent low back pain
Shwu-Fen Wang

15.25 Validation and reliability of the abdominal drawing in maneuver in subjects with low back pain
Karsten Kaping

15.35 Trunk muscle recruitment patterns during neuromotor control exercises
Benedicte van Damme

15.45 Trunk motor control during multi-directional tracking tasks
Seyed Javad Mousavi

15.55 Comparing EMG in women with low back pain during selected functional tasks
Jeremy Houser

16.05 Tactile acuity of the trunk in chronic low back pain
Roberto Meroni

16.15 Open- and closed-loop control of the trunk are differentially affected in acute low back pain
D. Clyne

16.25 Discussion

THURSDAY OCTOBER 31, 2013

Parallel Sessions VI - Al Ras Ballroom

Effective Exercise Training and Treatment Modalities for the Lumbopelvic Spine

Moderators: Lieven Danneels & Andry Vleeming

08.00 Introduction
Lieven Danneels

08.05 Effects of exercise program to prevent low back pain in office workers: a one-year cluster-randomized controlled trial
Prawit Janwantanak
**TACTILE ACUITY OF THE TRUNK IN CHRONIC LOW BACK PAIN**

**Name and title presenter**
Meroni R. 1, Bolis M. 2, Valagussa G. 1, Cerri C.G. 2, Marinelli M, Sormani M, De Vito G. 3

**Contact**
Istituti Clinici Zucchi
Piazza Madonnina, 1
20841 - Carate Brianza (MB) - Italy
Office phone +39.0362986445
Mobile phone +39.3491591530

**Introduction**
Chronic non-specific low back pain is a common problem with high costs. Many factors can contribute to motor dysfunction after an initial episode of pain and many people are not aware that they are moving differently. The loss of proprioceptive acuity is an element that can contribute to motor dysfunction. Recent literature suggests that two point discrimination (TPD) threshold at the back is greater in patients with back pain than in healthy controls, and greater TPD threshold at the back relates to decreased voluntary lumbopelvic control. These findings raise the possibility that decreased tactile acuity may contribute to poor motor control, which has implications for back pain rehabilitation in particular and for movement retraining in general.

**Purpose/Aim**
to study TPD threshold in a sample of CLBP patients, to verify if a 6 week sensory discrimination training improved TDP threshold, low back pain, function, movement patterns

**Materials and Methods**
A blinded randomized clinical study involving a sample of 77 patients with chronic non-specific low back pain. Subjects aged between 18 and 65 years, with low back pain more than 12 months, for at least 90 days within the past year were enrolled in the study. While patients with red flags or yellow flags, structural pathologies, spine surgery, pain below the knee were excluded. Patients underwent an interview and physical assessment with a physiotherapist and completed a body chart, the Baecke scale, the SF 36 questionnaire, the Oswestry disability index, the Roland–Morris Disability questionnaire and two 100-mm VAS to describe both back pain at the moment of evaluation and average back pain. The TPD was assessed bilaterally in the back.

**RESULTS**
Treated patients and controls were homogeneous showing no differences in sex, age, weight, height, body mass index, pain, Baecke scale, SF 36 questionnaire, Oswestry disability index and Roland–Morris Disability questionnaire and TDP threshold. Also the movement impairment evaluation was similar between patients and controls. Movement
Impairment evaluation at t1 demonstrated an improvement in treated subjects on rotation signs, extension signs and total symptoms. Patients had a significant improvement of pain intensity (VAS mean t0= 4.8mm and VAS mean t1=2.9mm, p=0.015). Also the Oswestry disability index and the Roland–Morris Disability questionnaire disability scales showed a significant decrease after the period of training. Improvement at t1 were kept at t2.

Figure 3 TPD changes (cm) over time, levels are reported on the horizontal axis with 10 representing the most caudal level (Fig.1). Red circles represent significant changes (p<0.05)

Figure 4 Movement System Impairment assessment changes (item counts), the graphs represent changes at T1-T0 and T2-T0. Note that while movement-related symptoms and dysfunctional signs decreased no significant changes have been found in the contributing factors (e.g. muscle excessive length or tissue rigidity etc.).

Relevance
Understanding strategies to improve pain and motor control is a key factor for low back pain treatment

Conclusions
Our data suggests that tactile training might play a role in improving symptoms and movement pattern in subjects with LBP.

Implications
Tactile training might be a useful tool for the treatment of people with LBP

Keywords
Low back pain, two point discrimination, treatment

Bibliography