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ELECTROACUPUNCTURE IN INTERVERTEBRAL DISC PROLAPSES

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Objectives: The objective of this study was to investigate whether electro acupuncture, when compared to TENS, had a reasonable effect on functional scores and pain in patients with prolapsed of lumbar intervertebral disc.
Design-subjects: A single site, randomised trial of 60 participants, diagnosed as prolepses of lumbar intervertebral disc by x-rays and MRI, was performed.
Intervention: Participants were randomised into two groups. In-group one (n = 30) silver needles placed in lumbar paravertabral and lower extremity and electro stimulation and in the second group (n = 30) low frequency high intensity TENS was used three times a week. All groups received treatment for a total of fifteen sessions.
Outcome measures: Visual analogue scale (VAS) was used to evaluate pain, Modified Oswestry Disability Questionnaire (MODQ) and Low Back Pain Sequence Scale (LPSS) were used to evaluate physical functions of the patients.
Results: In our work where TENS and acupuncture treatment were compared on 60 patients with prolepses of lumbar intervertebral disc, results of both TENS and acupuncture groups were statistically significant when compared with pre treatment to post treatment and one-month post treatment period ($p < 0.005$). But no statistically significant difference of recovery in visual analogue scale, Oswestry disability questionnaire and back pain sequence scale test, had been detected between the groups ($p < 0.005$).
In conclusion we found acupuncture as effective as TENS in the treatment of lumbar disc prolepses.

E02 BIOFEEDBACK

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AN AMBULATORY EXTRAMURAL TREATMENT FOR NECK/SHOULDER PAIN

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Background and Aims: The Cinderella hypothesis provides an explanation why neck/shoulder complaints may arise during physically light computer work. It suggests that low threshold units will be overloaded and damaged when muscles are continuously activated at a low level, below awareness of the subject. This damage contributes to development and persistence of pain. Among many factors a lack of muscle relaxation might be caused by non-optimal postures and stress. An ambulatory myofeedback system was developed that warns the subject in such situation. This allows the subject to become aware and change his behaviour.
Methods: The systems consists of a garment with embedded EMG electrodes, worn under the clothes during daily activities. A small case, worn at a belt, contains the EMG processing and feedback unit. Personal feedback is provided by means of vibration when the Relative Rest Time (RRT) is below 20%. The system is used 4 weeks for at least 4 hours a day, five days a week.
Studies were conducted in subjects with neck/shoulder pain: prognostic cohort studies in 21 RSI patients and in 14 whiplash patients, an RCT comparing myofeedback (n = 41) with ergonomic consultation (n = 38) in RSI patients.
Results: Fifty percent of the subjects show clinical relevant decreases in pain directly after intervention that even persists at 6 months follow up. This decrease is related to an increase in RRT.
Conclusions: The ambulatory treatment allows a rather high intensity treatment in the subjects own environment enabling an effective translation of modified behaviour in activities of daily living.

E03 HOLISTIC/ALTERNATIVE MEDICINE

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THE EFFECT OF MOXIBUTIONON COLLAGEN-INDUCED ARTHRITIS IN MICE: A ROLE OF CD25+CD4+ REGULATORY T CELLS

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Background and Aims: It is known that the moxibustion applied to the acu-point has desirable effects on the self-defense mechanisms. There are many reports that the decrease of the number and/or the dysfunction of natural regulatory T cell (CD25+ CD4+ T cells) induces autoimmune disease such as rheumatoid arthritis.
Methods: We used collagen-induced arthritis (CIA) mice to examine the effect of moxibustion for autoimmune disease such as rheumatoid arthritis. DBA/1J mice were immunized intradermally with type α bovine collagen twice with the 3 weeks interval. The symptoms of arthritis were occurred 28 days after the first injection (day 28).
CIA mice were divided into three groups. Control group: no treatment, Moxibustion group: Moxibustion treatment with 1 mg moxa cone was applied 5 times a day to the MEIMON (GV4) acupoint, 3 days per week for 3 weeks. Prednisolone group 10 mg of prednisolone was administered orally, 3 times per week for 3 weeks.
Results: At the initial stage (day 28), the number of the leucocytes, especially the CD25+ CD4+ T cells were increased in the moxibustion group.
On the other hand, in the prednisolone group, the number of CD25+ CD4+ T cells was significantly increased but the number of leucocytes was not changed.
Conclusions: There results suggested that the increase of regulatory T cell induced by moxibustion and prednisolone at the early stage of CIA lowered arthritis severity.

E04 MANIPULATION METHODS

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PILOT STUDY OF FLUOROSCOPIC-GUIDED LATERALLY APPROACHED INTRA-ARTICULAR INJECTION OF HIGH MOLECULER WEIGHT HYALURONAN IN THE TREATMENT OF SYMPTOMATIC HIP OSTEOARTRITIS

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Hyaluronic acid (HA) is used for intra-articular treatment of osteoarthritis (OA). Non-operative therapeutic armamentarium recommended for reducing pain and maintaining mobility in the hip is still very limited with regard to OA. Some intraarticular supplementary therapies recommended for hip OA administered by anterior approach. We examined the effect of hyaluronic acid (Adant®) in intraarticular treatment for hip OA by lateral approach. This is the first study using lateral approach under flouroscopic guidance in human. Eight patients with hip OA were included in this preliminary study.
Method: Three injections were administered once weekly to each patient. Visual analogue scale (VAS) was used to measure the hip OA pain and NSAID consumption was noted. The primary outcome measure were; "pain on walking", decrease in VAS, patient satisfaction and NSAID consumption. Evaluation was performed at baseline and after 7, 30 and 90 days.
Results: Significant reduction of all parameters was observed 30 and 90 days after the injection, but there was no reduction at 7th day. Neither local side effects have been observed, nor systemic complications.
Conclusions: Our primary data show that viscosupplementation is a promising approach for hip osteoarthritis, providing beneficial effects in a 90 days follow up. Since there was no reduction in pain scores