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THU0540

INCREASED WORK CAPACITY IN CHRONIC LOW BACK PAIN PATIENTS AFTER A MULTIDIMENSIONAL PROGRAM ASSOCIATED WITH DECREASE IN FEAR AND APPREHENSION

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Background: Chronic low back pain has a high burden in our society. Almost 85% of the population would be affected from low back pain. Less than 10% would be chronic but they have an important economic impact since they have the highest costs. According to Vlayen, the kinesiophobia (avoidance of movement) is the most important prognostic factor when evaluating the return to work

Objectives: To study the importance of kinesiophobia, fear and anxiety in the chronic low back (CLB) pain patient and their relationship to workability after a multidimensional intensive treatment program.

Methods: We included 850 patients who had followed an outpatient program of functional restoration during 3 weeks. The program was composed of physical exercises, occupational therapy and psychological group discussions. They were followed over 1 year. Using different questionnaires (TSK -Tampa scale of Kinesiophobia, FABQ, Pact -subjective work capacity-, Phoda, SF 36), physical performances tests (muscular endurance: Shirado, Biering-Sörensen, Bruce; lumbar mobility, Pile lifting test) we analysed the important factors for their work capacity.

Results: There were a clear relationship between a decrease in kinesiophobia and an increase of work capacity. Globally, the work capacity increased from 41.2% to 79%. There were no long standing increases in muscular performances, but the important change appeared in the decrease in the physical part of FABQ (14 to 9/24) and the SF36 limitations physical health/emotional problems (19.4% to 51.8%/36 to 65.7%).

Conclusions: A multidimensional intensive program including approaches on fear and apprehension has an important impact on work capacity. This observation is important to take into account in creating functional restoration programs

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THE EFFECT OF PHYSICAL THERAPY ON CLINICAL AND QUALITY OF LIFE IN CHRONIC NECK PAIN PATIENTS: A RANDOMISED CONTROLLED TRIAL

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Background: In the treatment of chronic neck pain (CNP), education, medical treatment, exercise and physical therapy (PT) modalities are in place. However, there are not enough studies on the efficacy of PT modalities in CNP

Objectives: To evaluate the effectiveness of the addition of PT modalities to exercise and medical treatment in relieving pain and improving the functional status of patient with CNP

Methods: 80 patients with CNP were included in a randomised, controlled trial. Patients were assigned in two groups randomly. Treatment group (TG) received conventional PT (hot pack (HP), ultrasound (US), Transcutaneous Electrical Nerve Stimulation (TENS)) treatment in addition. PT was applied ten sessions. HP treatment was applied in 20 min. US treatment was applied with 1,5watt/cm² dose and continuous type in 10 min. TENS treatment was applied with conventional type in 30 min. All patients were informed about correct posture and daily life activities. Both groups received home-based exercises program and analgesic medical treatment if it is necessary. Patients were evaluated before and after therapy and 3th month later by Visual Analogue Scale (VAS), cervical range of motion (ROM), Beck Depression Scale (BDS) and short form-36 (SF-36)

Results: In both groups there is significant improvement in VAS, cervical ROM, SF 36 and BDS after treatment (p<0.01). In TG significant improvement was seen on 3th month follow up. But the significant improvement was not seen on 3th month in control group (CG).

There is no significant difference between groups for VAS, SF-36 parameters and BDS before and after treatment (p>0.05). There was a significant improvement in VAS, SF-36 parameters and BDS in the TG compared with the CG at the end of therapy and 3 months post-treatment (p < 0.01)

Conclusions: Medical treatment and exercise with HP, US and TENS therapy was effective on both pain and disability during the treatment. This improvement kept on 3th month follow up. Also same improvement was seen on mood and life quality. Exercise has better effects on after treatment, but these goods effects decrease on 3th month follow up. So we think physical medicine modalities should be used in CNP with disability

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THU0542

EVALUATION OF THE EFFECTIVENESS OF ULTRASOUND GUIDED EPIDURAL CORTICOSTEROID INJECTION AND PULSED ELECTROMAGNETIC FIELD STIMULATION IN CHRONIC LOW BACK PAIN

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Background: Epidural injections are one of the most common nonsurgical interventions for managing chronic low back pain. They have been used to treat radicular pain from herniated discs, spinal stenosis, and axial spinal pain. Pulsed electromagnetic field stimulation therapy (PEMFs) provides a noninvasive and safe method to treat the site of injury, the source of pain, inflammation by modulating factors involved in pain signalling and the inflammatory response.

Objectives: To assess the improvement in patients with chronic low back pain treated with epidural steroid injection or Pulsed electromagnetic field stimulation. To compare the efficacy of epidural steroid injection and pulsed electromagnetic field stimulation in treatment of patients with chronic low back pain.

Methods: In this study; sixty patients with chronic discogenic low back pain (diagnosed clinically and by magnetic resonant imaging of lumbosacral region) with or without radicular pain of at least 6 months duration were selected. We excluded patients with other causes of back pain as spondylolithesis, inflammatory, infective, neoplastic, traumatic causes. Patients were randomly divided into two equal groups (30 patients each); after informed consent; group I treated by ultrasound guided caudal epidural injection of 40 mg methylprednisolone and 2 ml 2% lidocaine and 20 ml of 9% NaCl twice one week in between and group II received PEMFs daily for 4 weeks. And all patients will be instructed to follow an exercise program. All patients were assessed clinically, functionally by Oswestry Disability Index (ODI) and by measuring serum level of beta-endorphin by ELIZA before, at the end treatment and six months after the end of treatment.

Results: In both groups; there was highly significant improvement in pain after treatment (P1 <0.0001) the mean value of the (VAS) was 8.13+0.63, 7.70 +1.34 respectively before treatment and 3.33+2.63, 2.30+2.32 respectively after treatment. Still further significant improvement at the end follow up (P1 <0.0001) in group I. There was highly significant improvement (p<0.0001) of functional status in both groups after treatment and at follow up period as compared to before treatment but there was significant decrease of functional status at follow up period as compared to after treatment in group II. There was significant improvement of serum level of beta endorphin (p>0.05) in both groups after treatment and follow up period as compared to before treatment but there was insignificant difference at follow up period as compared to after treatment. Our result showed insignificant difference between two groups in clinical, functional or laboratory parameters.