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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 and Pulsed electromagnetic field stimulation.

Results: 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 spondyloarthitis, 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 of 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) 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.