

NEURO RESOURCE GROUP

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Poster Presentation

NON-INVASIVE INTERACTIVE NEUROSTIMULATION (NIN) WITH THE INTERX DEVICE FOR THE TREATMENT OF CHRONIC INTRACTABLE LOW BACK PAIN: A PILOT STUDY

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Low back pain is a costly illness for which electrical stimulation is commonly recommended. According to the National Institute of Health, Americans spend at least \$50 billion each year on lower back pain, the most common cause of job-related disability and a leading contributor to missed work. Previous systematic reviews and practice guidelines have reached discordant results on the effectiveness of electrical stimulation for low back pain.

Recently NIN delivered with the InterX 5002 neurostimulation device has proven effective for the treatment of post surgical pain and severe chronic orthopedic pain. The purpose of this pilot study is to determine whether InterX may be effective for chronic low back pain.

Nine patients were enrolled to participate in the trial. All of them had a confirmed chronic lower back pain lasting on average 7.5 years with the period of suffering ranging from three months up to 15 years. Patients were given three InterX treatments per week for three weeks, followed by a two week break. The patients self-administered two further treatments at home using a patient device with electrodes that could be wrapped onto the body.

Results: All patients benefited from a significant reduction in pain. The average VAS pain score for the group before the first treatment was 5.25. Following the final treatment the average pain score was <1. The effect on functional ability was reflected in the Oswestry Low Back Scale of pain intensity:

The average disability score was greater than 12 at baseline, the score was reduced by 56% (to 6.9) by the end of the trial. Patients also showed significant reductions in medication intake with six subjects not taking any pain medication by the end of the trial.

This study suggests that NIN may provide patients with moderate low back pain with significant relief which can be managed and maintained with a course of home treatment. Further investigation into this new treatment modality for chronic low back pain is warranted.