

PROSPECTIVE, OPEN LABEL, PILOT STUDY: ONE YEAR RESULTS OF 10KHZ SPINAL CORD STIMULATION (SCS) FOR NEUROPATHIC BACK PAIN IN NON-OPERATED PATIENTS

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Introduction

Persistent neuropathic low back pain associated with allodynia and hyperalgesia (LBP) is often difficult to treat, especially when patients have exhausted standard care measures such as physiotherapy, interventional procedures and are not suitable for surgery. HF-SCS has been demonstrated to effectively treat chronic neuropathic low back and leg pain. We present one year follow up results on our prospective Maiden-Back study

Methods

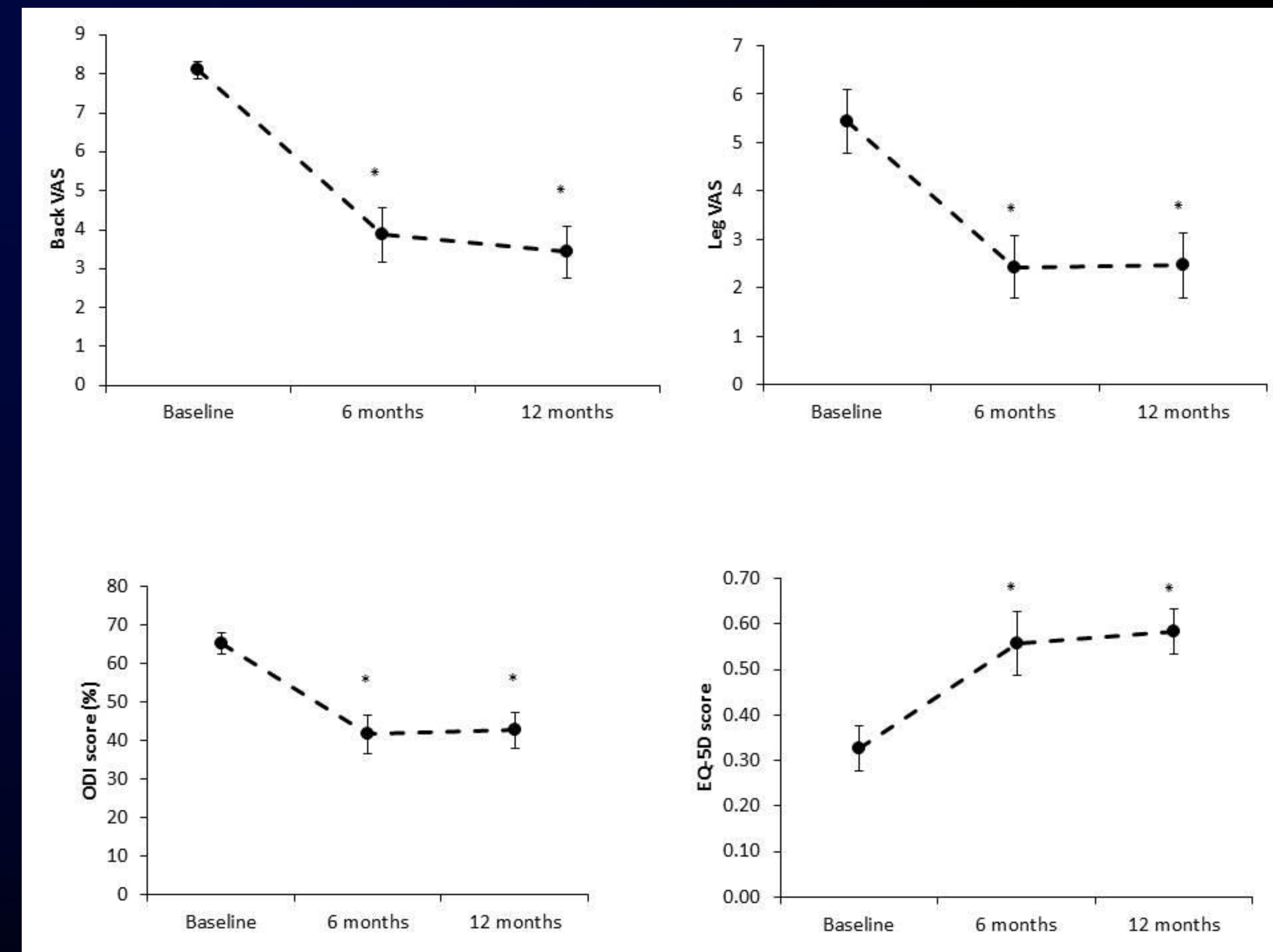
Twenty patients with hyperalgesia or allodynia to lower back underwent a SCS trial followed by full implantation. 12 months data with further on-going data collection for 5 years looking at improvement in back and leg pain, health-related quality of life (QoL), pain-related disability, employment status and global impression of change in patients with non-operated neuropathic back pain characterised by hyperalgesia and allodynia.

Results

Back and leg pain, health-related QoL and pain-related disability were significantly improved at 6 and 12 months compared to baseline. Medication consumption was reduced at 12 months and employment status improved for one patient. Baseline leg pain and health-related QoL significantly predicted change at 12 months: lower baseline scores were related to greater improvements at 12 months. Finally, patients who responded to 12 months of SCS had higher neuropathic pain scores, were in employment and had pain when standing to sitting at baseline. There was a tendency for neuropathic pain scores to predict response type.

Conclusion

Twelve months of 10 kHz SCS improved pain, medication consumption and well-being in patients with moderate to severe hyperalgesia and allodynia. Responders to 10 kHz SCS had unique initial characteristics that differed from those of non-responders, suggesting it is feasible to identify response type from the outset. With further work exploring the more long-term effects of 10 kHz SCS in this patient group, it will be possible to more firmly establish the therapeutic effects of this treatment in difficult to treat back pain with hyperalgesia and allodynia.



References

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