

NATIONAL INSTITUTE FOR HEALTH AND CLINICAL EXCELLENCE

Health Technology Appraisal

Spinal cord stimulation (SCS) for chronic pain of neuropathic or ischaemic origin

Comments of the Final Scope

On behalf of the British Pain Society

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Outcomes

1. There are a sufficient number of randomised controlled trials to investigate SCS; however, blinding remains problematic. This is a common problem in the comparator treatments for surgery, but also in data from drug trials that do not use an active placebo (the majority), injection treatments and psychological therapies.

2. Complications of SCS are medically minor but carry significant operative costs. The revision rates may be based upon data from several years ago. There have been improvements in technology to reduce these in recent times. For example, rechargeable pulse generators to reduce frequency of re-operation for battery replacement; multiple electrodes, greater range of pulse width and frequencies and multiple simultaneous programmes to reduce the need for revision surgery for lead migration; design of new anchors and glues to reduce lead migration. There is a recent literature that evaluates the effect of these and from it can be inferred a likelihood that the revision rates for this treatment have reduced and are expected to fall further as these practices are disseminated (Kumar, 2007(1)).

3. We note that medication use is included in outcomes in the protocol. How are those data going to be collected?

4. We draw attention to the fact that SCS is often used as last resort after all other treatments. Why exclude patients who have pain and "treatable" pathology? The term treatable is relative.
 - (a) For failed back surgery syndrome, revision spine surgery only helped 5% of those that were deemed to have surgically remediable pathology (North, 2005). This is far fewer than who were helped with SCS.
 - (b) For peripheral vascular disease, vascular reconstruction carries significant morbidity and mortality (TASC).
 - (c) For refractory angina, re-do coronary artery bypass grafting carried significant morbidity and mortality compared with SCS and both have similar outcomes (Ekre, 2002).

Economic Analysis

1. When it comes to cost effectiveness there has been a tendency to add on the cost of multidisciplinary assessment to that of SCS when in fact it is the CONDITION that requires multidisciplinary assessment rather than the therapy
2. Quality of Life (QoL) scores are lower in neuropathic leg pain patients with failed back surgery syndrome (FBSS) than other chronic pain diagnoses such as rheumatoid arthritis, osteoarthritis and fibromyalgia. SCS rather than comprehensive medical management (CMM) increased QoL scores in this diagnostic group. This draws attention to the fact that the condition of patients selected for SCS is serious in terms of QoL. It should further be understood that this is not a function of the therapy but of the condition.
3. Patients having SCS have tried many other treatments e.g. 87% of patients had tried four or more treatment modalities prior to randomisation. Treatment modalities included were NSAID, anti neuropathic medication, physiotherapy, TENS, acupuncture, nerve block, psychology, opioids (Kumar, 2007(2)). Cost analysis should take this into account. This also demonstrates that many patients are not being offered SCS in preference to other treatments and that SCS may have succeeded in earlier stages of the conditions. There may be a case for earlier intervention with SCS.

Other

1. The professional societies such as the British Pain Society, Neuromodulation Society of the UK and Ireland and the Faculty of Pain Medicine of the Royal College of Anaesthetists are developing adequate training so that SCS as a service to the NHS can be rolled out throughout the NHS to meet unmet need. As yet it is still a bit of a lottery.

References

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