Paresthesia Coverage and Pain Relief in the Low Back for Patients Implanted with a Precision Spinal Cord Stimulator System

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Purpose

• To determine if new spinal cord stimulation (SCS) technology is capable of targeting low back pain and maintaining coverage.

Methods

• Retrospective patient survey from a single Australian clinic
• Patients (n=32) with primary complaint of chronic low back pain implanted with a Precision™ Plus SCS system were contacted by telephone to quantify pain relief and paresthesia coverage.  
  - Responses were received from 27 patients.
• Stimulator usage data downloaded at routine programming sessions.

Results

• 70% were satisfied with paresthesia coverage.
• Patients stated 85% (median) of back pain area was treated with stimulation (mean: 71±38%).
• VAS decreased from 8.3±1.3 to 4.3±2.4 (56% median reduction).
• 6 month follow-up data (n=12):  
  - 87±18% back pain covered.
  - Reported 58±20% pain score reductions
• Pain therapy maintained at 4 and 10 months post-implant.
• Used stimulation an average of 16 hours/day but varied greatly between patients.

Author Conclusions

• New SCS technology was able to capture low back pain in most patients, with a 56% median reduction in pain scores.

Results from case studies are not predictive of results in other cases. Results in other cases may vary.
Discussion Points

- Using technology available in 1993, Barolat et al. was able to induce paresthesia in the low back at most 30% of the time\(^1\).

- Patients treated by Verrills et al. were able to induce paresthesia and capture 71% of the low back pain using Precision™ Plus SCS systems.

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