



60-day PNS of the cluneal nerves provides pain relief and improves quality of life: real-world outcomes from a retrospective review

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BACKGROUND

- Low back and lower limb pain incur significant economic and societal burden and real-world evidence (RWE) can provide insights into treatment effectiveness in routine clinical practice.¹⁻³
- Recent studies across multiple pain indications have suggested that percutaneous PNS treatment via implanted leads for up to 60 days can produce significant pain relief⁴⁻⁷, but few studies have been published on PNS targeting the cluneal nerves.
- The present work is a retrospective review of patient-reported pain and quality of life outcomes from patients receiving 60-day PNS treatment targeting the cluneal nerves in routine clinical practice.

METHODS

- Anonymized data were reviewed from a national real-world database of patients who previously underwent commercial implantation of 60-day PNS system leads targeting the cluneal nerve.
- Outcomes, including patient-reported percent pain relief, average pain (BPISF-5), and quality of life (PGIC) were evaluated at baseline and end of treatment (EOT).
- Responders were defined by $\geq 50\%$ pain relief and/or clinically meaningful improvement (≥ 1) in quality of life as measured by PGIC



RESULTS & DISCUSSION

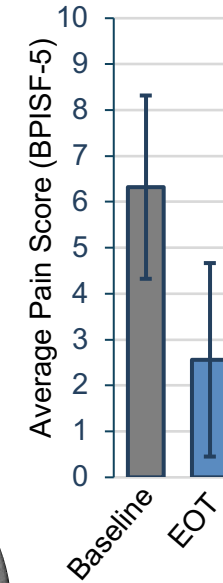
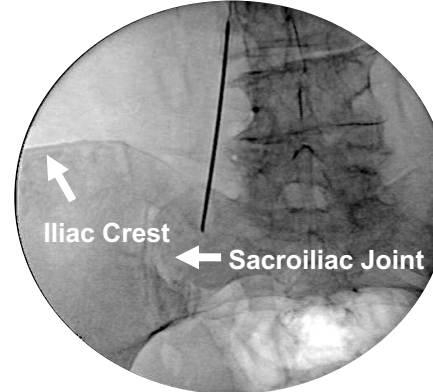
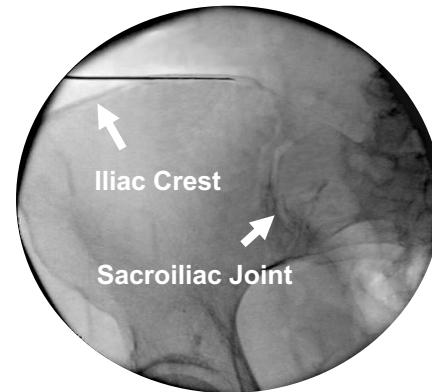
Most Patients Reported $\geq 50\%$ Reduction in Pain and/or Improvement in Quality of Life Following 60-day PNS

- 69% (95% CI: 63-74, 206/300) of patients were responders at EOT with $\geq 50\%$ pain relief and/or clinically meaningful improvement in quality of life.

Example Lead Placement Approaches

Superior Cluneal Nerve

Middle (Medial) Cluneal Nerve



- Common nerve targets included Superior and/or Middle (Medial) Cluneal Nerves, depending on pain distribution
- Mean percent pain relief among responders was $68 \pm 24\%$

Categorical Severity of Average Pain in Patients with Moderate-to-Severe Pain at Baseline

Baseline



End-of-Treatment (EOT)



None/Mild (≤ 3) Moderate (4-6) Severe (≥ 7)⁸

- While safety was not directly analyzed in this review, published studies indicate the most common events are skin irritation due to adhesive bandages, pain or discomfort due to stimulation, and pain due to the lead placement procedure.

CONCLUSIONS

- Sixty-day PNS targeting the cluneal nerves produced significant improvements in pain and quality of life in a majority of patients. A majority of patients reported mild or no pain at the end of treatment.
- This 60-day PNS treatment may serve as a promising, non-destructive option for management of pain in the distribution of the cluneal nerves.

REFERENCES

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- Support for this study was provided by SPR Therapeutics. SAE, DMD are consultants to SPR Therapeutics. WH, NC, and JB are employees of SPR Therapeutics.