



60-day PNS targeting nerves of the groin reduces pain and improves quality of life: a retrospective review of real-world outcomes

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BACKGROUND

- Neuropathic pain in the groin and lower abdomen can be caused by neuralgia or neuropathy including ilioinguinal neuropathies that may arise following trauma or surgeries including herniorrhaphy, appendectomy, and cesarean section¹.
- Conventional treatment options are often neuro-destructive² or cause unwanted off-target effects³.
- Sixty-day percutaneous peripheral nerve stimulation (PNS) has emerged as a potential non-destructive, non-permanently implanted treatment for chronic pain conditions that has the potential to produce sustained relief across primary pain regions and etiologies⁴.

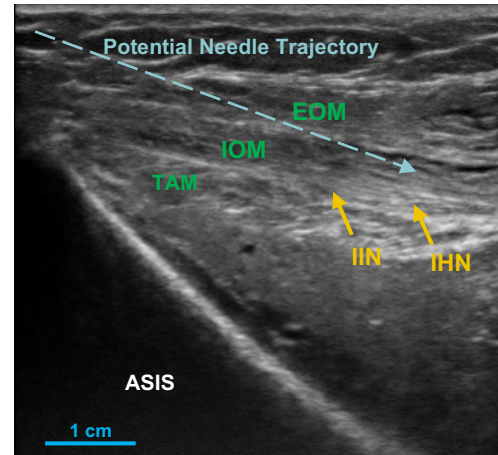
METHODS

- Anonymized data were reviewed from a national real-world database of patients who: i) previously underwent implantation of 60-day PNS leads targeting the ilioinguinal, iliohypogastric, and/or genitofemoral nerve(s), ii) opted in to provide data to the device manufacturer, and iii) had baseline and end of treatment outcomes available.
- Average Pain (BPISF-5), percent pain relief, and quality of life (QoL, measured by PGIC) were collected before treatment (baseline) and at end of treatment (EOT).
- Responders were defined by $\geq 50\%$ pain relief and/or clinically significant improvement in QoL.

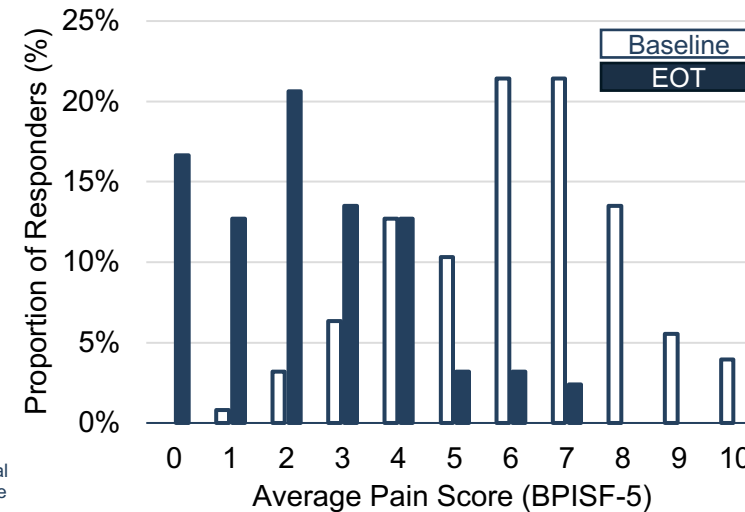


RESULTS & DISCUSSION

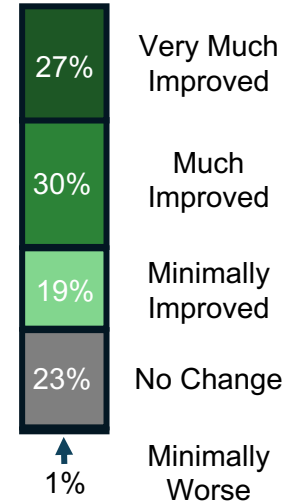
A Majority of Patients (75%, 126/168) Experienced $\geq 50\%$ Reduction in Pain and/or Clinically Significant Improvement in Quality of Life



IIN: Ilioinguinal Nerve; IHN: Iliohypogastric Nerve; EOM: External Oblique Muscle; IOM: Internal Oblique Muscle; TAM: Transverse Abdominis Muscle; ASIS: Anterior Superior Iliac Spine



Quality of Life (PGIC) at EOT



- Mean percent pain relief among responders was $69 \pm 24\%$.
- The most common nerve target to treat groin pain was the ilioinguinal nerve (145/168).
- 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

- A majority of patients who received a 60-day PNS treatment targeting the nerves of the groin experienced clinically significant pain reduction and/or improved quality of life.
- 60-day percutaneous PNS of the nerves innervating the groin (ilioinguinal, iliohypogastric, and/or genitofemoral nerves) may provide effective relief from neuropathic pain in the groin following injury, surgery, or other nerve lesions.

REFERENCES

1. Kohan et al., 2020
 2. Kim et al., 2005
 3. Jeng et al., 2010
 4. Huntoon et al. 2023
- Support for this study was provided by SPR Therapeutics. SR, HS, and SS are consultants to SPR Therapeutics. WH, NC, and JB are employees of SPR Therapeutics.