

Case Report on Chronic Shoulder Pain and Response to Peripheral Nerve Stimulation

Lucendia Adams, MD and Raheleh Rahimi Darabad, MD

Indiana University Department of Physical Medicine and Rehabilitation; Indiana University Department of Advanced Pain Therapies

INTRODUCTION

- Millions suffer from chronic shoulder pain with rotator cuff pathology being the number one culprit
- Studies have shown no appreciable long-term difference in conservative vs surgical treatment for chronic shoulder pain
- Conservative treatment is less costly and leads to less complications, so should be advocated for as initial treatment approach
- What options are there for patients who have failed multiple conservative treatments and are deemed non-surgical candidates?

Case:

- 82 yo female with known HTN and CHF with 2 years of left shoulder pain secondary to MRI confirmed rotator cuff pathology, GH joint arthritis, and AC joint arthritis
- EMG confirmed Left C7 radiculopathy
- Failed conservative treatment:
 - Physical Therapy
 - Oral analgesics and anti-inflammatories
 - Topical anti-inflammatories
 - Neuropathic agents: gabapentin and Lyrica
 - Muscle Relaxants: Tizanidine and Baclofen
 - CESI at C7-T1
- Multiple surgical consultations – all deeming not surgical candidate given age and comorbidities

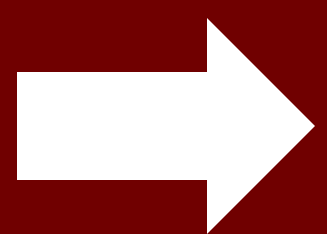


INDIANA UNIVERSITY
SCHOOL OF MEDICINE



Peripheral Nerve Stimulator placement for Chronic Shoulder Pain can reduce pain and improve function for up to 24 Months after placement... maybe longer.

SCAN QR CODE TO
VIEW SURVEY



INTERVENTION

- May 2021 – left suprascapular and left axillary nerve leads placed and attached to peripheral nerve stimulator (PNS)
- 8 weeks later both leads removed in office

SURVEY

- At 24 months post-PNS placement she was given 21 question survey via phone to evaluate pain and functionality pre and post placement

RESULTS

- 80% reduction in pain 24 months post-PNS placement with her daily pain score decreasing from an 8/10 to 2/10
- Activities of Daily Living (ADLs), sleep, and ROM restrictions were less impeded by shoulder pain after PNS (mild limitation vs significant limitations pre-PNS)
- Patient would recommend PNS placement to others for treatment of chronic shoulder pain

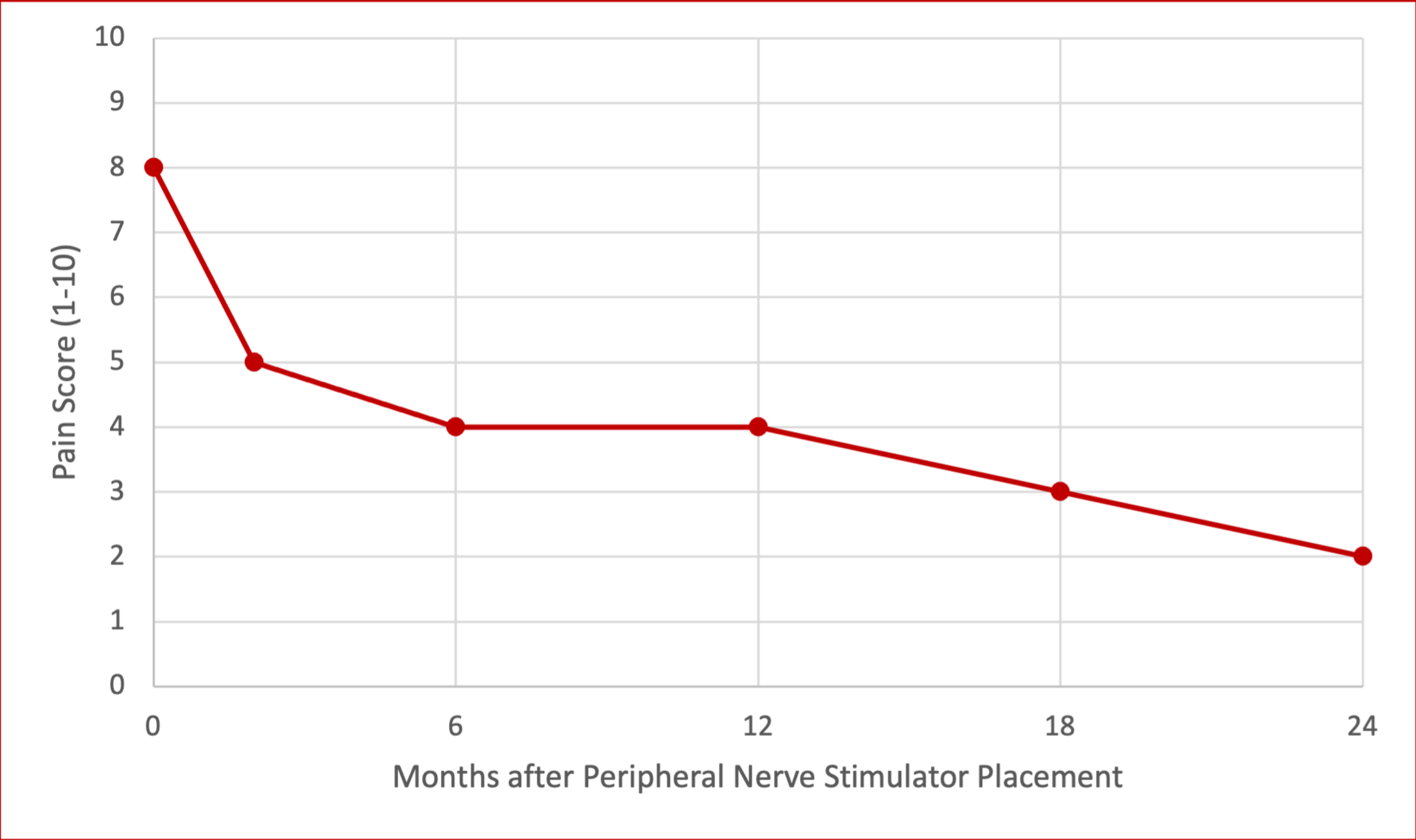


Figure 1: Pain Score on scale of 1-10 (y-axis) plotted against Months after Peripheral Nerve Stimulator Placement

CONCLUSION

- Positive short-term reduction in overall chronic shoulder pain after PNS placement as well as long-term benefits up to 24 months post-placement
- N = 1; more validated research needed to follow patients 24 months and beyond to understand how long positive effects from PNS placement may last