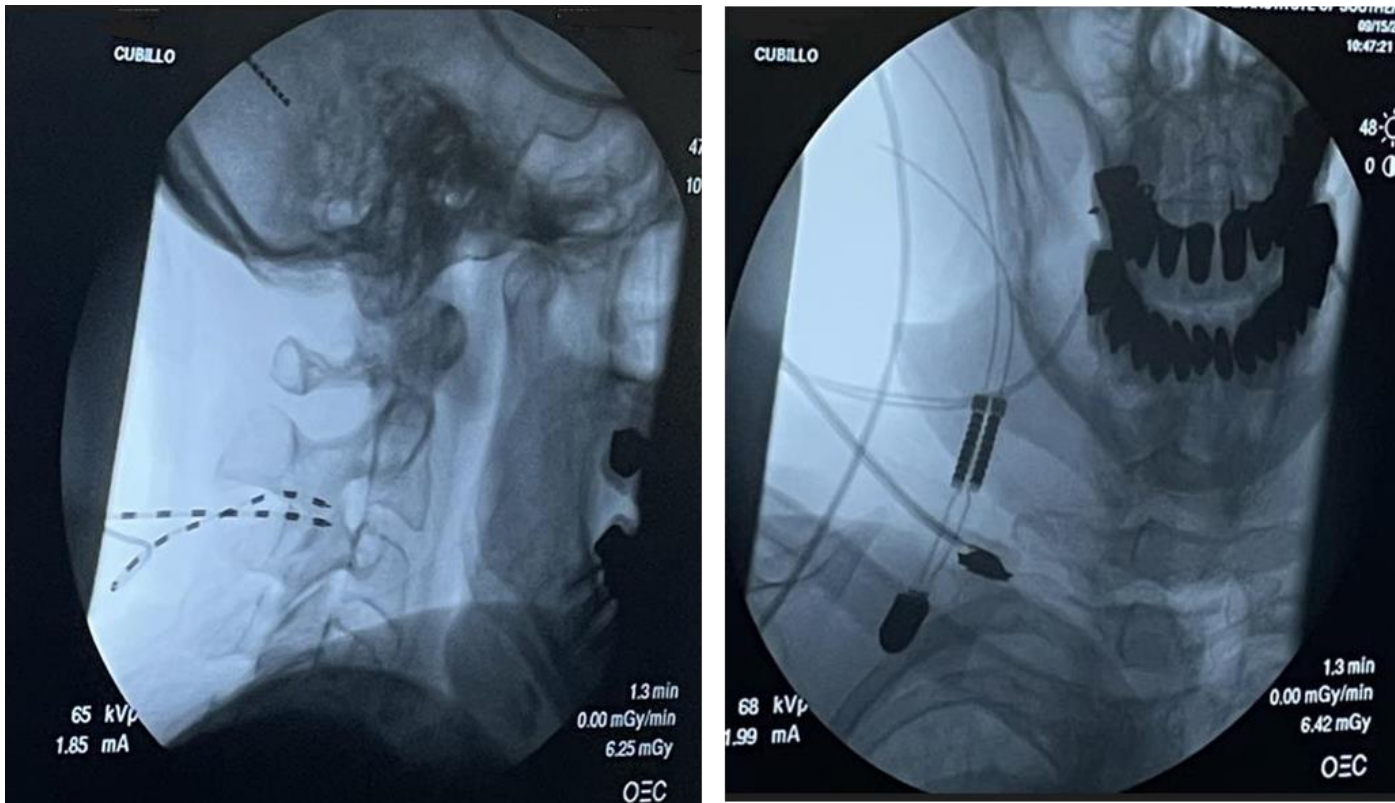
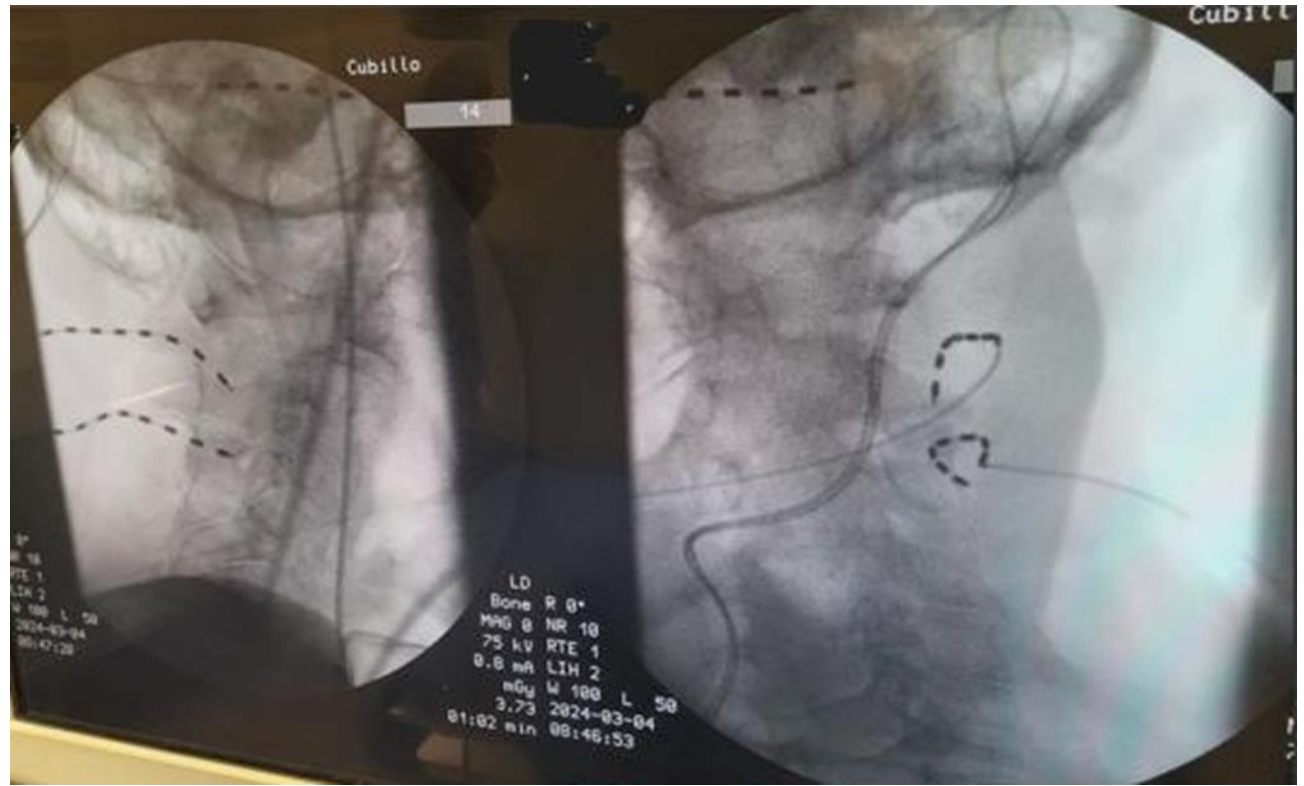
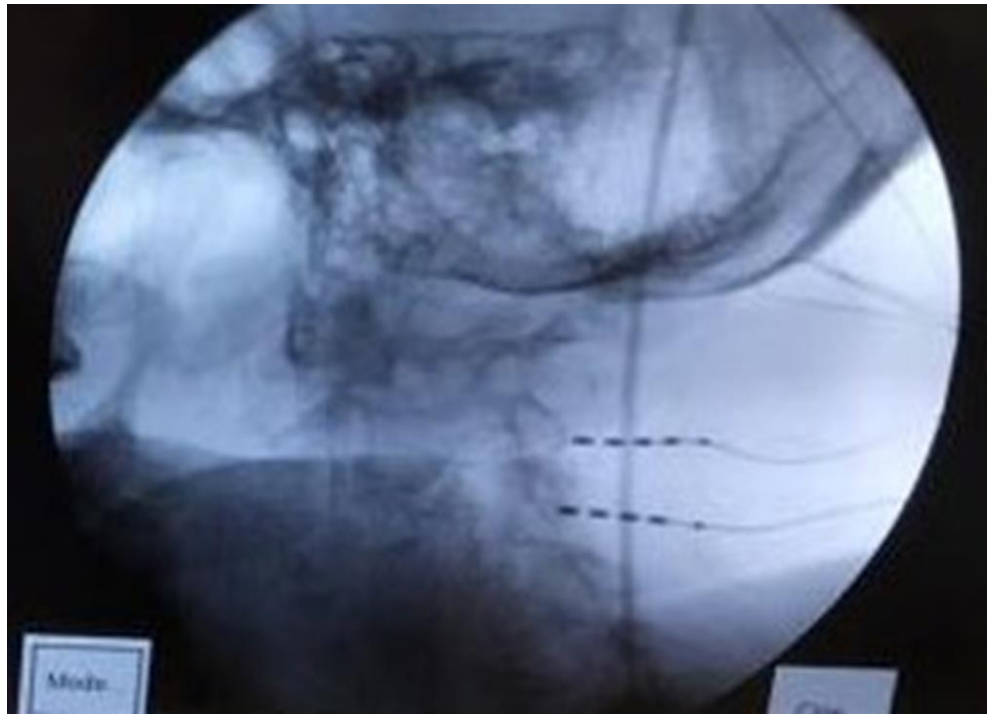


Nalu PNS Provides Significant Relief for Refractory Occipital Neuralgia and Cervical Facetogenic Pain

Author: E. Cubillo

Affiliations: Pain Institute of Southern Arizona, Tucson, AZ

Introduction
Peripheral nerve stimulation (PNS) has emerged as a viable treatment option for patients suffering from chronic pain, particularly in cases where conventional therapies have failed. This abstract presents the clinical experiences of three patients treated with Nalu PNS for chronic occipital neuralgia and cervical facetogenic pain. These cases highlight the efficacy of Nalu PNS in providing significant pain relief and improving the quality of life in patients with long-standing pain conditions.
Methods
Three (3) patients with chronic occipital neuralgia and cervical facetogenic pain, who had previously undergone multiple interventions with limited success, were selected for Nalu PNS trials. The procedures involved trial stimulation of the C2-C3 medial branches using the Nalu PNS system, followed by permanent implantation based on the trial results. Patient-reported outcomes, including pain relief and quality of life, were recorded during follow-up visits.

Case 1: Occipital Neuralgia
History: 67-year-old female patient with a history of Occipital Neuralgia. Previous Treatments: Greater Occipital Nerve Blocks, Pulsed Radiofrequency Ablation (RFA) with temporary relief. Peripheral Nerve stimulation with Nalu PNS System: - Bilateral trial stimulation at C2-C3 in July 2023. - Baseline NRS pain score- 9/10 - 90% pain relief during trial - Permanent Implant at C2-C3 Medial Branch in September '23. - 1-year of device use with 78% (2/10) pain relief and - Improvements in Quality of Life

Figure 1
Case 2: Salvage Therapy
History: 90-year-old male patient with Chronic (right) Head and Neck Pain since 2003. Previous Treatments: Unresponsive to multiple interventions including other PNS device with greater occipital nerve placement. Peripheral Nerve stimulation with Nalu PNS System: - Right trial stimulation at C2-C3 in April 2024. - Baseline NRS pain score- 10/10 - 70% (3/10) pain relief during trial - Permanent Implant at C2-C3 Medial Branch in April 2024. - 8-months of device use with 70% pain relief.

Figure 2
Case 3: Headaches
History: 68-year-old male patient with right sided neck pain and headaches from 1-year. Previous Treatments: worsened pain after cervical medial branch RFA Peripheral Nerve stimulation with Nalu PNS System: - Right trial stimulation at C2-C3 in April 2024. - Baseline NRS pain score- 8/10 - 65% pain relief during trial - Permanent Implant at C2-C3 Medial Branch in May 2024. - 6-months of device use showed 70% overall pain relief. - Improvement in range of motion of head, neck and shoulder.

Figure 3

Discussion
The clinical experiences of these three patients demonstrate the effectiveness of Nalu PNS in managing chronic pain conditions, particularly when other interventions have failed. The significant pain relief and improved quality of life reported by the patients suggest that Nalu PNS is a promising option for treating refractory occipital neuralgia and cervical facetogenic pain. Further research is needed to explore long-term outcomes and the potential of PNS as a standard care approach for chronic pain management.
Figure 1: Lateral and AP cervical fluoroscopy with bilateral 8 contact PNS NALU leads at the C2-C3 junction Figure 2: Lateral and AP cervical fluoroscopic views with ipsilateral (right) 8 contact PNS NALU leads at C2 and C3 Figure 3: Lateral cervical fluoroscopic view with ipsilateral (right) 4 contact PNS NALU leads at C2 and C3.

