

Case Report: Peripheral Nerve Stimulation of the Sphenopalatine Ganglion and Auriculotemporal Nerve for Chronic Facial Pain

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Introduction & Background

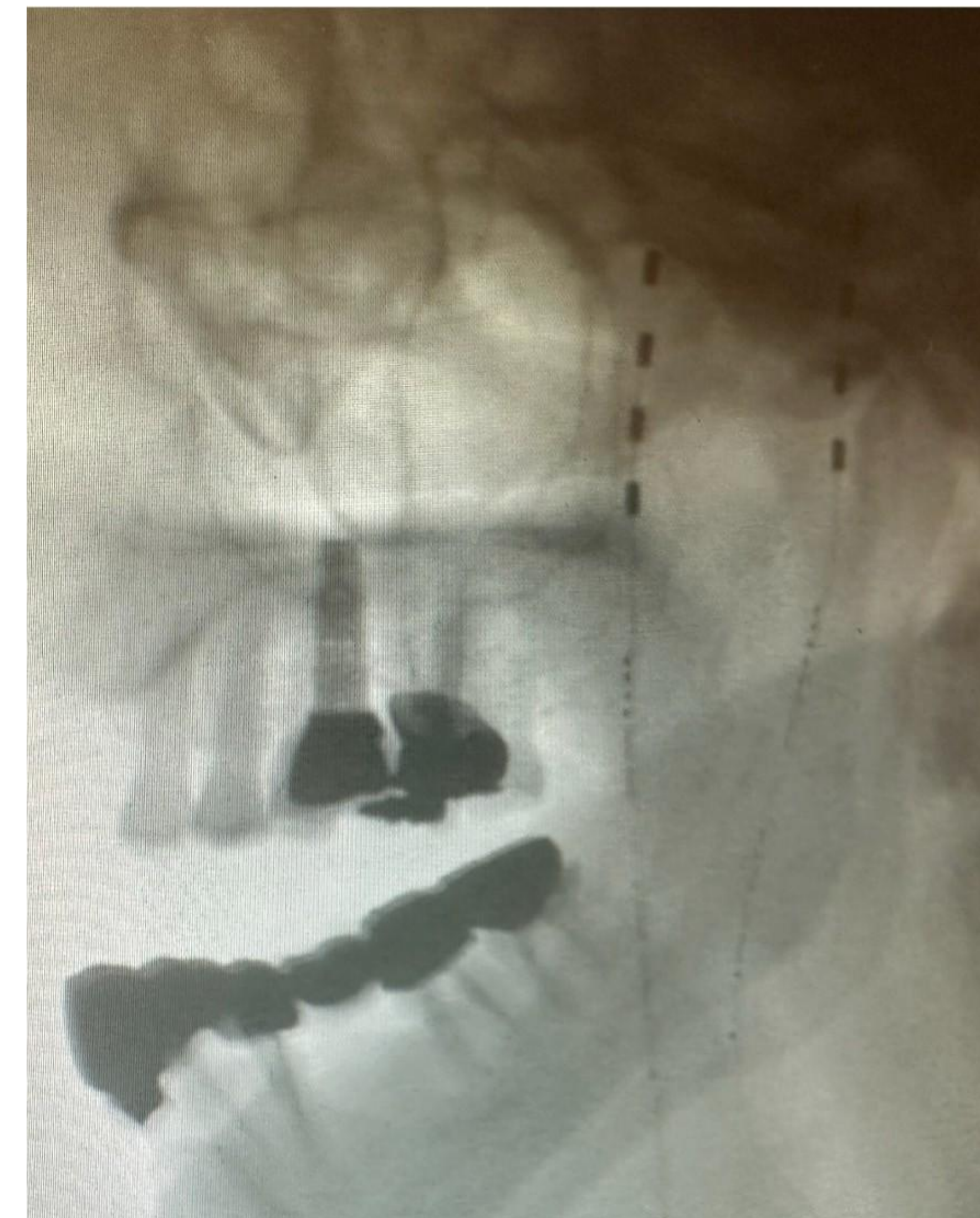
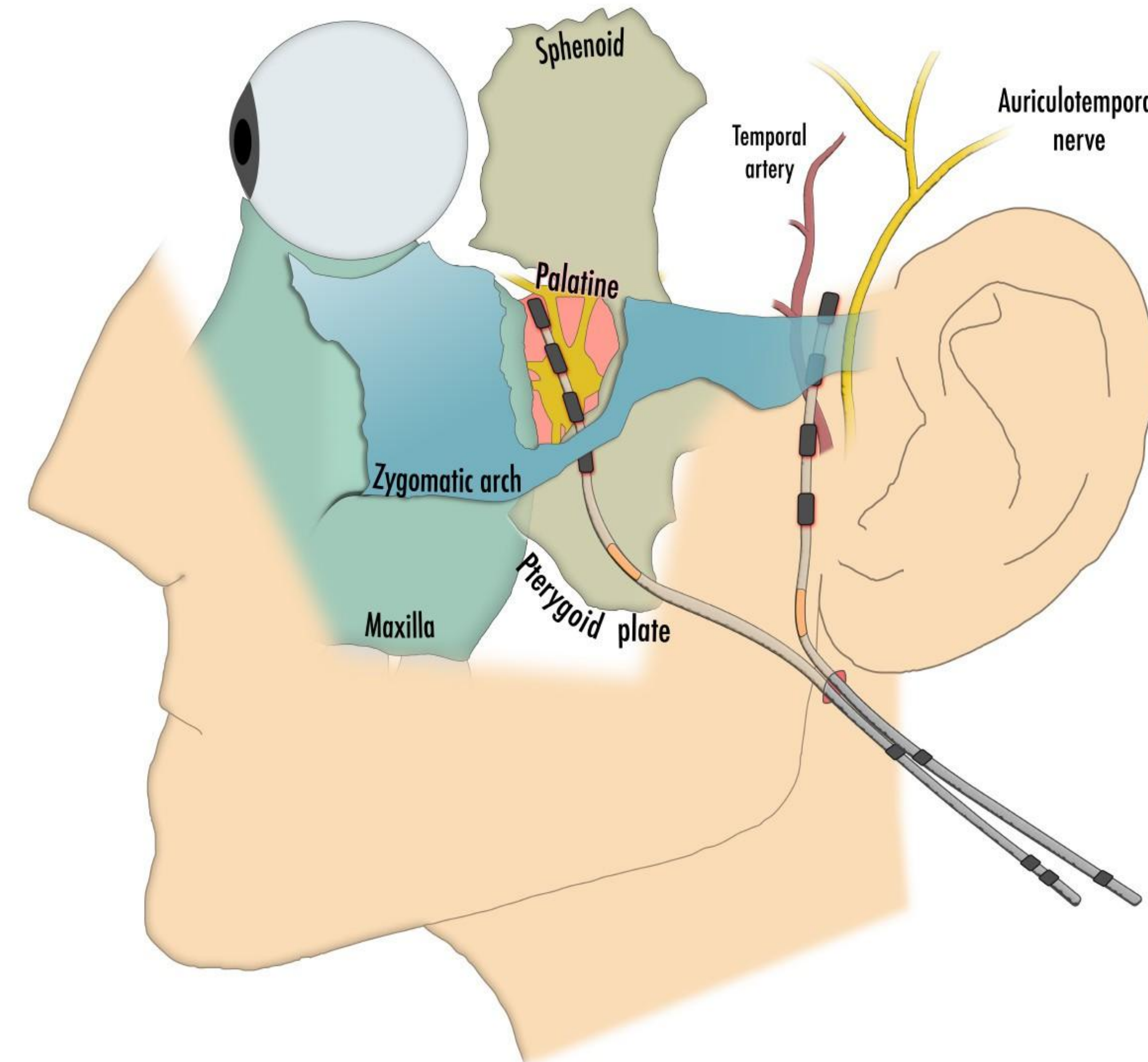
Chronic facial pain is often driven by various underlying mechanisms and can severely impact patients' quality of life. Peripheral nerve stimulation (PNS) emerges as a promising therapeutic option for managing chronic facial pain, offering potential relief where conventional treatments may fall short.

Case Presentation

A 74-year-old male with a history of pain initially in the upper lip and later progressing to the lower lip and mandibular area. It was characterized by sharp, burning, intermittent, electric-like sensations, with varying features leading to a potential diagnosis ranging from trigeminal neuralgia to painful trigeminal neuropathy and variations. Multiple conservative treatment attempts were unsuccessful.

Intervention

PNS implantation targeting the Sphenopalatine ganglion (SPG) and auriculotemporal nerve (ATN). The patient received two successful diagnostic blocks, followed by a trial stimulation period of one week, in preparation for permanent implantation.



Results

The patient reported a significant reduction in facial pain frequency and intensity following the trial period. The VAS score decreased from 9/10 to 3/10. A decision to postpone definitive implantation was made, and at the 3-month follow-up, the patient continued to experience substantial pain relief with a VAS score of 2/10 and a reduction in pain episodes from daily occurrences to bi-weekly. Surveys were done to reassess the condition after two years, with persistent results supporting evidence for long-term pain relief.

Discussion

PNS with combined SPG and ATN stimulation can offer a viable and effective treatment option for patients with chronic facial pain. The substantial decrease in pain intensity and frequency and its persistence for months after trial removal highlights the value of shorter-term implants not only in preparation for future longer-lasting implants but also as a possible standalone therapy. Further studies with larger cohorts are warranted to establish long-term efficacy and safety.

References

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