SUCCESSFUL OUTCOME OF PERIPHERAL NERVE STIMULATION FOR SACROILIITIS AFTER SPINE FUSION

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Introduction

Sacroiliitis often emerges as a complication following extensive lumbar fusion.(*1*) Peripheral nerve stimulation (PNS), targeting the medial cluneal nerve and sacral lateral branch, emerges as a promising remedy.(*2*) Here, we present a case where PNS has demonstrated successful outcomes in addressing unyielding sacroiliitis arising post spinal fusion.

Case Presentation

A 66-year-old woman underwent multi-level spinal fusion (T12 to S1) to counter spinal stenosis with recurrent junctional stenosis. Despite conservative management spanning six months, encompassing medical therapy including MME > 90, and physical therapy, the patient's chronic lower back pain and left buttock pain persisted. Steroid injections into the sacroiliac (SI) joint and radiofrequency ablation of superior and medial cluneal nerves and sacral lateral branches provided temporary relief. Declining SI joint fusion or invasive surgery, she opted for PNS of the superior cluneal nerve and sacral lateral branches. Postoperatively, after six months, her VAS score lowered to 1-3/10, accompanied by an improved ODI from 35 to 18.

Discussion

The SI joint's degeneration post spinal fusion is significant, contributing to approximately 50% of chronic lower back pain post fusion. Yet, established protocols for managing this condition are lacking.(*3*) Methods like PRP, RFA, neuroaugmentation, and SI joint fusion offer varying degrees of sustained relief(*4–6*). Considering patient age, invasiveness, and durability, PNS stands out as an advantageous option.(*2*) Therefore, PNS should be considered as a viable treatment for refractory sacroiliitis subsequent to spinal fusion.

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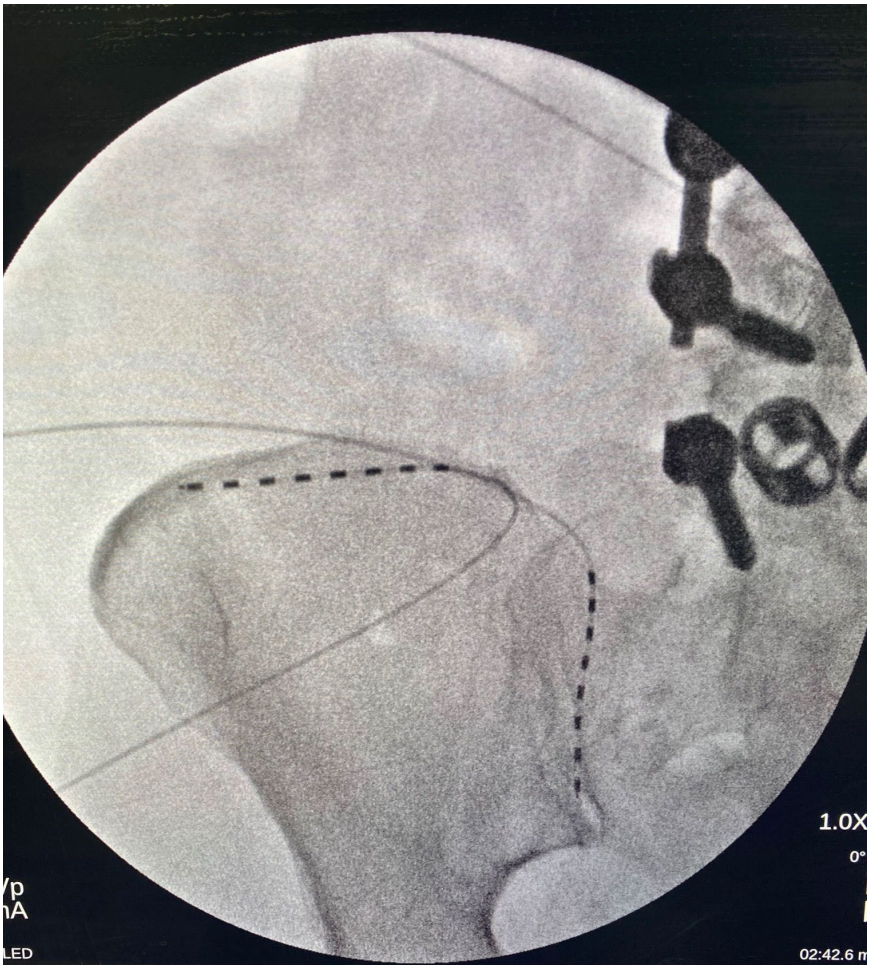

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Figure 1: Fluoroscopic image of a PNS targeting the cluneal nerves superior cluneal nerve and sacral lateral branches.