Wound Dehiscence After SCS Implantation: Successful Device Preservation with Plastic Surgery Coordination

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INTRODUCTION

Spinal cord stimulation (SCS) is an effective treatment for refractory neuropathic pain (1). Wound dehiscence of the implantable pulse generator pocket is rare (~2%) but carries a high risk of infection and may ultimately necessitate explantation (2).

CASE DESCRIPTION

- Patient is a 47 year old female with history of obesity, hypertension, fibromyalgia, chronic low back pain and right-side predominant radicular symptoms.
- She had undergone multiple interventions including lumbar epidural steroid injections and radiofrequency ablation without durable pain relief.
- SCS was trialed in February 2026 and implanted April 2026 after greater than 80% symptom relief.
- IPG wound dehiscence was noted 1 week post-implantation and continued at 2 weeks prompting urgent referral to plastic surgery. Cefalexin was continued.
- On post-implant day 21, patient underwent wound washout and closure with plastic surgery. Necrotic tissue edges were excised and the pocket washed out. Deep sutures were noted to be dehisced; the wound was closed primarily with 2-0 PDS for fascia, 2-0 and 3-0 PDS for superficial layers. Staples were used for skin closure.

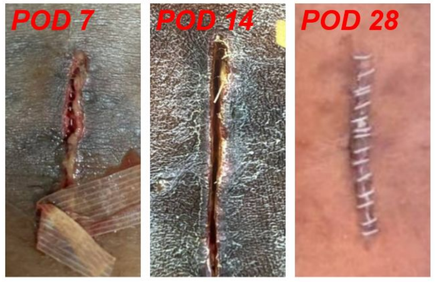
OUTCOME

At 3 months post-SCS implantation, patient had significant, albeit reduced, symptom burden. IPG pocket wound is well-healing with interval removal of staples. Wound cultures were without growth.

REFERENCES

1. Dworkin RH, O'Connor AB, Kent J, et al. Interventional management of neuropathic pain: neupsig recommendations. Pain 2013;154:2249–61.
2. Cherkalin, D., Koushik, S.S., Dua, S. et al. A Comprehensive Review of Spinal Cord Stimulator Infections. Curr Pain Headache Rep 26, 877–882 (2022). https://doi.org/10.1007/s11916-022-01090-2
3. Krog, L., Maloney, J., Pew, S. et al. Cervical Spinal Cord Stimulation: A Review. Curr Pain Headache Rep 28, 239–249 (2024). https://doi.org/10.1007/s11916-023-01200-8

Early multidisciplinary involvement prevents explantation of a successful spinal cord stimulator.



Serial photographs of IPG wound post-operative implant days (POD). POD 28 is 1 week following wound revision.

DISCUSSION

- Wound dehiscence in this case likely occurred initially due to disruption of subcuticular suture.
- Persistent and advanced wound dehiscence usually prompts explant out of concern for hardware infection.
- Close relationships with plastic surgery colleagues provided the foundation for efficient surgical planning and scheduling.
- Engagement of other disciplines for wound dehiscence is underutilized, possibly due to a self imposed expectation of proceduralists to manage their own complications.

CONCLUSIONS

Here, we present a case in which early recognition of delayed wound healing and appropriate surgical referral prevented removal and reimplantation of an efficacious SCS. Wound supervision is especially important in patients with risk factors for dehisence including obesity, malnutrition and diabetes mellitus (3).

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