## **COMMENTARY**

## Surgical technique for removal of InterStim leads

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The authors provide a well-written description of a safe and effective method of tined lead removal for sacral neuromodulation devices.1 It is well-known that the re-operation rate for sacral neuromodulation is high, approaching approximately 30% to 40% over an 11 to 14 year period in some series.<sup>2,3</sup> Therefore, it is important for surgeons to have a systematic approach to lead removal and to be aware of common pitfalls associated with this procedure. In our experience at a high-volume tertiary care center, we have developed a similar technique for successful tined lead removal. First, we prepare for future tined lead removal at the time of implantation by closing the skin over the lead implantation site at the sacrum with a single interrupted 3-0 Chromic suture. This stitch leaves a faint mark on the skin that designates site of the lead so the laterality and location of lead insertion at the S3 foramen can be easily located. We similarly remove the implanted pulse generator and cut the wire to deliver the wire through the second incision over the lead.

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Common pitfalls in lead removal involve pulling the wire through a single incision while still attached to the IPG, or pulling the wire proximal to Marker Band B. The authors of this article emphasize the true key to successful tined lead removal, which is grasping the tined portion of the lead distal to Marker Band B with a right-angle clamp or a hemostat clamp and applying gentle traction with a rocking motion until the entire tined portion of the lead is removed. If the wire breaks while applying traction, we recommend using fluoroscopic guidance and widening the dissection to allow for better exposure to remove the remaining embedded lead. Overall, we agree that tined lead removal may be performed in a simple, effective, and timely fashion by following the technique described in this article.

## References

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