

# **CASE AT A GLANCE: RADIOGRAPHIC EVIDENCE OF PERCUTANEOUSLY IMPLANTED SPINAL CORD STIMULATOR LEAD MIGRATION**

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Lead migration is the most common complication of percutaneously implanted spinal cord stimulator therapy with a reported mean incidence of 15.5% (1). Though caudal migration of implanted leads occurs more frequently, cases of cephalad migration have been reported (2–5). Presenting symptoms of lead migration include loss of pain coverage, inability to program, and unwanted stimulation, all suggestive of lead displacement. Radiographic imaging is diagnostic to demonstrate a displaced lead (6). The following anteroposterior radiographs (Fig. 1) demonstrate single lead migration and successful revision of percutaneous spinal cord stimulator leads implanted in a 55-year-old female with post-laminectomy pain syndrome presenting with

severe bilateral buttock and posterior leg pain. At 6 weeks follow up of a successful spinal cord stimulator trial and permanent implantation, she reported experiencing a snapping sensation along her back and sudden loss of right sided coverage during a game of golf. Revision surgery revealed a broken anchor. Patient risk factors such as obesity and post-operative activity may increase the rate of lead migration. Novel techniques in lead implantation may lead to lower observed rates of lead migration (7–9). In patients presenting with acute symptoms of changes in pain coverage, clinicians should have a low threshold to request diagnostic radiographic imaging.

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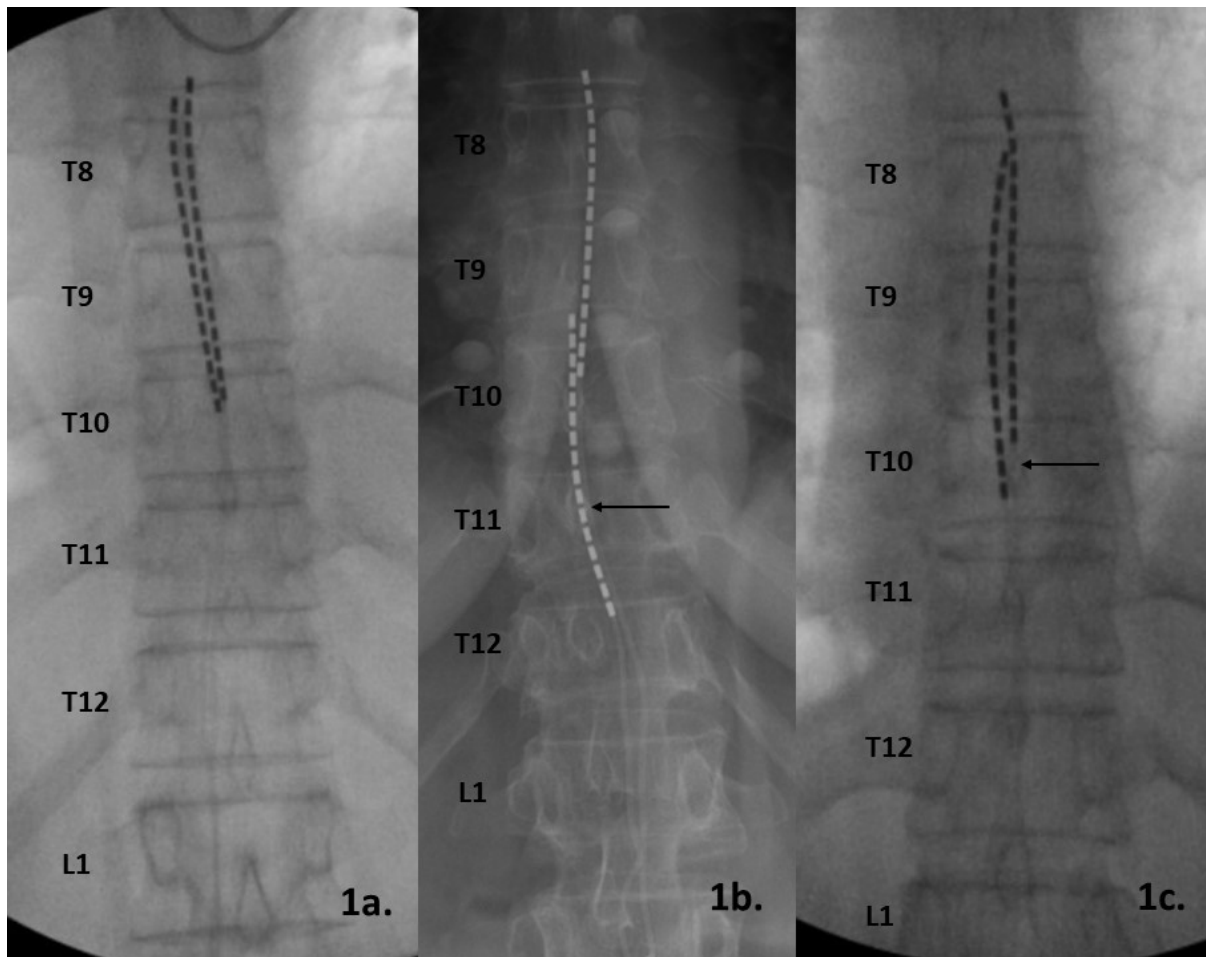


Fig. 1. Anteroposterior radiographs of 1a) initial intraoperative imaging demonstrating successful lead placement spanning T8 and T9 vertebrae, 1b) diagnostic imaging demonstrating significant right lead caudal migration to T10 and T11 vertebrae, and 1c) post revision operative imaging demonstrating successful replacement of the right lead.

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