

Ten years of successful pain management for complex regional pain syndrome by epidural anesthesia with implanted port: a case report

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To the Editor:

A 27-year-old woman underwent tumor resection for fibrous dysplasia of the right ilium. Following surgery, she suffered from burning pain, allodynia, edema, cutaneous atrophy, and bilateral difference of skin temperature in the territory of the right lateral femoral cutaneous nerve. Her pain was diagnosed as complex regional pain syndrome (CRPS) associated with injury to the lateral femoral cutaneous nerve. The numeric rating scale (NRS) was 8–9. Temporary pain relief could be achieved with oral tramadol hydrochloride administration or a single epidural block, but this was insufficient. Spinal cord stimulation system (SCS) implantation was performed through placement of a dual electrode lead in the epidural space [1, 2]. However, pain relief by SCS was only partial, and the patient wished to avoid frequent epidural blocks, as the pain relief varied each time (NRS 3–7). Dural puncture headaches were also a patient concern, given her prior experience with a severe post dural puncture headache following spinal anesthesia. After clearly explaining the risk of infection to our patient, we implanted an epidural port (PORT-A-CATH; Smiths

Medical, UK) from L2–L3 to the extremity to T12. Following implantation, we administered weekly doses of either 6 or 7 ml 1 % mepivacaine, which yielded significant pain relief for years with NRS 3–4. After 6 years after implantation, we changed the local anesthetic to 0.75 % ropivacaine, leading to the decrease of the NRS to 1–2. We adjusted the dose of local anesthetics according to pain control for the patient. In the 10 years since implantation, the epidural catheter has broken twice (after 3 years and 7 months, and at 8 years and 3 months following implantation). Catheter breakage was confirmed by contrast agent leakage, and catheter replacement under general anesthesia was uneventful in both instances. Epidural catheter implantation is often performed for cancer patients with intractable pain [3, 4], but our report suggests that it may also serve as an alternative treatment to address CRPS that is nonresponsive to medication or SCS.

Conflict of interest None.

References

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