Entrapped Epidural Catheter: An Anaesthetic Challenge

Sir,

Epidural anaesthesia is the most effective technique for intraoperative and postoperative analgesia. However, some rare but worrisome mechanical complications of epidural catheters, such as difficult removal or breakage may occasionally occur. Various techniques, including changing a patient’s position or fluoroscopic-guided or surgery-guided techniques have been described in the literature to facilitate the removal of an epidural catheter.1 This case is a rare complication where the epidural catheter was entrapped, and it was extremely difficult to remove.

A 31-year female presented to the emergency operation theatre for exploratory laparotomy for a pelvic abscess with post-abortion sepsis. The epidural catheter was inserted to provide perioperative analgesia. With the patient in the left lateral position, the epidural catheter insertion was done at T12 - L1 interspace and fixed at 10 cm from the skin. Epidural was working efficiently during the perioperative period. On postoperative day 3, we planned to remove the catheter, but it was not coming out. To prevent any further complications like catheter shredding, the patient was put in the left lateral position. The catheter removal was tried with slow, steady, and gentle traction. In this position, the catheter was removed successfully, and thus by this simple maneuver, we were saved from any significant complication.

Several complications have been documented on the removal of entrapped epidural catheter such as catheter breakage, kinking or knotting, which might need surgical intervention.2-4 Successful maneuvers can be used to facilitate the epidural catheter removal including lumbar spine flexion, spine rotation, returning the patient to the original insertion position, and injecting the catheter with normal saline.5 The neurological functions should be observed during the removal of a kinked or lopped epidural catheter. If paresthesia, radicular-type pain, or any other sign of nerve root damage appears, further attempts at withdrawing the catheter should be abandoned immediately.

The above complications of entrapped epidural catheter are rare but problematic for the patient and the anaesthesiologist. The practicing anaesthesiologists should be aware of these potential complications so that they can manage safely.

PATIENT’S CONSENT:
Informed consent was obtained from the patient to publish the data concerning this case.

COMPETING INTEREST:
The authors declared no competing interest.

AUTHORS’ CONTRIBUTION:
PS: Drafted the work and revised it critically for important intellectual content.
SS: Contributed towards the concept and design of the article.
DR: Done work for ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.
All the authors have approved the final version of the manuscript to be published.

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Received: September 08, 2021; Revised: March 07, 2022; Accepted: March 27, 2022
DOI: https://doi.org/10.29271/jcpsp.2022.09.1230