Epidural register (record of epidural catheter placement) – Need of current anesthesia practice

Dear Sir,

An epidural register, or log book, is a new term that has been used by us. It means the register or log book in which we keep the relevant record of all the epidural catheters placed during different surgeries in the O.T. complex or any other area. Here, we report one unique case report in which we have timely avoided serious catheter-related complications with the help of an epidural register.

A 34-year-old female was operated on for a bilateral tibia fracture under combined spinal epidural anesthesia. Epidural entry was made in the epidural register, and the catheter was left *in situ* to provide postoperative analgesia for up to 72 hours as per institutional protocol. After 72 hours, as per the record from the epidural register, a junior resident doctor from the concerned anesthesia team was sent to the ward for the removal of the catheter, where she found that the patient had been discharged on request in the early morning with an epidural catheter *in situ* by a first-year orthopedic resident doctor without prior information to the anesthesia team. Immediately, we tried to trace the patient's contact number but could not establish contact. The next day, we traced the patient's address from the record office with the help of the registration number available to us and then sent our doctors team with a sterile dressing set to her home. There they removed the catheter under all aseptic conditions, sterile dressing, and documentation.

Epidural catheters are widely used in different types of surgical settings as they serve as an excellent adjunct or alternative to general anesthesia, especially in medical colleges or big hospitals where we daily administer epidural anesthesia.[1] As we also used to keep the epidural catheters for 1–4 days for postoperative analgesia, it has become difficult for any single person or team to remember and keep the follow-up of each epidural catheter for these patients, which were placed on previous days. Moreover, due to the practice of rotational duties for consultant anesthesiologists (daily in different operation theaters) and work overload, follow-up of epidural catheters has become more cumbersome for them too. Moreover, due to a lack of knowledge regarding unattended prolonged epidural catheter placement complications among ward staff and ward doctors, there might be some chances that patients might get discharged or go LAMA from the hospital with an epidural catheter *in situ*, which can bring medicolegal liabilities for the operating team (anesthesia and surgical team). As unnecessary prolonged epidural catheter placement can cause severe complications like local infection, epidural abscess, meningitis, and even neurological damage,[2] we must give similar concern and attention to the removal of the epidural catheter as during placement. Hence, here comes the role of the epidural register in current anesthesia practice. By keeping records of all the epidural catheters placed in different surgical procedures in the whole operation theater complex, it will be very easy for junior resident doctors or consultant anesthesiologists to follow up on each epidural catheter (for top-up analgesic doses and removal of the catheter) even on rotational duties or early uninformed discharge of patients. Moreover, it will be easier for fellow

anesthesiologists to follow up on the epidural catheters placed by other consultant anesthesiologists in their absence with the help of an epidural register. Similarly, in our case, with the help of the epidural register record only, we came to know about the discharge of a patient with an epidural catheter *in situ* and timely avoided an unwanted prolonged catheter-related complication. We suggest the following guidelines be adopted for the epidural register:

1. Enter the correct data of patient's name, age, sex, registration number, type of surgery, date of catheter placement, date of removal, and names of the operating team for each epidural anesthesia case.
2. Data must preferably be entered by one of the qualified anesthesia team members (junior resident or senior resident) who is handling the case.
3. Epidural catheters must be removed by experienced doctors or staff, and the date of removal must be entered in the register by one of the team members who have followed up on this case and must be duly signed.
4. Epidural register data must be maintained and checked by junior or senior anesthesia residents on a daily basis for their respective operation theaters. Each consultant or senior anesthesiologist must check the entries (especially the date of removal) for the cases on a regular basis or whenever available.

In conclusion, maintaining an epidural register is good practice for all anesthesiologists to avoid any undue prolonged catheter-related complications and medicolegal issues, especially in institutions or medical colleges where a good number of epidural catheters are placed daily.

Consent of patient

The authors certify that they have obtained all appropriate patient consent forms, including consent for publication.

Contributions

K.K.G., A.S., and G.D.: These authors helped with case management and manuscript writing and editing. S.K. and H.K.: These authors helped with case management and manuscript editing. All authors read and approved the final version of the manuscript for publication.

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Conflicts of interest

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