Malfunctioning catheter connector: An unusual and rare cause of epidural catheter blockade

Sir,

Epidural catheter is an important component of the anesthetic armamentarium since its introduction in anesthesiology by Curbelo. It allows regularization of surgical blocks, labor, and postoperative analgesia and relief of oncologic pain. We encountered an unusual intra-operative problem while using an epidural catheter.

A 32-year-old man was to undergo lower limb orthopedic surgery for whom combined spinal and epidural (CSEA) was planned. L3-4 interspace was selected, epidural space identified with loss of resistance to air technique and spinal drug was injected using B-Braun CSEA set. Epidural catheter was placed and fixed at 11 cm mark, catheter connector (click and ready type) and filter was attached. Surgery was completed uneventfully on the subarachnoid block. We tried to give test dose via the catheter, but there was significant resistance to the drug flow. We removed the filter and tried pushing the drug again via the catheter connector only which also failed. After end of surgery, we removed the adhesive to look for any kinks at the entry site.
Sir,

Peripartum cardiomyopathy is a dilated cardiomyopathy associated with cardiac failure in the last month of pregnancy or within five months of delivery. There is no identifiable cause of cardiac failure, no heart disease prior to the last month of pregnancy, and left ventricular systolic dysfunction.

Failure to inject drugs through malfunctioning epidural catheter has been reported, but blockade caused by malfunctioning click and ready connector has not been reported in literature. The connector (click and ready type) has two parts. One is the base (Lemon yellow) through which the catheter passes and the other is the flap (Transparent) on top which on closure clicks and holds the catheter in place. The click and ready apparatus is an easy and convenient way of fixing the epidural catheter to the syringe prior to the filter and known to have increased grip strength and providing more secure catheter connection. The transparent upper flap also has a small arch of around 1 mm on the midline inner surface which actually holds the catheter at the site [Figure 2]. The arch of the catheter was the site of malfunction in our case as we checked 10 more catheter connectors of the same type and company. The arch was slightly larger in our case and hence was completely occluding the catheter lumen.

Before taking out the catheter, one should check the connector in click and ready technique for any manufacturing defects. Only changing the connector (from another sterile set) might overcome the problem and will not deprive the patient of postoperative analgesia. Pre-insertion check of the complete set needs to be emphasized.

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