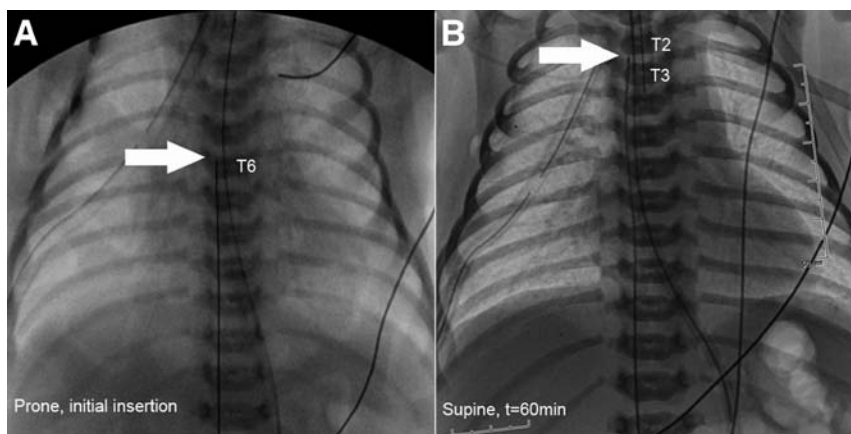


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Cephalad Migration of Pediatric Caudal Epidural Catheters Associated with Change from Prone to Supine Position

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RADIOPAQUE epidural catheters are inserted at a caudal location and threaded cephalad with the patient in the lateral decubitus or prone position. Each catheter tip location is confirmed *via* fluoroscopy or epidurogram¹ and then the catheter is secured with sterile dressing and Dermabond® (Ethicon Inc., Somerville, NJ).² We recently found radiographic evidence of cephalad migration of a caudal epidural catheter tip in a pediatric patient after a position change, despite unchanged catheter skin depth.

The figure shows the catheter tip in a patient in the prone (fig. A, T6 level, at insertion in the operating room) and supine (fig. B, T2/T3 level, 60 min postinsertion in the neonatal intensive care unit) positions. Proper catheter tip position had been confirmed in the prone position using fluoroscopy. Although the catheter remained secured at its initial skin depth in the caudal region, postoperative supine radiographs showed the catheter tip had migrated cephalad to the T2/T3 level. Cephalad migration not only resulted in the catheter providing inadequate analgesia, but also increased the risk of undesirable side effects (*e.g.*, cardiac accelerator fiber blockade). The catheter was withdrawn and provided good postoperative analgesia after its tip was reconfirmed at the desired level in the supine position.

Based on this finding, we now confirm the locations of caudally threaded epidural catheters with the patient in the supine position.

References

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