

WHAT IF THE EPIDURAL CATHETER NEEDS TO BE FIXED MORE THAN FIFTEEN CENTIMETRES AT SKIN?

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Epidural catheters inserted 8 cm within the epidural space are more likely to result in intravenous cannulation and unilateral block¹. Epidural catheters inserted 2 or 4 cm within the epidural space are more likely to be dislodged than epidural catheters inserted 6 or 8 cm.¹ Obese patients are at particular risk of epidural catheter displacement². It is recommended that epidural catheters should be inserted 5 or 6 cm into the epidural space when prolonged labour or caesarean delivery is likely^{1,3}. Epidural catheters do not have cm markings between 15 and 20 cm marks. I would like to report an inconvenient situation caused by absence of these markings and a method of dealing with it. A 26 year old, morbidly obese primigravida requested an epidural in the first stage of labour. Her booking BMI and body weight were recorded as 66 kg.m⁻² and 175 kg respectively. After failing to reach epidural space with a standard 10.5 cm, 18 gauge Portex Epidural needle, a Portex extra length (13.5 cm) Tuohy needle was used. On the fourth attempt, the epidural space was located using loss of resistance to saline technique with the Tuohy needle at 11 cm to skin. An 18 gauge epidural catheter was inserted via the Tuohy needle beyond the 20 cm mark and the Tuohy needle was withdrawn with care. I intended to leave the epidural catheter 6 cm into the epidural space to minimise risk of catheter dislodgement. This implied that the epidural catheter would need to be 17 cm at the skin. But, as mentioned earlier, there are no cm marking on epidural catheter between 15 and 20 cm marks. However, Portex extra length Tuohy needles have markings every cm starting from the tip of the needle. So, I used the Tuohy needle markings to measure 3 cm from 20 cm mark on the epidural catheter. Using the Tuohy as a guide, I pulled the epidural catheter out from 20 cm to 17 cm at skin for fixation. The parturient had a good bilateral epidural block for labour analgesia. The same epidural catheter was later used to provide successful regional anaesthesia for an emergency caesarean delivery. I have described a simple and accurate method of measuring catheter length if the epidural catheter needs to be fixed more than 15 cm at skin. However, care must be taken not to shear the catheter with the tip of the epidural needle while measurement.

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