

to prevent puncture of the iv catheter. The obturator needle is withdrawn with the catheter held in position over the distal end. When the obturator needle is completely removed, the catheter will be subcutaneously tunneled with its tip exiting at the epidural entrance site (fig. 1-C). The epidural needle is then removed and the epidural catheter is passed through the 16-G iv catheter (fig. 1-D). The iv catheter is removed and the epidural catheter is pulled until the catheter lies completely within the subcutaneous tunnel. A Steri-strip® may be required to close the site of the first skin nick.

This technique is useful for subcutaneous placement of epidural catheters for chronic use. In two steps, with a 5.25-inch iv catheter, an epidural catheter can be brought subcutaneously from the midline posteriorly to the anterior abdomen where the site can be more easily cared for in debilitated cancer patients. The risk of epidural infection from the skin is minimal since the skin exit site of the catheter is far removed from the epidural space.

The technique is also useful for situations where an epidural catheter for postoperative pain management might be in or near the surgical field. If a thoracic epidural catheter is placed preoperatively for management of pain following a thoracotomy, then a dressing over the epidural site may be within the surgical field if the incision is brought close to the midline posteriorly. I, therefore, routinely tunnel the epidural catheter 3-4 cm away from the operative side using a 2-inch iv catheter. This allows secure attachment of the epidural catheter to the

skin with Steri-strips and a sterile dressing without encroaching on the surgical field.

The method described can be accomplished in less than 30 s and requires equipment already available in a clinic or operating room. For these reasons, I believe that it is a method of subcutaneous tunneling that is superior to those currently in use and is especially suitable for routine tunneling of catheters for treatment of postoperative pain.

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Airway Fires during Surgery with the Carbon Dioxide Laser

To the Editor:—We have successfully completed approximately 1,000 cases using the helium protocol¹ for airway CO₂-laser operations. In two cases, we experienced airway fires; in both cases a leak around the endotracheal tube necessitated an increased fresh gas flow. This resulted in an inadvertent increase in the F_IO₂, and a violation of the protocol. In order to prevent such mishaps, we are now using a premixed helium/oxygen gas (Heliox), containing 30% oxygen and 70% helium. When a leak makes a higher fresh gas flow necessary, it can be accomplished with Heliox, without affecting the 30% oxygen in helium mixture.

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Cerebral Venous Thrombosis Versus Postlumbar Puncture Headache

To the Editor:—In a recent report, Bolton *et al.*¹ describe a seizure following epidural blood patch (EBP) and caffeine sodium benzoate (CSB) in a postpartum patient thought to have a postlumbar puncture headache. We feel that their patient had classic signs, symptoms, and

clinical course of postpartum cerebral venous thrombosis (CVT) and that it was coincidental that a seizure followed the EBP and CSB.

We describe a very similar case in which the patient developed seizures following an EBP. The diagnosis of CVT was later established.