3. The angulated handle provides an adequate grip and ease of control, without obstructing the field of vision.

4. The blades of the guide enable the operator to guide the tube posteriorly if required. This maneuver is not possible with the Bearman hook or tracheal tube retractor.

The device will be available in disposable plastic to interested anesthesiologists.

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REFERENCES


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A New Technique for Applying Scalp Electrodes for Intraoperative EEG Recording

To the Editor—Satisfactory EEG recording in the operating room environment often is hampered by the lack of a good system for attaching leads to the patient's head. Conventional cup electrodes attached with EEG paste are messy and dislodged easily. When attached with collodion, adherence is somewhat better, but this involves a meticulous time consuming process. Needle electrodes have the disadvantage of being invasive, unappealing to patients, and often provide poor recordings.

At our institution we have adapted the two-sided circular adhesive (Vitatek, Hillsboro, Oregon), normally used to attach a precordial stethoscope to skin, to attach standard cup-style EEG electrodes to the scalp. We prepare the skin with skin degreaser (Miller-Stephenson, Los Angeles, California), remove the backing from the inner side only of the two-sided adhesive, attach the sticky side of the circular adhesive to the outer surface of the EEG cup electrode, then replace the backing (fig. 1). Next we fill the cup electrode with EEG electrode cream (Grass Instrument Co., Quincy, Massachusetts) through the hole in the inner backing. When ready to apply, we peel away the backing covering the inner surface of the electrode and then attach the electrode to skin (fig. 2). With this technique, standard EEG electrodes are applied more quickly than with collodion (which takes several minutes.
per electrode to dry) and are held more securely than with either collodian or electrode paste. While a circular adhesive will not secure cup electrodes to skin covered with thick hair, we routinely observe satisfactory intraoperative EEG recordings by using circular adhesive to apply forehead–mastoid electrode pairs simulating frontoparietal scalp placement.

Yet Another Hazard of Percutaneous Central Venous Cannulation

To the Editor—Further to the correspondence from Dr. Schwartz and colleagues, we would like to report a case of inadvertent cannulation of a systemic-pulmonary Bialock shunt following attempted percutaneous catheterization of the ipsilateral internal jugular vein.

The young patient, aged 3 months, weighing 5 kg, and measuring 72 cm, with Fallot’s tetralogy, underwent right thoracotomy when a 6-cm “Gore-tex” shunt was established between right subclavian artery and right pulmonary artery. Her postoperative course was characterized by unilateral pulmonary edema, hypoxemia, and signs of right ventricular failure, necessitating inotropic support, vigorous diuretic therapy, and ventilatory assistance, together with parenteral nutrition. When her last remaining central line ceased to function on the ninth postoperative day, attempts were made to reinsert a new central venous cannula.

Despite assistance and correct positioning, numerous attempts to cannulate right and left internal jugular veins or the right subclavian vein proved unsuccessful. Eventually, after prolonged manipulation, a vessel was catheterized with a cannula over needle apparatus (18G, Abbocath) via a point of insertion marked as the apex of the topographic triangle formed by the two heads of the right sternomastoid and the right clavicle. The first reading of central venous pressure revealed a marked discrepancy compared with earlier recordings, and the transduced waveform was consistent with a cannula placed in the pulmonary artery, viz systolic pressure 35 mmHg, diastolic pressure 12 mmHg. The suspected position of the cannula was substantiated by injection of contrast medium under fluoroscopic screening. The line was removed under angiographic control without difficulty. The patient continued to thrive.

This case reaffirms concern regarding patients who have tetralogy of Fallot with functioning Bialock–Taussig shunts and the establishment of ipsilateral supraclavicular internal jugular venous cannulae. Diligence in the interpretation of readings from centrally placed cannulae is reemphasized.

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