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In Reply:—While it is true that the continuous epidural infusion of opiates may avoid some of the side effects associated with bolus epidural administration, as used in our study, the former technique requires the continuous presence of or availability of skilled nursing care. The newer modalities of postoperative analgesia should be available to all patients and not necessarily those requiring an intensive care setting. The purpose of the study was not to downplay the role of epidural opiates but to compare these different forms of postoperative analgesia out of the ICU setting on healthy patients who, after all, constitute the majority of patients undergoing elective surgery. In such patients, the same degree of specialized nursing is not necessarily available and analgesic efficacy, together with simplicity of technique, need to be balanced against patient safety and nursing acceptance.

In this setting, both Eisenach *et al.*¹ and our group² found patient satisfaction to be an important consideration when comparing these techniques. Dr. Hord should not make the mistake of overinterpreting our conclusions to reflect the needs of critically ill patients, but to

represent the application of these newer approaches to analgesia out of the ICU in a very different patient population.

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Blind Nasal Intubation of an Apneic Neonate

To the Editor:—The recent correspondence from Gouverneur¹ prompts me to describe another approach to tracheal intubation of infants.

I was asked to assist in the intubation of the trachea in a 7-week-old, 2-kg infant having severe apneic episodes. A diagnosis of trisomy 13 (Patau Syndrome) had been made, but this was not known by the staff involved in resuscitation. Micrognathia was obvious and laryngoscopy revealed only the proximal epiglottis but not the glottis.

A pediatric malleable metal stylet was employed to curve the 2.5-mm ID Portex endotracheal tube into a suitable shape and, while observing the anterior neck, blind nasal tracheal intubation was successful at the first attempt.

Other reported approaches to overcoming difficult tracheal intubation in neonates include conventional blind nasal tracheal intubation,² blind nasal tracheal intubation with the patient in the prone position,³ anterior commissure laryngoscope with optical stylet,⁴ nasopharyngeal intubation,⁵ tracheostomy,⁶ and fiberoptic endoscopy.⁷ Although Berry⁸ has stated the age range for using the stylet in blind nasotracheal intubation to be "from three years through adult," I have since 1981 used the technique in 14 younger patients, including five infants of 2.9-4.3 kg body weight (two were stillborn).

The small size endotracheal tubes are rather soft and floppy and very little "feel," necessary for blind tracheal intubation, is transmitted up the tube. In addition, they do not, in contrast to adult sizes, maintain a suitable distal curve. Therefore, a lubricated malleable metal stylet (fig. 1) is used to provide the latter, but without protruding from the end of the tube. It also enables the tube to be manipulated in a way not possible without it. I shape the tube roughly to a right angle with the limbs approximating the respective lengths of nasal passage and

pharynx. Subsequent adjustments to the curvature, *i.e.*, more obtuse or acute, and distal limb length are made in the light of experience at each attempt until tracheal intubation is obtained. To locate the glottis, either the breath sounds, preferable in the young, or the external visual signs described by Jacoby⁹ and Bennett *et al.*^{*} may be used.

In contrast to Berry, I have not found it necessary when using the stylet, for any age of patient, to have "a short sharper angle at the tip."⁸ The anterior angulation required to enter the larynx can be obtained by manipulation of the stylet supported tube.

The same method can be similarly applied when blind oral tracheal intubation is indicated.

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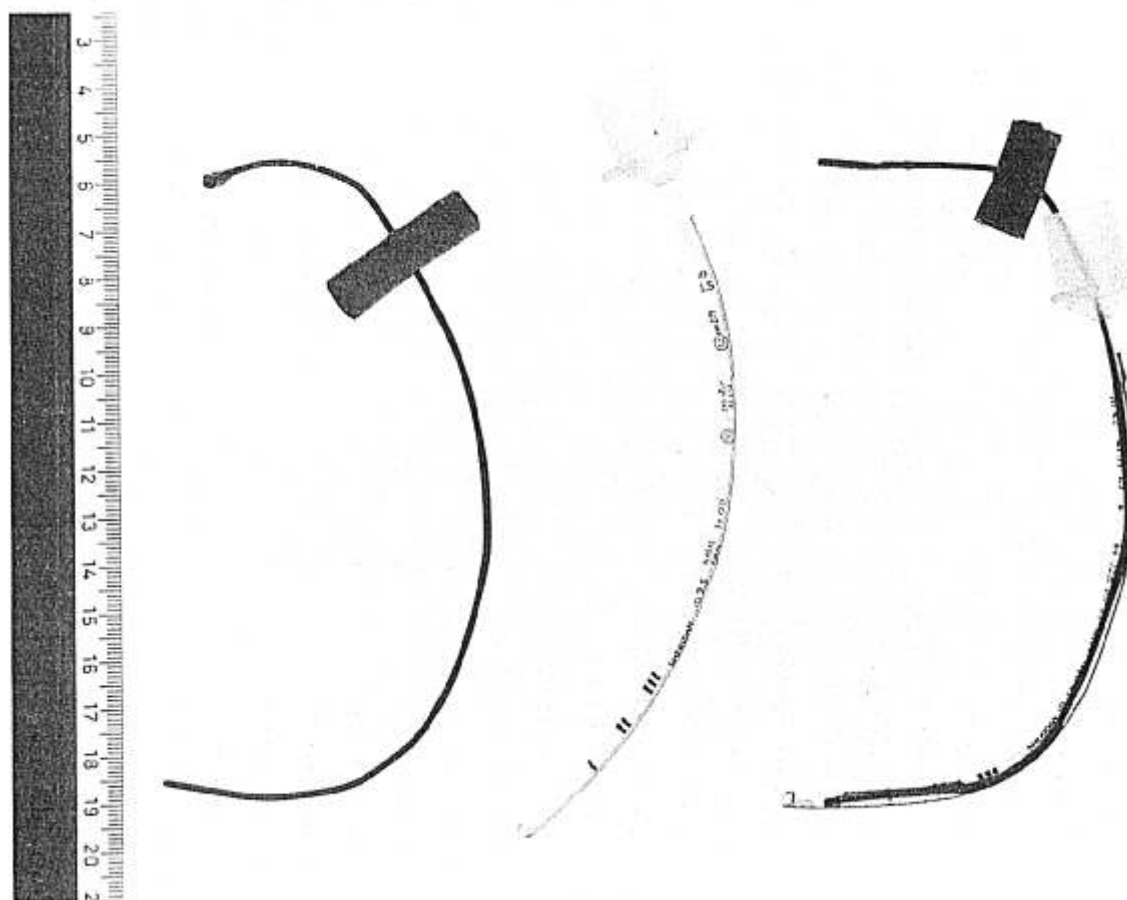


FIG. 1. On the left, a pediatric malleable metal stylet. In the center, a 2.5 mm ID Portex endotracheal tube. On the right, a stylet curved tube used in blind nasal tracheal intubation of a 2.9-kg stillborn infant at the first attempt.

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A Unique Complication of a Lumbar Epidural Catheter

To the Editor:—In a recent case, our obstetrical anesthesiology team found removal of a 20-gauge, 36-inch Arrow E-C 5000 Theracath epidural catheter, after cesarian section, difficult. The tip of a 17-gauge Touhy needle had been inserted into the L-2/L-3 interspace. After identification of the epidural space, the catheter was easily threaded 2 cm. Following a test dose, surgical anesthesia to T-4 was readily achieved with 18 ml of 0.5% bupivacaine.

After completion of the surgery, the patient was positioned in a left lateral decubitus position with 40° of flexion for epidural catheter removal. Despite steady traction on the catheter, it could not be withdrawn. After assessing that the catheter had been sufficiently withdrawn to place it outside the epidural space, constant perpendicular force on the catheter was applied. After a distinct pop, the catheter was removed intact from beneath the skin. Examination of the retrieved catheter