In Reply—The methodological point made by Drs. Dale and Nilsen is well taken. However, our conclusion was not only based on our experimental finding, but also on data previously published. We believe that Drs. Dale and Nilsen do not discuss the independence of interaction between inhalational anesthetics and verapamil at the plasma protein binding site and the reduction of verapamil total clearance. Verapamil total clearance is not dependent on the fraction bound to plasma protein, but, rather, on total hepatic blood flow.1 Concerning the effects of inhalational anesthetics on verapamil distribution, it seems that inhalational anesthetics—if they have any effects—reduce the binding of drugs to plasma protein.2 In these conditions, the increase in unbound fractions of drugs should result in an increase in the volume of distribution, rather than the recorded decrease. It is interesting to consider that, in Dr. Dale’s work,3 we found no evidence to contradict our conclusion, since, in more appropriate experimental conditions, inhalational anesthetics did not significantly affect binding of propranolol, a drug with a pharmacokinetic profile similar to verapamil. We hope that Drs. Dale and Nilsen will soon be able to supply data related to the effects of inhalational anesthetics on the binding of verapamil to plasma protein.

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REFERENCES

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Facial Paralysis after General Anesthesia?

To the Editor:—The clinical report on facial paralysis following general anesthesia1 attributed to compression of the nerve leaves a number of questions unanswered. Some of us could draw conclusions that strong pressure should not be applied to the jaw, for fear of facial nerve injury. Should this thesis hold true, patients would have to be cautioned, perhaps routinely, at the time they sign an informed consent.

In the case reported by me a number of years ago,2 the possible role of anatomic abnormalities was mentioned. The point of exit of the nerve at the stylomastoid foramen was graphically demonstrated, and the role of a tight harness over the mandibular branch was emphasized. The existence of anatomical variants, as this recent report and ours indicates, is still a valid argument. A warning of caution is timely with the upsurge of nerve blocks at the stylomastoid foramen for “akinesia” in ophthalmic surgery.3

Crani al polyneuritis, formerly known as “Idiopathic Bell’s Palsy,” “Herpes Zoster,” etc., has been reported in the past following surgery. It is more common in diabetics and in the third term of pregnancy.4,5 It is usually unilateral, but can be contralateral.

The time-honored practice of providing anesthesia via a mask with proper precautions should not be discarded. It surely has served us well in the past, as evidenced by the negligible number of facial paralysis reported in the past. We need not encourage our intrepid friends to intubate the trachea and exercise their prowess, rather than using restraint when it is indicated.

Another facet of this problem is the differential diagnosis between traumatic and facial polyneuritis, as has been extensively discussed in the literature.5,6,7 It seems that hyperacusis, a single and reliable sign, should be sought in polyneuritis. In our case, lid lag and absence of taste on the anterior two-thirds of the tongue directed our attention towards a possible idiopathic lesion or a combination of traumatic and viral lesion, as strange as it sounds.

Limited use of electrodiagnostic methods at the onset
of this complication is understandable. The value of EEMG is unquestionable. Evoked electromyography is of prognostic value, and is advisable even in a case where trauma is the only plausible explanation.

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In Reply—Dr. Spielberger misinterprets me when he implies that I recommend discarding the practice of providing anesthesia via a mask and indiscriminately encouraging the “exercising of prowess” at non-indicated tracheal intubation.

The point is that, if it becomes necessary to exercise sustained and strong forward pressure behind the mandible in order to maintain a clear airway, then there is a small but significant risk of encountering this complication. In these circumstances, early endotracheal intubation is recommended.

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Monitoring Bilateral Breath Sounds

To the Editor:—Every anesthesiologist is aware of the importance of bilateral breath sounds (BBS) as a diagnostic tool of intraoperative complications, such as endobronchial intubation, obstructed airway, and pneumothorax.1–4 Continuous auscultation using a weighted chest stethoscope bell or esophageal stethoscope has become the standard technique for monitoring breath sounds and heart tones.1–8 However, intermittent auscultation using a stethoscope is still required to determine the presence of BBS. Unfortunately, limited access to the chest during surgical procedures (e.g., thoracic or head and neck cases) does not allow for easy detection of BBS. Furthermore, head movement may displace an endotracheal tube, leading to inadvertent endobronchial intubation, a complication not recognizable by continuous esophageal auscultation. The small preterm infant is at a considerable risk of intraoperative endobronchial intubation due to their particular anatomical characteristics. Their tracheal length has been measured at only 3 cm,7–10 while lateral head tilt may displace the endotracheal tube tip 1.2 cm. To deal with this challenging and common problem, we have developed a simple, inexpensive method to monitor BBS using readily available OR supplies.

The method employs 2 iv extension tubes which are

![Fig. 1. The photograph details two disposable chest pieces connected via extension tube to a three-way stopcock.](image-url)