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only at the end of the procedure. Furthermore, hypercarbia at the conclusion of the case (due to incomplete reversal) would have reduced the central nervous system toxicity/convulsive threshold to bupivacaine. The signs noticed in this case, i.e., dystonic movement and prolonged emergence from anesthesia, thus might have been related to a high blood concentration of bupivacaine. It was unfortunate that the blood bupivacaine concentration was not measured.

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Unanticipated Difficult Intubation in Two Family Members

To the Editor — A 47-yr-old woman and her 70-yr-old mother experienced difficult intubations within 2 months of each other while undergoing general endotracheal anesthesia.

Preoperatively, the daughter’s airway revealed a three-finger breadth mouth opening with partial visualization of her uvula, three-finger breadth thyroid-mental distance, adequate neck mobility, and

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full dentition. She stood 158 cm tall, weighed 80 kg, with the majority of her weight distributed to the lower portion of her body. No other significant medical history existed. After intravenous sodium thiopental and succinylcholine, one unsuccessful tracheal intubation attempt by the student nurse anesthetist, two attempts by the certified registered nurse anesthetist, and two attempts by the staff anesthesiologist including varying head position, cricoid cartilage pressure, and use of both Macintosh and Miller laryngoscopy blades. Laryngoscopy in all attempts permitted visualization of the epiglottis but not the vocal cords. Adequate ventilation was possible via face mask between intubation attempts. A call for help and a request for the difficult airway cart occurred simultaneously with return of the patient's spontaneous respirations. A blind nasal tracheal intubation by a second staff anesthesiologist succeeded on the third attempt. The gynecologic surgical procedure progressed uneventfully. A second airway assessment postoperatively was similar to her preoperative airway evaluation. Postoperatively, the patient experienced hoarseness and soreness of her pharynx and larynx for 10 days. The patient registered with the Difficult Airway Medic Alert Registry and purchased a Medic Alert bracelet.

Subsequently, her cataractous mother, at another hospital, after intravenous induction of general anesthesia and use of a combination of succinylcholine and mivacurium for muscle relaxation, was found to require three attempts before successful tracheal intubation. Her height was approximately 153 cm, and she weighed approximately 68 kg, with most of her body weight in her abdomen, hips, and thighs. Again, visualization of the epiglottis but not the vocal cords occurred. The patient had subsequent larnectomy surgery many years ago, but these medical records were not available. Her orthopedic surgery progressed uneventfully, and postoperatively, she experienced a minimal sore throat. Postoperatively, no other existing medical conditions revealed a potential for a difficult intubation, but her previous medical records for her larnectomy could not be located. She also wears a Medic Alert bracelet. When assessing the surgical patient preoperatively, one includes a question about family problems with anesthesia. We suggest a heightened awareness when taking the preanesthetic history regarding possible difficult intubation in family members. As the registry of difficult intubation acquires data, the presence of genetically related patients might be addressed.

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Technical Failure of Desflurane Vaporizer Tec-6

To the Editor.—We would like to report a case in which we encountered two problems with the Ohmeda Tec-6 vaporizer: (1) a significant fresh gas leak developed after Tec-6 was turned off, and (2) neither the Tec-6 nor other vaporizers (isoflurane and enfurane), which were mounted on the same anesthesia machine, could be turned on after the Tec-6 was turned off.

The patient was a 44-year-old man who had undergone septrhinoplasty under general anesthesia with nitrous oxide and desflurane in oxygen using a Tec-6 vaporizer mounted on a North American Dräger anesthesia machine (Narkomed 2B). The induction and intraoperative course were uneventful. At the end of the procedure, desflurane was turned off, and the patient’s trachea was extubated. On attempting to assist his ventilation via mask and despite a tight seal of the mask and a high flow of oxygen, it was noted that the reservoir bag could not be filled with oxygen. The fresh gas flush button was pressed several times while the adjustable pressure limiting valve was closed to allow filling of the reservoir bag. However, the reservoir bag only minimally filled while the oxygen flush valve was continuously activated. During these maneuvers, the selector switch was turned to the “bag” mode. While flushing, we could hear a leak around the area of the Tec-6 desflurane vaporizer. Because the patient was still unconscious and required a more secure airway, his trachea was re-intubated and the lungs were ventilated using a manual self-inflation resuscitation (Ambu) bag. We tried to manipulate the dial of the desflurane vaporizer as well as the concentration dials of the other vaporizers that were mounted on the anesthesia machine to determine whether the “leak” situation could be corrected. We found that all of the vaporizers were in a locked “off” position and could not be turned on. Another anesthesia machine was brought into the operating room, and we subsequently ventilated the patient’s lungs in a normal and uneventful manner.

The Tec-6 vaporizer used to deliver desflurane differs in design from the variable bypass concentration-calibrated vaporizers (such as the Ohmeda Tec-4 and Tec-5 and the Drägerwerk Vapor 191). 

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