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Magill's Forceps

To the Editor:—The forceps used by Drs. Shah and Nossaman¹ were originally used for guiding catheters, rather than endotracheal tubes, into the trachea, but were designed by *Magill*, not *McGill*. Sir Ivan Magill was a young man when he described them in 1920² as an aid to passing nasotracheal catheters for insufflation anesthesia. This was before he proceeded with the use of a single wide-bore tube for to-and-fro breathing.³

Magill celebrated his 90th birthday in 1978, at which time summaries of his publications over a period of 55 years were published.⁴

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Glottic Closure Following Large Doses of Fentanyl

To the Editor:—The inability to ventilate patients following large doses of fentanyl is ascribed to decreased thoracic wall compliance secondary to truncal rigidity.¹

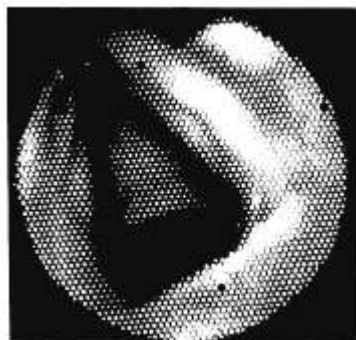


FIG. 1. Open glottis but rigid trunk after large doses of fentanyl administered intravenously.

Recently, Scamman² reported only minimally decreased compliance in patients with tracheostomies who received large doses of fentanyl (17 $\mu\text{g}/\text{kg}$), whereas the same dose in patients without tracheostomy resulted in failure to provide bag and mask ventilation, suggesting that the major problem is at the glottic level.

Concerned with the possibility of encountering ventilatory difficulty while administering large doses of fentanyl in patients presenting for cardiac surgery who, on pre-operative examination, were thought to be possibly difficult to intubate, we performed fiberoptic laryngoscopy following adequate topical anesthesia utilizing a Patil-Syracuse mask and airway³ during anesthesia induction with large doses of fentanyl administered as an intravenous drip.

FIG. 2. Glottic closure and truncal rigidity after fentanyl administration.

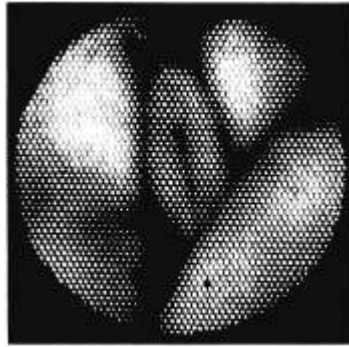
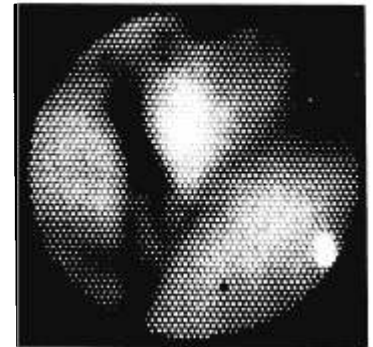


FIG. 3. Glottic closure without truncal rigidity after fentanyl administration.

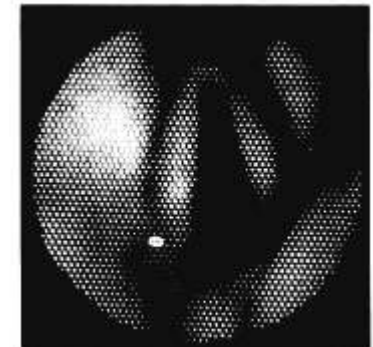


Ventilatory difficulty was encountered in all patients. The difficulty occurred after a wide dose range of fentanyl (5–35 $\mu\text{g}/\text{kg}$). Fentanyl was administered in all instances as an intravenous drip at the rate of 200–300 $\mu\text{g}/\text{min}$. In one group of patients, the glottis was noted to be open (fig. 1), although ventilation was impossible and the trunk and extremities were judged to be rigid. Although an endotracheal tube could be inserted over an endoscope without difficulty, ventilation was not possible until 20 mg of succinylcholine was administered intravenously.

The second group of patients exhibited glottic closure (fig. 2) and clinically evident truncal rigidity. A third group of patients was characterized by glottic narrowing without truncal rigidity, as judged by palpation of the abdomen. In these patients, attempted manual ventilation resulted in encroachment of the surrounding pharyngeal tissue upon the larynx (fig. 3). The response to administration of succinylcholine was dramatic (fig. 4). The glottis became wider 15–30 s after iv administration of 20 mg of succinylcholine and was completely opened within about 45 s (fig. 4). Ventilation was easier 30–45 s after administration of 20 mg of succinylcholine in those patients who manifested truncal rigidity.

Previous studies have indicated that the inability to ventilate patients induced into anesthesia with “high doses” of fentanyl may be due to truncal rigidity¹ or closure of the glottic aperture.² Direct observation of the glottis, however, reveals that either factor or a combination may be responsible.

FIG. 4. Relief of glottic closure after administration of 20 mg succinylcholine iv.



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Modified Rigid Bronchoscope for Nd-YAG Laser Resection of Tracheobronchial Obstructing Lesions

To the Editor:—Various approaches to the management of anesthesia for resection of tracheobronchial lesions with the neodymium-yttrium aluminum garnet (Nd-YAG) laser have been described.^{1–6} We would like to describe a simple technique that facilitates both positive pressure ventilation

and the administration of volatile anesthetic agents through the rigid bronchoscope.

We use a separate reusable endotracheal tube cuff (Rusch Inc., NY) and secure it to the bronchoscope as shown (fig. 1). Following induction of anesthesia, the rigid