The Fiberoptic Gastroscope for Difficult Endotracheal Intubation

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Several authors have described the successful use of the fiberoptic laryngoscope and bronchoscope for difficult endotracheal intubations.1-3 We report a case of successful endotracheal intubation using a fiberoptic gastroscope after repeated failures with both a fiberoptic bronchoscope and a fiberoptic laryngoscope.

REPORT OF A CASE

A 60-year-old man was scheduled for repair of a gastric volvulus. Anesthesia was induced with 350 mg thiopental, iv, and 80 mg succinylcholine, iv, to facilitate endotracheal intubation. Multiple attempts at endotracheal intubation with various laryngoscope blades were unsuccessful and only the tip of the epiglottis could be seen on laryngoscopy. After resumption of spontaneous ventilation, 5 mg diazepam, iv, and etidocaine 2 per cent via a mask were administered. Multiple blind attempts via the nares at endotracheal intubation were also unsuccessful. At this time there was a significant accumulation of blood and secretions in the oropharynx. Oronasal and nasotracheal intubation were attempted first with a fiberoptic laryngoscope and then a fiberoptic bronchoscope. These attempts also were unsuccessful primarily due to lack of adequate suction. An Olympus GIF P30 gastroscope was then inserted orally, the pharynx and upper airway were suctioned through the gastroscope, and the vocal cords were then clearly visualized. A 9.5 red rubber endotracheal tube was lubricated and passed over the gastroscope and the trachea was intubated without difficulty.

DISCUSSION

The technique of using a gastroscope for difficult endotracheal intubations has been limited in the past, because of the large diameter of most gastroscopes. The smaller diameter Olympus GIF P30 gastroscope is small enough to accept a 9.5-mm endotracheal tube. Furthermore, the gastroscope provides four-way flexion, an excellent ability to suction blood and secretions under direct vision, and the tip can be cleaned easily. We do not advocate the gastroscope as a first line instrument for endotracheal intubation, but with the use of a 9.5-mm endotracheal tube it may be a useful alternative to the fiberoptic bronchoscope, especially when large amounts of blood and secretions are present in the airway.

REFERENCES


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