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Parker Flex-Tip tube for fiberoptic nasotracheal intubation in a case of lingual tonsil hypertrophy

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To the Editor:

Fiberoptic tracheal intubation is useful for difficult airways. Two major difficulties with this technique are: insertion of the fibroscope into the trachea and then, advancing the endotracheal tube (ETT) over the fibroscope.¹ This second difficulty is attributed to catching of the ETT on supraglottic structures.² The Parker Flex-Tip™ tube (PFT; Parker Medical, Englewood, CO, USA) overcame this difficulty in a case of lingual tonsil hypertrophy (LTH).

A 56-yr-old previously healthy woman was scheduled for hemithyroidectomy. There was no indication of a difficult airway. After induction of anesthesia, laryngoscopy revealed a grade 4 Cormack Lehane view. The intubation was impossible. We decided to waken the patient and try nasotracheal fiberoptic intubation. A 6.5-mm internal diameter (ID) standard tube (Hi-Contour™, Mallinckrodt Medical, Ireland) was inserted over the fibroscope (Pentax, 3.5-mm outer diameter). The fibroscope was successfully directed into the trachea, but the ETT would not advance, so the procedure was abandoned. A few days later, the patient was monitored and

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prepared following our standard nasotracheal fibreoptic intubation protocol. We chose a 6.5-mm ID PFT. As the fibrescope advanced a LTH was discovered, narrowing between the epiglottis and the posterior pharyngeal wall. Once the carina was visible, the PFT was easily displaced over the fibrescope into the trachea.

Supraepiglottic masses, like LTH, are recognized risk factors for unanticipated failed tracheal intubation.³ LTH may also cause massive bleeding following instrumentation of supraglottis⁴ and in the worst possible case it may become a "cannot-intubate-cannot-ventilate" situation. In our case, LTH could be the cause of a difficult advancement of the tube.

The major reason for difficulty in advancing an ETT over a fibrescope is impingement of the tube's tip in different parts of the supraglottis;¹ this can be markedly reduced by using a flexible tube. Ovassapian *et al.*² studied 33 patients with unanticipated failed intubation, via direct laryngoscopy. LTH was discovered in all patients.

Kristensen reduced two-thirds the rate of resistance to passage of the tube into the trachea by comparing the PFT with the standard tube (PortexTM) during fibreoptic orotracheal intubation.⁵ Utilization of thinner fibrescopes, or greater ID tubes is possible because the PFT mainly reduces the gap between the scope and the tube (Figure 2). Reduction of the gap, joined to the use of flexible tubes are the main recommendations given by Asai *et al.*¹

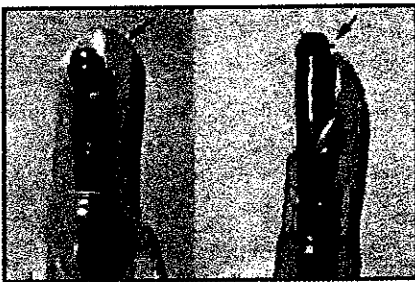


FIGURE Reduction of the gap between the Parker Flex-Tip tube (left) and the fibrescope compared with the Mallinckrodt standard tube (right).

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In conclusion, the PFT tube may be useful for nasotracheal fibreoptic intubation in awake patients.

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