

Modified i-gel Airway for Oral Surgery

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The i-gel (Intersurgical Ltd, Wokingham, UK) is a relatively new, single-use supraglottic airway device for use during general anesthesia. The main components of this device are a noninflatable gel-like cuff that is claimed to achieve a perfect fit to the pharyngeal and laryngeal structure and a thick airway tube with a gastric drain tube orifice.¹ We often use the i-gel during dental procedures and minor oral surgery. However, its thick airway tube occasionally interferes with surgical access. We describe a modified i-gel airway for use during oral surgeries.

Our idea was to use a reinforced tracheal tube, also called a coiled-wire reinforced tracheal tube, along with the i-gel airway to avoid interference with the surgical field. A size number 4 i-gel airway was cut to an airway tube length of 5.5 cm (Figure 1A). A reinforced tracheal tube (inner diameter 7.5 mm, outer diameter 10.2 mm, Rüsch, Kern, Germany) was then passed into the i-gel's airway tube. The distal end of the reinforced tracheal tube just fits into the i-gel so that the tip does not protrude through its ventilation hole (Figure 1B). To fix the i-gel even more tightly, the cuff of the reinforced tracheal tube was inflated with approximately 2.5 mL of air.

Insertion of the i-gel into the airway can be readily achieved by gripping its thick airway tube part and using the index and middle fingers to position it into the hypopharynx in the usual manner. However, removal should *only* be performed by gripping the thick airway tube part of the i-gel using Magill forceps under direct laryngoscopy so that the reinforced tracheal tube does not separate from the i-gel and leave it lodged in the oropharyngeal cavity. Using this modified i-gel airway, we successfully administered general anesthesia to more than 15 outpatients presenting for dental treatment and minor oral surgery.

We believe that this modified i-gel airway is a useful device for these surgeries, provided that it is only removed by pulling on the i-gel base and not on the reinforced tracheal tube.

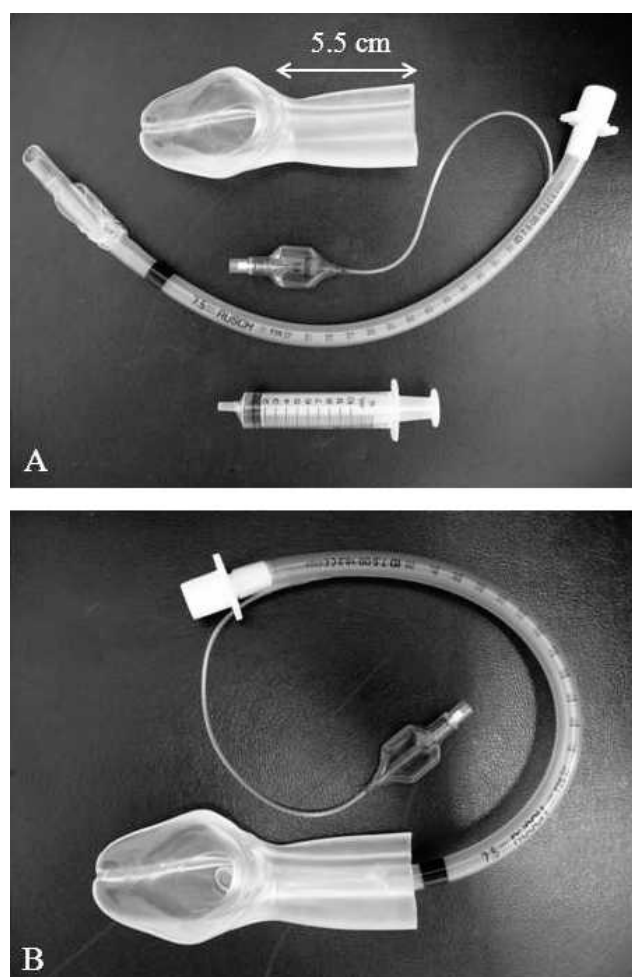


Figure 1. A. Cut i-gel airway and reinforced tracheal tube. B. Cut i-gel airway with reinforced tracheal tube in it. To fix the i-gel tightly, the cuff of the reinforced tracheal tube was inflated with air.

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