

I-gel supraglottic airway

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Introduction:

The I-gel airway (Intersurgical Ltd., Wokingham, UK) is a novel type of supraglottic airway. It is a latex free, disposable device, made of a medical grade thermoplastic elastomer. I-gel is anatomically preformed to mirror the perilaryngeal structures. The device contains epiglottis blocker, which helps to prevent epiglottis from downfolding or obstructing laryngeal inlet. The soft non-inflatable cuff seals anatomically against perilaryngeal structures. Furthermore, the I-gel has a gastric channel allowing venting of the air and gastric content or insertion of gastric tube.

Indication for use:

- airway maintenance during general anaesthesia in fasted patients
- not suitable for the patients and procedures with increased risk of aspiration of gastric content
- could be used either with spontaneous or controlled ventilation
- conduit for endotracheal intubation in the patients with difficult to manage airway
- potential use in cardiopulmonary resuscitation even in prehospital setting

Complications:

No major complications associated with I-gel have been described to date. Protection against aspiration is probably comparable with LMA family (but certainly not 100%). Minor complications reported include sore throat, temporary hoarseness, sore tongue, hypaesthesia of tongue, etc.

Our experience:

We present our experience with I-gel in a busy teaching district general hospital. More than 1500 devices have been used over 2 year period. The indications included maintenance of airway for general anaesthesia in the cases of general surgery, breast surgery, urology, gynaecology and ENT. The ventilation mode was both spontaneous (operations shorter than 30 min) and controlled (IPPV, PCV). I-gel has been used in 20 gynaecological laparoscopies with gastric tube inserted and in one laparoscopic cholecystectomy in a patient with tracheal stenosis. We have also used I-gel in 14 cases as a conduit for fiberoptic tracheal intubation (6 elective, 8 unanticipated). The overall insertion rate was over 95%. Complications noted were only minor and temporary.

Literature:

1. Levitan RM, Kinkle WC. Initial anatomic investigation of the I-gel airway: a novel supraglottic airway without inflatable cuff. *Anaesthesia* 2005; 60: 1022-6.
2. Michalek P, Hodgkinson P, Donaldson W. Fiberoptic intubation through an I-gel supraglottic airway in two patients with predicted difficult airway and intellectual disability. *Anesth Analg* 2008; 106: 1501-4.
3. Richez B, Saltel L, Banchereau F et al. A new single use supraglottic device with a noninflatable cuff and an esophageal vent: an observational study of the I-gel. *Anesth Analg* 2008; 106: 1137-9.