

similar to ours, insertion after stabilizing the tongue may be necessary.

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References

1. Theiler LG, Kleine-Bruuggeney M, Kaiser D, Urwyler N, Luyet C, Vogt A, Greif R, Unibe MM: Crossover comparison of the laryngeal mask supreme and the i-gel in simulated difficult airway scenario in anesthetized patients. *ANESTHESIOLOGY* 2009; 111:55–62
2. Intersurgical. I-gel User Guide. Wokingham Berks, Intersurgical, 2005

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In Reply:

We thank Drs. Taxak and Gopinath for their valuable contribution in response to our article.¹ Failure of supraglottic airway devices occurs because of either failed insertion or failed ventilation, despite successful insertion. In case of the i-gel™ (Intersurgical Ltd., Wokingham, Berkshire, United Kingdom), insertion may fail because of the inability to pass the device between the front teeth, the tongue, or the pharyngeal curvature. Overall, the inability to insert the i-gel™ is quite a rare event (1.3%).[†] As Drs. Taxak and Gopinath point out correctly that the bulky design of the i-gel™ with its large airway opening may cause entrapment of the tongue. We agree that digitally pushing the tongue out of the way may solve the problem. However, many anesthesiologists would be reluctant to put their finger into the mouth of a patient who has not



Fig. 1. Tongue is trapped between lower teeth and i-gel™ (Intersurgical Ltd., Wokingham, Berkshire, United Kingdom) (simulated photo).

[†] Gutzmann M, Roemer J, Theiler L, Urwyler N, Greif R: Prospective multicenter clinical evaluation of the cuffless Supraglottic Airway Device i-gel™ (abstract). Presented at the American Society of Anesthesiologists 2009: A473.

received muscle relaxation. A simple tongue retractor might be used too.

In addition, clinicians need to be aware of the fact that the i-gel™ may not only push the tongue down, impeding successful insertion, but also displace the base of the tongue after insertion. That may lead to protrusion of the tongue from the mouth, trapping its tip between the lower teeth and the integral bite block of the i-gel™ (see fig. 1). In fact, in a large prospective evaluation of nearly 2,000 cases, we documented a patient who suffered from prolonged bilateral numbness at the tip of the tongue because of that entrapment in an otherwise short and uneventful anesthesia.[†] That might have happened with the use of other supraglottic airway devices too. We thus strongly recommend checking the tongue position in every patient after successful i-gel™ insertion.

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What about the Surgery?

To the Editor:

I enjoyed reading Prof. Sessler's¹ editorial view regarding the long-term consequences of anesthetic management. Prof. Sessler reviewed the changes in anesthetic practice that have occurred in the past few decades, which have led to significant improvement in patient care and reduction in perioperative morbidity and mortality.

I was surprised, however, that there was no mention of the changes that have occurred in surgical practice during this period. The trend toward minimal invasive surgery in many surgical subspecialties has profoundly changed the stress that the patient undergoes during surgery and afterward. Laparoscopy has replaced laparotomy, and video-assisted thoracoscopy has replaced thoracotomy. Procedures such as angiographic-guided stent insertion for management of aortic disease and endovascular obliteration for cerebral arteriovenous malformation have reduced the number of large open operations that are performed in the operating rooms. In cardiac surgery, we now have off pump coronary artery bypass and minimal invasive valve replacements. Many operations have become ambulatory procedures, such as arthroscopies or extracorporeal shock wave lithotripsy. Minimal invasive procedures cause less bleeding, less tissue injury, less stress to the body, and are less painful. Thus, less blood and