A New Twist on i-gel Insertion

R. Eleanor Anderson, MD, Ron M. Walls, MD, FRCPC, FAAEM

A 90° rotation increases first-pass success and decreases insertion time.

The i-gel is a supraglottic device with a soft, noninflatable cuff. Although insertion is usually successful, it sometimes fails because of tongue folding. Previous studies have shown that a rotational technique during insertion improves first-pass success with a laryngeal mask airway. The technique involves placing the device in the oropharynx and then rotating it 90° counterclockwise, inserting it past the tongue in this orientation until resistance is met at the hypopharynx, and then rerotating it clockwise back to the standard orientation.

To study the efficacy of a rotational technique for i-gel insertion, researchers randomized 181 patients undergoing general anesthesia to the traditional or rotational technique. After insertion by an experienced operator, an attending anesthesiologist blinded to the insertion technique judged the effectiveness of the airway based on capnography trace and leak pressure.

The rotational technique provided a higher first-pass success rate (97% vs. 86%), a shorter insertion time (mean, 22.4 vs. 26.9 seconds), a better airway seal (mean leak pressure, 27.1 vs. 22.5 cm H2O), and fewer postoperative airway complications.

Comment: Compared to the traditional approach, a 90° rotation during insertion of the i-gel decreases tongue resistance against the device. The rotational technique is better than the standard insertion method and should be adopted as the technique of choice for i-gel insertions in adults.

Citation(s):

(http://dx.doi.org/10.1111/anae.12680)