LMA Supreme Outperforms the i-gel for Novices

*Insertion times were comparable with the two supraglottic airway devices, but the LMA Supreme had better operating characteristics.*

To compare the insertion success rates and ventilation profiles of the LMA Supreme and the i-gel supraglottic airway devices, researchers in Italy randomized 80 women undergoing breast surgery to airway management with one of the two devices. The 80 operators included medical students, surgeons, nurses, and social workers, all of whom received a brief didactic session and two practice insertions on simulator manikins with each device. Patient exclusion criteria were risk for aspiration (nonfasted, pregnant, body-mass index >35 kg/m², or history of reflux), potential difficult airway (mouth opening <2 cm, Mallampati class 4, limited neck extension, previous difficult intubation), American Society of Anesthesiologists physical status >3, or preoperative sore throat.

The rate of first attempt insertion success was significantly higher with the LMA Supreme than the i-gel (77% vs. 54%). All LMA Supreme insertions were successful, whereas 15% of attempted i-gel insertions failed (3 insertion attempts were allowed). Mean insertion time for successful insertions was 28 seconds for both devices. Median leak pressure was significantly higher with the LMA Supreme (28 vs. 24 cm H₂O), as was expired tidal volume (785 vs. 680 mL). Postoperative sore throat was significantly more common with the LMA Supreme (44% vs. 20%).

**Comment:** The LMA Supreme matched or outperformed the i-gel by every measure for these novice users. Although both devices are useful for primary and rescue airway management, these results suggest that the LMA Supreme is a better choice than the i-gel, at least for novice operators.

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