i-gel Has High Success for Elective Intubations

In this large study, the i-gel was associated with a 93% first-attempt success rate and few complications.

Researchers prospectively evaluated 2049 i-gel supraglottic airway device insertions in elective surgery patients at 5 Swiss hospitals over a 24-month period. After induction of anesthesia, operators recorded data on operator specialty and experience, patient characteristics, airway assessment, anesthesia management, and perioperative complications.

The first-attempt i-gel success rate was 93%, and the overall success rate was 96%. Risk factors for first-attempt i-gel failure were male sex, older age, poor dentition, and impaired mandibular subluxation. Mean airway leak pressure was 26 cm H₂O. Providers classified 92% of insertions as easy or very easy. Complications included mucosal injury (3%), sore throat (2%), laryngospasm or bronchospasm (1%), nerve injury (2 patients), and glottic hematoma (1 patient). One patient suffered an asystolic cardiac arrest but had return of spontaneous circulation 1 minute later.

Comment: Although this study is subject to selection bias, the large number of insertions shows that the i-gel is associated with high success (>93%) and relatively minor complications in an elective surgery population. The leak pressure is comparable to that for a standard laryngeal mask airway. Based on these results, the i-gel is a reasonable choice for emergency airway management in patients without a predicted difficult airway.

— Cheryl Lynn Horton, MD, and Ron M. Walls, MD, FRCPC, FAAEM

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