The Laryngeal Tube: Another New Airway Device

The laryngeal tube (LT) is a single-lumen, reusable airway device that is inserted blindly into the oropharynx. A single inflation port inflates the proximal (oropharyngeal) and distal (esophageal) cuffs to a pressure of 80 mm Hg. These investigators randomized 50 American Society of Anesthesiologists class I or II patients to ventilation with the LT or the laryngeal mask airway (LMA) during elective general anesthesia.

Both devices were inserted on the first attempt in all patients, and the median insertion times were comparable (LT group, 21 seconds; LMA group, 19 seconds). Blood gas analysis results, end-tidal CO₂ levels, and pulse oximetry values were statistically equivalent between groups. Peak airway pressures after 2 and 10 minutes of ventilation were statistically, but not clinically, different. The airway leak pressure was significantly higher for the LT than for the LMA device (36±3 vs. 22±3 cm H₂O).

Comment: The LT is relatively new, and more information is needed before its potential role in emergency airway management is clear. However, the device was easily and consistently inserted in this study, and its higher leak pressure implies potentially greater ventilation capability when airway pressures are high (e.g., in patients with asthma). Before the LT can be accepted in practice, we need absolute assurance that it cannot enter the trachea, because occlusion of the distal cuff would be disastrous with this single-lumen device. The Combitube has two lumens for the purpose of avoiding such a catastrophe.

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