ILMA Intubation with a Conventional Tracheal Tube

The intubating laryngeal mask airway (ILMA) has a wire-reinforced reusable endotracheal tube - the Fastrach silicone tube (FTST) -- specially designed for intubation through the mask. Conventional endotracheal tubes also can be used but have not been compared head-to-head with the FTST. Investigators in India randomized 150 healthy adults without identifiable difficult-airway markers to undergo intubation through the ILMA with the FTST or either of two conventional endotracheal tubes: the Rusch polyvinyl chloride tube (PVCT, which was softened by prewarming) and the Rusch latex armored tracheal tube (LAT.)

The ILMA was successfully placed, and ventilation was achieved in all patients. Ninety-six percent of patients were then successfully intubated in two or fewer attempts. Intubation success rates with the PVCT and FTST were equivalent, at 96%, and were significantly higher than with the LAT (82%). Success rates on the first attempt also were higher with the PVCT and FTST than with the LAT (86% vs. 52%). Esophageal intubation occurred significantly more often with the LAT than with the PVCT and FTST (29.7% vs. 1.8% and 7.4%). The FTST was placed successfully in seven of the nine patients who had two failed attempts with the LAT but in neither of the two patients who had two failed attempts with the PVCT ($P<0.05$). Number of maneuvers required to achieve intubation, time to removal of the ILMA after intubation, incidence of blood on the endotracheal tube, and percentage of patients reporting sore throat were similar in all groups.

Comment: Conventional tubes can be used for intubation through the ILMA, but the FTST has particular attributes (flexibility with rigidity, soft tip) that facilitate ILMA intubation. Particularly for novice users, the take-home message is that the FTST, although more expensive than other tubes, is a better rescue device for use in the emergency department than are most of the commonly used conventional endotracheal tubes.

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