Jaw-Thrust Maneuver Facilitates Fiberoptic Intubation

Tracheal tube passage was faster and more successful when the jaw-thrust maneuver was used.

The jaw-thrust maneuver enhances oral fiberoptic bronchoscopy; however, its role during endotracheal tube passage is not clear. Researchers randomized 82 patients undergoing elective surgery to receive a jaw-thrust maneuver or a sham maneuver performed by an assistant during endotracheal tube passage. Each patient underwent fiberoptic bronchoscopy using the jaw-thrust maneuver. At the time of endotracheal tube passage, the jaw-thrust maneuver was either continued or discontinued (control group). Operators were experienced attending anesthesiologists who were blinded to the position of the assistant's hands by a drape. Patients with body mass index >35 kg/m², lung disease, or anticipated difficult intubation, and those who required a neurosurgical procedure were excluded.

Characteristics were similar between groups. The jaw-thrust group had a higher first-attempt success rate (71% vs. 34%) and required fewer attempts (median, 1 vs. 2) and less time (median, 6 vs. 10 seconds) for tube advancement. All patients in the jaw-thrust group were intubated within three attempts. Six control group patients were difficult to intubate and required additional intubation facilitating maneuvers (3) or direct laryngoscopy (3) for successful intubation. Complication rates were similar between groups and there were no hypoxic events.

Comment: The jaw-thrust maneuver helps to move the tongue forward, thereby making fiberoptic examination and intubation easier and more likely to be successful. The maneuver should be used whenever visualization and tube passage are not easily accomplished with a flexible endoscope.

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

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