Two-Handed Jaw Thrust Superior for Intubation with the Clarus Video System


The modified jaw thrust maneuver outperformed both BURP and conventional one-handed jaw thrust maneuvers, providing superior laryngeal view and time to intubation.

The Clarus Video System is a malleable fiberoptic stylet with an attached video camera. The endotracheal tube is loaded onto the stylet and guided through the vocal cords, without need for a laryngoscope. To determine the best maneuver to facilitate glottic view and intubation with the Clarus Video System, researchers compared backward, upward, rightward pressure (BURP), modified (two-handed) jaw thrust, and conventional jaw thrust (single-handed chin lift by the operator). BURP and two-handed jaw thrust were applied by a trained assistant blinded to glottic view. All three maneuvers were performed on each of 209 adult patients (age range, 18 to 70 years) with American Society of Anesthesiologists status 1–3. Patients with history of, or anticipated, difficult intubation were excluded. Glottic view with each maneuver was recorded by an observing anesthesiologist, and then a randomly assigned maneuver was used for intubation.

Modified jaw thrust decreased time to intubation compared with conventional jaw thrust and BURP (median time, 14 vs. 20 and 22 seconds), and improved the laryngeal view (proportion with grade 1 view, 27% vs. 7% and 15%). Intubation success rates were similar among the three groups (100%, 97%, and 98%).

Comment
When using the Clarus Video System, two-handed jaw thrust by a trained assistant seems to be the maneuver most likely to optimize glottic view and potentially also to speed intubation. It is a good back-up maneuver when the conventional one-handed chin lift by the operator fails to provide adequate access.

Citation(s):

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