Does Nasal Cannula Oxygen Improve Preoxygenation?

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*Adding nasal cannula to nonrebreather mask or bag-valve-mask preoxygenation improved end-tidal oxygen levels.*

Preoxygenation is used to fill the lungs with oxygen and wash out nitrogen before emergency endotracheal intubation. Investigators assessed the contribution of supplemental nasal cannula–delivered oxygen to end-tidal oxygen levels in a randomized crossover trial of 60 healthy volunteers who received either bag-valve-mask or nonrebreather mask ventilation in each of four scenarios: with and without nasal cannula oxygen and with and without mask leak. End-tidal oxygen levels were measured after 3 minutes of preoxygenation.

Video laryngoscopy (VL) improves intubation success in patients with predicted difficult airways primarily by ensuring glottic visualization. While VL with acute-angled devices has been compared to direct laryngoscopy, there is little information about the clinical equipoise between different hypercurved blades in this setting.

**Comment:** These results support the common practice of adding nasal cannula oxygen to bag-valve-mask or nonrebreather preoxygenation in emergency airway management scenarios.

**Citation(s):**

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