Cricoid Pressure: Help or Hindrance?

Standard management of patients undergoing emergency intubation includes minimizing the risk of aspiration by applying cricoid pressure (Sellick's maneuver) until correct tube placement is confirmed. A less well-documented benefit of cricoid pressure is improved visualization of airway anatomy. These anesthesiologists from Canada and Hong Kong surveyed leading emergency medicine textbooks and contemporary literature and found no discussion of problems associated with Sellick's maneuver. They describe 2 patients in whom this technique apparently hindered ventilation.

In one case, an obese, short-necked, 44-year-old male undergoing emergent appendectomy had an overhanging epiglottis that blocked visualization of the glottis. When cricoid pressure was applied, 3 attempts at intubation were unsuccessful and the patient could not be ventilated. As soon as cricoid pressure was released, the laryngeal inlet fell into view, and intubation was successful. The other patient was an obese, heavy smoking 67-year-old man undergoing emergency cholecystectomy who began to desaturate shortly after induction. Mask ventilation with cricoid pressure applied was unsuccessful. Saturation continued to drop until the anesthesiologist noticed that excessive pressure was being applied and directed that the pressure be reduced. Ventilation immediately improved and intubation was successful. The authors caution that better training in proper application of cricoid pressure is needed.

Comment: This article is a good reminder that cricoid pressure should be used as a tool in airway management. For difficult cases, the pressure should be redirected (e.g., BURP maneuver) or reduced in order to facilitate ventilation and intubation.

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