CS#28

The Airtraqtm Optical Laryngoscope: A Retrospective Audit Of Optimal Usage Characteristics In Clinical Practice

The Internet Journal of Anesthesiology 2011 : Volume 29 Number 1

Aaron M. Joffe Hernando Olivar Armagan HC Dagal Raelyn Raver Andreas Grabinsky

University of Washington, Harborview Medical Center

Purpose: To describe intubation success and the device manipulations needed to obtain adequate glottic views to facilitate successful first attempt tracheal tube passage with the Airtraq.

Methods: Retrospective audit of anonymously collected prospective data from a departmental equipment purchasing committee sponsored trial. The odds of successful passage of the tracheal tube on the first attempt without repositioning when the posterior arytenoids cleft was in the left lower quadrant of the view from the Airtraq was compared to its location in any of the other quadrants using a contingency table.

Results: All patients were successfully intubated with the Airtraq (median time 28 seconds). Device repositioning to attain adequate view of the glottis occurred in 30-48% of insertions depending on whether it was a back-up or rotational motion. The odds of successful intubation on first attempt was thirty times higher when the posterior inter arytenoid cleft was in the lower left quadrant of the operators view.

Conclusions: **Results support the ease of use** and attainment of skills of the Airtraq **in inexperienced users**. More importantly, results suggest that manoeuvring the device to obtain a view of the glottic structures in the lower left quadrant of operator's view leads to the **highest likelihood of first attempt intubations success.**