



▼ POST GRADUATES ABSTRACTS

PG -03 : RANDOMIZED COMPARISON OF TWO VIDEO LARYNGOSCOPES FOR NASOTRACHEAL INTUBATION: TRUVIEWPCD VS KING VISION

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Background: Recent studies on several video laryngoscopes had demonstrated their superiority over conventional orotracheal intubation techniques. However very few studies have been conducted to evaluate their suitability for nasotracheal intubation. The Truview laryngoscope is one that has studies demonstrating its suitability for both oral and nasal intubations. Another relatively newer device, the King Vision video laryngoscopes has fewer studies supporting its suitability for oral intubations, however its suitability as a nasal intubating device has not yet been evaluated.

Aim: To perform a randomized comparison of the Truview and King Vision video laryngoscopes for performing successful nasotracheal intubation.

Methodology: We evaluated the performance of the TruviewPCD and King Vision video laryngoscopes on 80 patients undergoing various elective surgeries that required nasotracheal intubation between January 2016 and June 2017. On receiving approval from the institutional ethical committee, 80 patients fulfilling the inclusion criteria posted for various elective surgeries that required nasal intubation, were sequentially selected and assigned to two groups of forty patients each. Patients under ASA I and II, aged 18-50 years, with a mouth opening of more than three centimetre were recruited in the study. All patients were subjected to a standardized anaesthesia protocol. Patients were randomized by a sealed envelope technique to Group T where they were intubated using TruviewPCD or to Group K who were intubated with the non-channelled

King Vision video laryngoscope. Our primary outcome was the single successful nasotracheal intubation without the use of any additional manoeuvres. The time taken for intubation and the use of pre-defined additional manoeuvres along with Cormack Lehane grading and hemodynamics were collected and analysed. All data were documented by a non-participating anaesthesiologist not involved in the study.

Results: 71 patients (88.75%) were successfully intubated in a single attempt i.e. 35 patients (90%) in Group K and 36 patients (87.5%) with in Group T. Intubation time (Mean \pm SD) was 67.9 ± 24.1 seconds in Group T and 64.9 ± 20.0 seconds in Group K where comparison was not statistically significant ($p = 0.5$). The additional manoeuvres ($p = 0.2$) and hemodynamics were also analysed which did not show any statistically significant difference between the two groups. Minimal

bleeding was noted only in eleven cases and twelve cases in Group T and Group K respectively which was self-limiting. Post-operative sore throat was observed in 4 cases in Group T and 3 cases in Group K who were intubated with Macintosh laryngoscope was assisted with Magill forceps due to failed video laryngoscope assisted intubation.

Conclusion: Based on the results and the methodology employed, we concluded that both Truview and King Vision video laryngoscopes are suitable intubating devices for achieving successful nasotracheal intubation; however our study has not demonstrated the superiority of any one device over the other. Hence, King Vision video laryngoscope is just as effective as TruviewPCD video laryngoscope for successful nasotracheal intubation.