

ABSTRACT

A Randomised Comparative Study between King vision video Laryngoscope and conventional Direct Macintosh Laryngoscope for Nasotracheal intubation.

INTRODUCTION

Nasotracheal intubation is routinely done for oral and maxillofacial surgeries to avoid interference with the surgical field and to provide good accessibility for the surgeon to operate while the patient is under anaesthesia. Direct laryngoscopes for Nasotracheal intubation, require the patient's neck to be extended and most of the time Magill's forceps to guide the endotracheal tube into the glottis. Cuff inflation technique was described for blind nasal intubation where inflating the cuff of the endotracheal tube lifts the tube anteriorly and it's guided to the laryngeal inlet and then the cuff is deflated and the tube introduced into the trachea. The use of King Vision videolaryngoscope for Nasotracheal intubation using cuff inflation technique, allows for intubation without the need for airway instrumentation and avoiding the complications such as airway trauma and cuff perforation.

AIMS AND OBJECTIVES: are to compare intubation difficulty score, hemodynamic stress response , successful placement of endotracheal tube and complication between Macintosh laryngoscope and King Vision laryngoscope during nasotracheal intubation.

METHODOLOGY:

Eighty patients of age group 10-60 years of ASA physical status one and two undergoing elective Surgeries under general anaesthesia requiring Nasotracheal intubation were included in the study and randomized into two groups. After obtaining ethical committee clearance and informed written consent from the patients or the parents of the patients the study was conducted. After premedication and induction, Patients in Group ML, Nasotracheal Intubation with Direct Macintosh laryngoscope using Magill's forceps was done and patients of Group KL, Nasotracheal Intubation with King Vision video laryngoscope using cuff inflation technique was done.

OBSERVATION AND RESULTS

Age, gender, ASA physical status and Mallampatti class were comparable between the two groups. Intubation difficulty score was comparable between the two groups. Cormack Lehane grade was better and reduced hemodynamic stress response was noted in king Vision group ($p=0.001$). Time taken for laryngoscopy and time taken for intubation were significantly longer in King Vision group.

CONCLUSION: Nasotracheal intubation with King vision video laryngoscopes using cuff inflation technique is a good alternative to conventional direct Macintosh laryngoscope using Magill's forceps in terms of providing better laryngeal view , lesser hemodynamic response and lesser complications.

KEY WORDS: King Vision Videolaryngoscope, Macintosh laryngoscope, nasotracheal intubation, endotracheal, cuff inflation.