ABSTRACT

INTRODUCTION

Endotracheal intubation is considered the definitive device in patients undergoing general anesthesia for airway management. Macintosh laryngoscope is most commonly used device for direct visualization of larynx. In recent years video laryngoscopes provide a better view of larynx.

Manual Inline Stabilization (MILS) is widely used in patients with actual or suspected cervical spine injury to reduce the risk of cord injury during tracheal intubation. MILS makes more difficult to visualize the larynx using conventional laryngoscopes.

Studies are available comparing conventional laryngoscope (Macintosh) and video laryngoscopes. Since very few studies comparing C-MAC D blade and McCoy blade are available, we want to compare them in patients with simulated cervical spine injury.

METHODOLOGY

100 patients between 18 to 65 years under ASA 1 and 2 were divided into two groups (50 in each)

Group C: C-MAC D blade laryngoscope

Group M: McCoy blade laryngoscope

In operation theatre, patients were connected to ASA standard monitors – ECG, NIBP and pulse oximeter. Pre – Oxygenated with 100% Oxygen for 3 minutes. Induced with Inj. Fentanyl 2mcg/kg, Inj. Lignocaine (preservative free) 20mg, Inj. Propofol 2mg/kg and Inj. Succinylcholine 1.5mg/kg.

After 45 seconds MILS will be done by an anaesthetist and laryngoscopy will be done by another anaesthetist experienced with both the techniques.Laryngoscopy

will be done with C-MAC D blade laryngoscope in group C and McCoy blade laryngoscope in group M and intubated with appropriate size endotracheal tube.

- Outcomes measured - duration of laryngoscopy, duration of intubation, total duration of intubation, ease of intubation (IDS score), Heart rate and blood pressure - Baseline, prior to laryngoscopy, 1^{st} , 3^{rd} and 5^{th} minutes after intubation.

RESULTS

All data were analysed using SPSS software.

There was a statistical significance in duration of laryngoscopy and duration of intubation. The total duration of intubation was comparable and insignificant. The C-MAC group had better glotticvisualisation, needed optimal lifting force and clinically insignificant external laryngeal pressure with lower IDS score when compared to McCoy group.

CONCLUSION

C-MAC video laryngoscope requires less time for laryngoscopy, provides better visualisation of glottis, lower IDS score with similar duration of intubation and haemodynamic responses when compared to McCoy laryngoscope in patients with simulated cervical spine injury.

KEYWORDS

Cervical spine injury, Manual In Line Stabilisation, C-MAC D blade, McCoy blade, laryngoscope.