ABSTRACT

Name : Dr. Amala Savio A

Title : A COMPARATIVE STUDY OF SUPRAGLOTTIC AIRWAY DEVICES, I-GEL AND INTUBATING LMA (ILMA) FOR EASE OF INSERTION AND AS CONDUIT FOR BLIND ENDOTRACHEAL INTUBATION

PERIOD OF STUDY : 6 Months [January 2016 TO June 2016]

INSTITUTION : Govt. Kilpauk Medical College, Chennai - 10

BACKGROUND :

Tracheal intubation with Macintosh laryngoscope is considered gold standard in airway management. Supraglottic airway devices [SADS] are helpful in difficult airways and emergency life threatening situations. They are considered an alternative to Endotracheal Tube and face mask for ventilation. They induce reduced stress response as compared to laryngoscopy and intubation. They can be easily inserted by staffs as it requires minimal training especially during Cardiopulmonary Resuscitation [CPR]. They are associated with lower incidence of postoperative sore throat. Some SADS like ILMA and I-GEL allow for subsequent tracheal intubation for management of airway. This study is designed to evaluate the quality and ease of insertion of ILMA and I-GEL and also Feasibility of blind endotracheal intubation using this devices

METHOD :

60 patients posted for surgical procedures under general anaesthesia. Patients fulfilling inclusion criteria were included in the study and were enrolled and analysed. Patients induced with appropriate Induction gents and Non depolarizing muscle relaxants and ventilated for 3 min prior to SAD insertion and again ventilated for one minute prior to blind ETT intubation.
Group A – ILMA (30) inserted after 3 min ventilation followed by blind ETT intubation

Group B – I GEL (30) inserted after 3 min ventilation followed by blind ETT intubation

Variables such as Ease of insertion ,Number of attempts and Duration of insertion of SADS , Number of attempts and Duration of blind ETT insertion and Postoperative sorethroat , dysphagia etc were compared.

The collected data were statistically analysed and tabulated .

RESULTS :

The statistical analysis tools used in this study for the comparison of demographic variables, ease of insertion , number of attempts and duration of insertion of SAD, number of attempts and duration for ETT insertion, failure and postoperative sorethroat and dysphagia were Chi square test and Fishers exact test. The p value derived for ease of insertion , number of attempts ,and duration of insertion of SGADS I-GEL and ILMA were p < 0.001 favouring I-GEL. Likewise the p value derived for number of attempts and duration for ETT insertion through I-GEL and ILMA were p< 0.0001 favouring ILMA. The p value derived for incidence of postoperative sore throat and dysphagia was p< 0.0125 ,favouring I-GEL.

CONCLUSION :

It was concluded that from above results that I-GEL is a better device for emergency rescue ventilation because of its ease of insertion and lesser incidence of postoperative sore throat and dysphagia as compared to ILMA whereas ILMA is a better device for blind endotracheal intubation compared to I-GEL

KEYWORDS : ILMA, I-GEL, Supraglottic airway device,

Ease of Insertion, Blind Endotracheal intubation