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Laryngeal Tube as airway rescue device from prehospital to tracheostomy: case report

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Introduction

Airway management is a priority in the care of any critically ill or injured patient. The insertion of a cuffed tracheal tube is essential to obtain an early and effective control of the airway. However, the attempted insertion of a tracheal tube under direct laryngoscopy is associated to a number of practical problems in pre-hospital trauma care. An extraglottic airway may be the answer in those patients where this simple and common procedure becomes complex and unobtainable.

Methods

Our case report is on a 54 year old woman victim of a multi vehicle collision brought to a level one Trauma Center emergency department by the Emergency Medical Service. Initial evaluation revealed a Glasgow Coma Scale score of 8 (eyes 1; verbal 2; motor 5) and a fixed-midriatic right pupil which suggested a severe traumatic head injury. The patient didn't show any evident predictable sign for difficult intubation. After oxygen administration and cervical spine immobilization a rapid sequence induction was carried out and intubation failed after three attempts. Subsequently a laryngeal tube (LT) was successfully placed and connected to a transport ventilator. Transfer to the hospital took 20 minutes with SpO₂ level of 99% and end tidal carbon dioxide not above 5 kPa.

Results

The patient was properly ventilated with the LT during all CT scan investigations. Due to the impossibility of

endotracheal intubation the patient underwent surgical tracheostomy as suggested by the ENT surgeon consultant to the trauma leader.

Conclusion

This case suggests that LT could be an important alternative device for airway management in trauma patients when tracheal intubation is not possible either in pre-hospital or in-hospital setting. LT could also be a precious tool to achieve good ventilation and oxygenation from the field to the operating theatre.

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