Oral presentation

Laryngeal Tube as airway rescue device from prehospital to tracheostomy: case report Aimone Giugni*, Piergiorgio Cavallo and Carlo Coniglio

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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.

References

- 1. Grier Gareth, Bredmose Per, Davies Gareth, Lockey David: Introduction and use of the ProSeal laryngeal mask airway as a rescue device in a pre-hospital trauma anaesthesia algorithm. Resuscitation 2009, 80:138-141.
- Cook TM, Hommers C: New airways for resuscitation? Resuscitation 2006, 69:371-387.
- 3. Mason Andrew M: Use of the intubating laryngeal mask airway in pre-hospital care: a case report. Resuscitation 2001, 51:91-95.
- Berlac P, Hyldmo PK, Kongstad P, Kurola J, Nakstad AR, Sandberg M: Pre-hospital airway management: guidelines from a task force from the Scandinavian Society for Anaesthesiology and Intensive Care Medicine. Acta Anaesthesiol Scand 2008, 52:897-907.
- 5. Castrén M: Pre-hospital airway management time to provide the same standard of care as in the hospital. Acta Anaesthesiol Scand 2008, **52**:877-878.
- Martin SE, Ochsner MG, Jarman RH, Agudelo WE: Laryngeal Mask Airway in Air Transport when Intubation Fails: Case Report. Journal of Trauma 1997, 42(2):333-336.
- Christopher S, Russi DO, Cari L, Wilcox BA, House Hans R: The laryngeal tube device: a simple and timely adjunct to airway management. Am Journal of Emergency Medicine 2007, 25:263-267.

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