

Use Of Combitube In Car Accident Victims

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Abstract

GOAL OF STUDY

It is known that tracheal intubation is performed with the patient in supine position. In frontal and fronto-lateral collision the patient may be trapped into the car and making the intubation impossible. These patients need immediate ventilatory and cardiovascular support. As nasotracheal intubation is contraindicated in bone fractures at the base of the skull and because of high risk for rhinorrhagia, a Combitube placed in a blinded manner offers adequate secure tracheal ventilation diminishing the risk from esophageal regurgitation.

MATERIALS AND METHOD

Five(5) patients with severe head trauma injuries due to serious car accident were intubated using a Combitube. Two(2) of the victims had Glasgow Coma Scale(GCS) 7, one had satisfactory level of consciousness but rapidly(10 minutes) showed a regression in vital signs while two other cases had a GCS 3. Normal and abnormal chest wall movements, capillary circulation with a pulse oximeter and presents of pulse in radial artery were recorded, as well as cardiorespiratory and central nervous system status evaluation in subsequent measurements. All patients were receiving hypertonic solution of NaCl 7.5% and Combitube placement was achieved after a 3 min time of crystalloid infusion, while patients were oxygenated with 100% O₂.

RESULTS

All patients (2) with GCS 3 died within the time of their transport to the hospital, even though they were submitted to ACLS. Other 3 patients showed hemodynamic stability and adequate ventilation with good survival outcome.

CONCLUSION

The use of Combitube in trapped car accident victims, as a blind intubating technique, offers secured support of ventilatory track in cases where access of trachea to perform intubation is almost impossible.

References

1. Adnet F, Jouriles NJ, Le Toumelin P, et al. Survey of out-of-hospital emergency intubation in the French prehospital medical system: a multicenter study. *Ann Emerg Med* 1998; 32:454-460
2. American College of Surgeons. Prehospital Trauma Life Support. 4th ed. Norman E. McSwain, Jr. Mosby, 1999, Anesthesia A-Z;
3. Steven M Yentis-Nicholas P Hirsch-Gary B Smith, Urtubia RM, Aguila CM, Cumsille MA. Combitube : a study for proper use. *Anesth Anal* 2000;90:958-962
4. Claridge JA, Crabtree TD, Pelletier SJ, et al. Persistent occult hypoperfusion is associated with a significant increase in infection rate and mortality in major trauma patient. *J Trauma* 2000; 48:8-14
5. Lakartidningen Does prehospital hypertonic infusion therapy improve the survival of trauma patient? 1999 Mar 3;96(9):1014-7.
6. Rask H, Crawford ME, Nielsen SL, Allerod CW. Hypertonic saline in treatment of hypovolemia. *Ugeskr Laeger* 1996 Jan 29;158(5):607-9.

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