CS#36

Endotracheal intubation - by using the Airtraq on patients with cardiac arrest handled by paramedics

Anaesthesia and Intensice Care Medicine

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In the Northern Region of Denmark the paramedics have been qualified for intubating patients with cardiac arrest by using Airtraq. The paramedics went through a 1-day course at CeMS (Centre for Medical Simulation, the department of Anaesthesia, Aalborg, Denmark) with skill training and simulation based teaching with Airtraq. They have been examined using Airtraq on mannequins and they are able to intubate these in less than 30 sec, as recommended in ERC Guidelines 2005. The paramedics are only allowed to make 2 attempts of intubation; if two failed attempts, they will have to continue bag mask ventilating the patient. The objective of this study is to monitor the Paramedics abilities to intubate patients.

Results

The paramedics have up to now (February-September 2010) had 52 patients with cardiac arrest needing a secure airway. In 44 of cases they succeeded in successfully endotracheal intubation by using the Airtraq resulting in an over-all success rate at 84,6 % . In 8 cases they failed 2 attempts of intubating and continued bag mask ventilation. All attempts succeeded within a time limit of 30 sec, except 1 attempt where 31 sec. was used. In one case there was an unrecognised intubation into the oesophagus.

Conclusion

Danish paramedics fulfil the objective of being able to intubate patients with cardiac arrest in real live settings by use of the Airtraq, within a time limit of 30 seconds, to prevent the hands off time during cardiopulmonary rescue, as recommended in ERC Guidelines 2005.