

7-YEAR REVIEW OF PRE-HOSPITAL INTUBATION FOR ADULT BURNS IN VICTORIA

Victoria's ambulance service has a history of pioneering improvements to standards in pre-hospital care. Rapid Sequence Induction (RSI) for airway intubation was introduced within Ambulance Victoria (AV) in 2003. Despite controversy, a successful clinical trial demonstrated the safety and efficacy of this advanced airway technique within the cohort of traumatically head injured patients. Following this success, indications for airway intubation by paramedics were expanded by AV to include other conditions including burn inhalational injury.

Victoria is unique in that pre-hospital airway intubation via RSI by paramedics does not occur in (all) other Australian states or in NZ. The observation of some burn patients being extubated within 24 hours of arrival at The Alfred led us to question the appropriateness of this intervention in some cases.

Some authors report that more than one third of all burn patients arriving intubated at a specialist burn unit had been intubated unnecessarily. Inexperience in burn and inhalational injury assessment, leading to over-estimation of injury severity, and air transfer can lead to unnecessary airway protection by intubation. This can expose the patient to avoidable complications and can increase healthcare costs.

We present a 7-year analysis of adult burn patients for whom the intubation status changed within 24 hours of arrival at The Alfred. Pre-hospital intubation by paramedics can be life-saving however can occur unnecessarily. Patients with burn inhalational injury are unique and accurate assessment and safe management requires experience. Paramedics require practical guidelines including specific indications for intubation to effectively manage this cohort of patients.