# Airway management in burns patients prior to transfer to a burns unit

## Sepehr S. Lajevardi<sup>1</sup>, Peter K.M. Maitz<sup>2</sup>

1 Burns Unit, Concord Repatriation General Hospital, Concord, NSW, 2137, sepehrlaj@gmail.com 2 Burns Unit, Concord Repatriation General Hospital, Concord, NSW, 2137, peter.maitz@sydney.edu.au

Inhalational burn is a potentially life threatening injury and prompt recognition and airway protection is required to avoid airway compromise. The New South Wales Burn Transfer Guidelines advices to prophylactically intubate the patients in presence of any concerns to protect the airway. This study aimed to review the appropriate airway management in patients transferred to Concord Hospital Burns unit from 2009 to 2013 in comparison to the guidelines.

334 patient transfers identified of which 8 (2.4%) had inappropriate airway management, 213 (63.8%) had appropriate airway management and in the remaining 113 (33.8%) airway management was not applicable. Of the patients with inappropriate airway management there were 6 males and 2 females with mean age of 42.1 years all with flame or explosion as mechanism of injury. 4 of the 8 patients had partial thickness burns to the head and neck region. The remaining patients required intubation on arrival to CRGH due to clinical airway compromise secondary to inhalational burn. From the 7 patients 4 had indications of inhalational burn prior to transfer but were not transferred without intubation. In all cases burns specialist was consulted prior to transfer but in most cases the final decision to transfer the patient without intubation was made by the retrieval team.

Airway compromise is potentially life threatening and early recognition of inhalational burns and prophylactic intubation is the best practice as advised by NSW "Burn Transfer Guidelines". Our review indicates that only a small number of patients transferred do not have adequate airway protection. We believe further coordination is required between the burns and retrieval team to optimise airway management prior to patient transfer.

### **Key Words**

Airway, Inhalational burns, Transfer

### Nominated Stream for Oral Presentations

- [x] Medical
- [] Nursing
- [ ] Allied Health
- [] Scientific

#### Nominated Stream for Poster Presentations

- [x] Care
- [] Prevention
- [] Research