

Poor provision of airway rescue equipment in non-theatre environments

Authors: CM Oliver, M Johnson.

Anaesthetic ST3, Frimley Park Hospital, Frimley, Surrey

Introduction: Major adverse airway events are common in non-theatre environments and may cause avoidable permanent harm and death [1]. Failures identified in NAP4 included; inadequate provision of skilled staff and equipment; and poor planning for patients with a 'difficult airway'.

Aims: To establish the availability of skilled staff and equipment for airway rescue interventions (ARI) in non-theatre environments.

Methods: A link to the following survey was distributed to London ST3+ Anaesthetic and ICM trainees in the summer of 2012. (<http://www.surveymonkey.com/s/JKV8GKB>)

Results: Of the 46 respondents, 65% had performed in excess of 5 ARIs in the preceding 6months. Locations were ED (91%), critical care (74%) and general ward (58%).

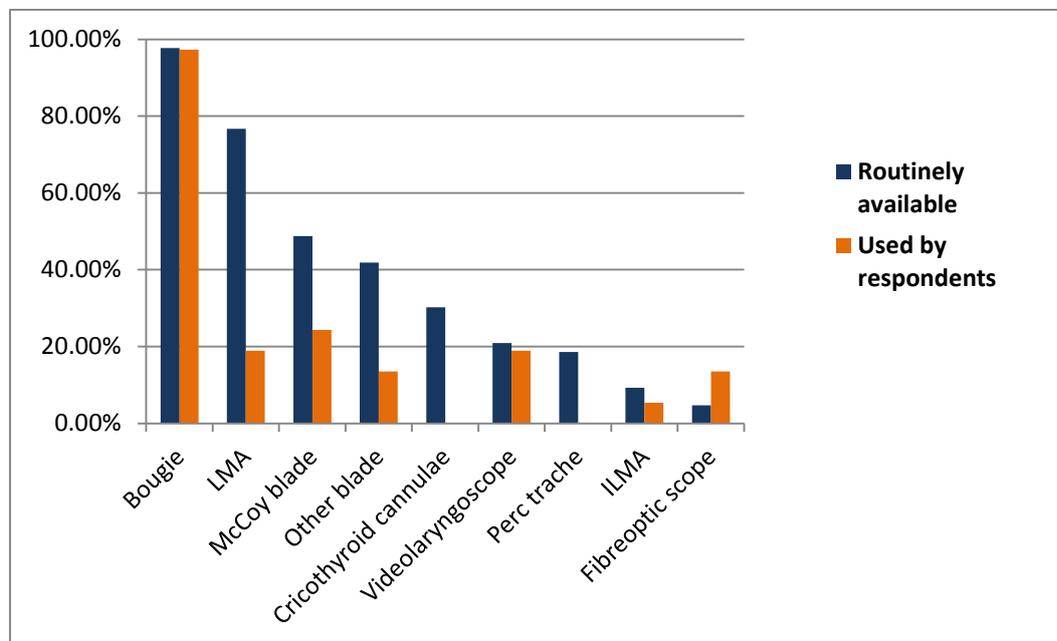


Table 1: Availability and use of airway rescue equipment

A third (30%) had recently encountered a difficult or failed ARI. Half of this number had required a videolaryngoscope or fiberoptic scope to secure an airway. A designated difficult airway trolley was available on the critical care unit of 69% of respondents.

Half of respondents (56%) reported that they had been assisted by an Operating department practitioner (ODP) on the majority of occasions, whilst 23% felt that in retrospect they would have liked an ODP to have been present on at least one occasion.

Conclusions: Fiberoptic and videolaryngoscopes were used relatively frequently to secure encountered difficult airways, but equipment availability did not meet demand. It is particularly alarming therefore to note that no difficult airway trolley was available on the critical care unit for a third of respondents (31%).

Availability of a skilled assistant was variable, perhaps reflecting variation in the attendance of ODPs and anaesthetic nurses at medical emergency and cardiac arrest calls.

We have again shown that difficult and failed airway rescue interventions are common in non-theatre environments. However the provision of potentially life-saving equipment and skilled staff remained poor in London hospitals one year after the publication of NAP4.

Conflicts of interest: None.

1. Cook, T.M., et al., *Major complications of airway management in the UK: results of the Fourth National Audit Project of the Royal College of Anaesthetists and the Difficult Airway Society. Part 2: intensive care and emergency departments*. Br J Anaesth, 2011. 106(5): p. 632-42.