

## **“Tales of 1001 Frights” - How Do Anaesthetists Manage Difficult Airways? How Should New Apparatus Be Designed?**

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In 1996 a multi-hospital system to facilitate reporting and communication of potentially recurring anaesthesia-related problems was established in Newcastle. It accepts reports from all anaesthetising locations (public and private) in the Hunter region (about 60,000 anaesthetics per year). The project (the Hunter Anaesthesia Risk Database) is similar in concept to the medic-alert database, but allows much more comprehensive reports detailing the problem, and is managed by an anaesthetic department.

The Database project has been described previously (1). Audit has suggested that the system is valued by both patients and anaesthetists. There are now over 1600 reports on the database, with over 1000 detailed reports of the management of difficult airways. As far as the Author is aware, it is the largest detailed database of its type in the world. It presents an opportunity for 'evidence' to be used to guide teaching of airway management skills, and the development of new apparatus.

Among the lessons learnt (or learnt again) from the reports on the database are:-

- The importance of the long introducer (under various names) as an intubation aid.
- The McCoy laryngoscope has been useful for some difficult airways.
- Many cases were safely managed by abandoning intubation attempts and completing cases with a laryngeal mask.
- Fibreoptic intubation is useful in elective situations, but may not assist in emergencies.
- Reports about 'new' airway devices (videolaryngoscopes) are starting to provide useful information.

The evidence provided by the database emphasising the role of the long introducer (bougie) suggests that it may be appropriate to devote more teaching time to the use of this equipment. This may need greater emphasis in the training of novices or occasional intubators.

It may also be suggested that airway management apparatus and techniques should be based on the long introducer/bougie as the primary technique of intubation, particularly for novices.

Furthermore, new (difficult) airway management apparatus should be designed to enable placement of a long introducer/bougie in the trachea of a patient with abnormal anatomy, rather than intubation with an endotracheal tube of the anatomically normal laryngotrachea.

<sup>1</sup> Kerridge RK, Crittenden MB, Vutukuri VLSP. A Multiple-Hospital Anaesthetic Problem Register: Establishment of a regionally organized system for facilitated reporting of potentially recurring anaesthetic-related problems. *Anaesth. Intensive Care* 2001;29:106-112