

9 Airway safety in a tertiary South African hospital and beyond...

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Management of airway is central to practice of anaesthesia. Failure to maintain adequate gas exchange is catastrophic. ASA Closed Claims Analysis shows 37% of adverse outcomes associated with respiratory events were attributable to anaesthesia. Brain damage occurred in 85% and 72% were considered preventable. Care was considered substandard in 90% of claims associated with inadequate ventilation.³

“There is no universal consensus for optimal management and equipment used in difficult airway” Previous work suggests that optimal management of difficult airway relies on anaesthesiologist’s experience, skill and familiarity with airway devices, than devices themselves.^{1,2}

Training of Difficult Airway management (DAM) in the Departments of Anaesthesia at University of Pretoria has never been formalised. A model utilised by Baystate Medical centre in the New York³ is being implemented. This is a project in evolution.

Step 1

Standardised DIFFICULT AIRWAY CARTS (DAC) are essential, not only in theatres but in all hospital locations where airways are routinely managed. Directors of ICUs and Casualty departments were approached and contents of DAC were discussed and compiled according to specific requirements. In order to expedite the process, each director was supplied with full lists of disposables in table form as well as product codes and distributors. This information has now been published nationally in SASA guidelines.⁴ Maintenance of the cart and further training in basic and advanced airway management was also discussed.

Step 2

Pertains to training of anaesthetic registrars in standard/advanced

airway management. Baystate model advocates 2 month dedicated airway rotation. Presently Pretoria departments don’t have dedicated airway block, but registrars on “Acute Pain” rotation are encouraged to witness all scheduled difficult intubations and to check DAC. Also attendance at a formal workshop is mandatory.

Step 3

Still needs to be developed, a system of assessment of airway competency for registrars

Conclusion

Both personal and systems failures (e.g. no DAM cart) result in unanticipated DAM. Carts and simplified algorithms should be made mandatory in South Africa.

Anaesthesiologists lack DAM training. Teaching of airway skills should be formalised and made essential for registration. Standards for DAM and curricula for CME are essential.

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