

Airway assessments and detecting anticipated difficult intubations: current standards of documentation

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Introduction

- ❖ The 4th National Audit Project (NAP 4) of airway complications related **directly to poor airway preoperative assessment** and documentation [1] with **no single predictive airway feature** strongly identified in early detection of difficult intubation (DI) [2].
- ❖ This quality improvement project sought to review the current practices of anaesthetists' daily pre-operative airway assessment through both audit and a concurrent qualitative survey of clinicians' methods in detecting DI.

Methods

- ❖ Audit data collection took place retrospectively reviewing the anaesthetic charts of 44 patients.
- ❖ A 12 question parallel online anonymous survey of 20 clinicians was undertaken to assess clinician feedback on the trust's current airway assessment proforma.

AIRWAY ASSESSMENT
Teeth: Caps |
Dentures |
Own |
Mallampati: 1 2 3 4
NECK MOVEMENTS:

Figure 1: This excerpt demonstrates the current airway assessment proforma in use by the trust.

Results

- ❖ The audit demonstrated assessments recorded were consistently below the expected standard. **Dental assessments** were recorded **most often** - **36 (81.8%)** and **BMI/weight** recorded **the least** - **13 (29.5%)**.
- ❖ **15%** of the surveyed clinicians felt reducing the rate of unanticipated DI was 'impossible'.
- ❖ Airway assessments conducted routinely by anaesthetists include: **degree of mouth opening (95%)**, **history of DI (95%)** and **Mallampati (95%)**.
- ❖ The highest frequency of the single **most important airway assessment** according to clinician opinion is **Mallampati (25%)**
- ❖ A strong majority (**78.9%**) believed a visual prompt of **'likely difficult intubation expected'** would aid in preparation for a difficult airway.

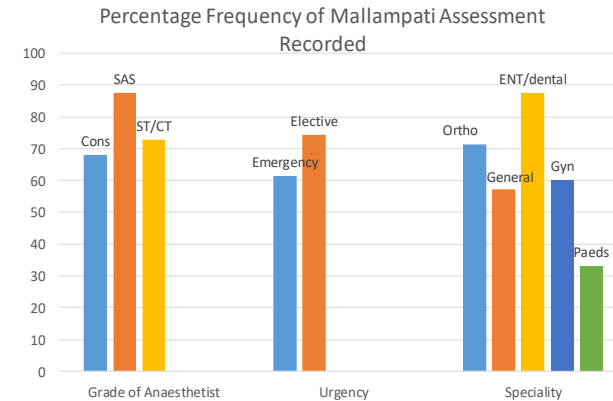


Figure 2: Bar chart displaying frequency of Mallampati assessment by seniority, urgency of operation and speciality.

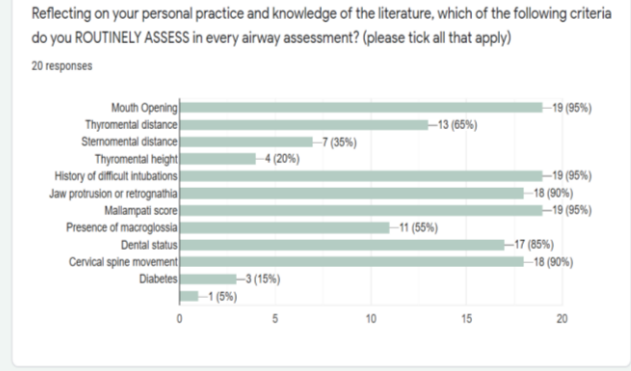


Figure 3: Reflection of current clinicians' practice of routine levels of airway assessment.

Discussion

- ❖ In close correlation with NAP 4 findings (1) of over-representation of airway complications in obese patients, our audit demonstrated a **staggering lack of capture of patients' BMI and airway assessment**.
- ❖ **Trainee anaesthetists** documented most thoroughly of all clinicians.
- ❖ **Elective procedures** and **general surgery** or **gynaecology** cases had demonstrated more frequent airway assessment.
- ❖ The authors propose high rates of unanticipated DI reported may be explained by lack of documentation of multiple areas of routine airway assessments.
- ❖ In order to address these issues, we recommend enhancing the current proforma and facilitation of further research to investigate the benefits of a universal tool for all anaesthetic airway assessments across the UK.

References

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2. Crawley SM, Dalton AJ. Predicting the difficult airway. *British Journal of Anaesthesia Education* 2015; 15(5): 253-257.