DASh and Slash: Race to Improve Patient Safety

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INTRODUCTION

- Can't intubate, can't oxygenate' (CICO) scenario is a well-recognised life-threatening anaesthetic emergency [1]
 - Significant morbidity and mortality if management strategies fail
- Delays in CICO management can lead to critical hypoxia even with adequate pre-oxygenation [2]
- New Difficult Airway Society (DAS) 2015 guidelines promote *surgical cricothyroidotomy* as final 'Plan D' approach to managing a CICO scenario [3]

AIMS

1. Assess impact of introducing a standardised, prepacked surgical kit to decrease delay in preparing for surgical cricothyroidotomy
2. Canvass views from anaesthetic colleagues about new surgical airway packs and preferred 'Plan D' approach to CICO scenarios

RESULTS

KEY FINDINGS

- Surgical cricothyroidotomy packs **reduced median time** for collection of equipment by **28.5 seconds** (interquartile range (IQR) 16.75 - 65.5 seconds) (see Fig. 1)
- **85%** of anaesthetists/intensivists **agreed with core components** of prepacked surgical airway kit (see Fig. 2)
- **< 50%** of anaesthetists/intensivists would opt for **surgical cricothyroidotomy** as 'Plan D' strategy (See Fig. 3)
 - **< 10%** of consultants would choose a surgical approach

Figure 1: Reduction in time for collection of surgical equipment pre- and post-introduction of surgical airway packs (Pre: median 65.5 secs, IQR 50.75 - 132.5 secs vs. Post: median 37 secs, IQR 34 - 67 secs)

METHODS

- Operating department practitioners (ODPs) asked to collect equipment required to perform surgical cricothyroidotomy under *timed* conditions
 - Pre- and post-introduction of prepacked surgical airway kit
- Survey sent to all members of local anaesthetic department
 - Appraisal of new prepacked surgical airway kit
 - Preferred 'Plan D' approach in view of new DAS 2015 guidelines

Figure 2: Survey results of agreement with DAS recommended **core** components of surgical airway packs (n = 26)

Figure 3: Survey results of **surgical airway** as primary approach to CICO management of all departmental staff (n = 26, as shown)

CONCLUSIONS

- Clear potential of a dedicated surgical airway pack in improving efficiency in CICO management and thus, patient safety
- Notable aversion to surgical cricothyroidotomy despite new DAS 2015 guidelines advocating this approach [2]
- **Future Plans:**
 - Focused education programme to improve awareness of surgical airway pack amongst staff working in environments where anaesthesia is delivered
 - Surgical airway workshop for local anaesthetic department

SURGICAL AIRWAY WORKSHOP

REFERENCES

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