Device and Medication Preferences of Canadian Physicians for Emergent Endotracheal Intubation (ETTI) in Critically Ill Patients

Grose et al., 2018

BACKGROUND
Numerous devices and medications are available to facilitate intubation
Consideration of patient physiology and pharmacology of medication is essential in planning ETTI

What are the ETTI practices of Canadian EM and ICU physicians treating critically ill patients?

STUDY DESIGN
Web-based and postal strategy survey was sent to non-faculty physicians and members of CAEP, CCMX, and CCRIG
Scenarios of patients with CHF, pneumonia, and trauma were included to assess physician preferences
Physicians were asked to respond using a 5-point Likert scale ranging from "always" to "never" based on "what they would do if they were managing the scenario in their usual place of work"

RESULTS
1. Top intubation device choice
   - Direct laryngoscopy (DL) with Macintosh blade

2. Top backup device choice
   - Endotracheal tube

3. Top choice of drugs
   - Based on scenario and physician specialty
   - Pneumonia: Ketamine, Fentanyl
   - CHF: Etomidate, Fentanyl
   - Trauma: Etomidate, Fentanyl

4. Top choice of paralytic
   - Based on physician specialty, regardless of scenario
   - Emergency Group: Succinylcholine
   - ICU Group: Rocuronium

LIMITATIONS
- 49.8% survey non-response rate
- Most respondents practiced in an academic setting, decreasing generalizability
- Self-reported practices may vary from actual practices

CONCLUSIONS
Substantial practice variation exists in the airway management of critically ill Canadian patients

1. Most physicians preferred direct laryngoscopy with a Macintosh blade
2. Most physicians’ back up device choice was an extraglottic device
3. Choice of intubation sedation was variable depending on patient scenario and physician specialty
4. EM physicians paralyzed patients more often than ICU physicians
5. EM physicians preferred succinylcholine, while ICU physicians preferred rocuronium

Reference: