## **Vortex Priming Status drills (x3) for ACMx workshop**

## **Equipment required (for each sim lab):**

- Basic airway equipment mask, OPAs, NPAs, laryngoscope, LMAs, ETT size 7 and 8, stylet, FROVA bougie
- Air Viva
- Glidescope
- Difficult airway trolley
- O<sub>2</sub> cylinder with 15L/min flow meter.
- CICO kit (happy to have 2 snaplock bags one with 14g BD insyte, 5ml syringe, 10ml saline; the other with Leroy device)
- Fibreglass shield over neck of pt with tubing as trachea taped down and skin overlay) I'll sort this out with Peter at sim centre.
- 1x Adult mannikin or torso on a trolley that can BMV, insert LMA, attempt to intubate
- Ipad/phone with SimMon app (myself and Amro will supply)
- Cognitive aids:
  - Vortex Priming Status tool, EH CICO algorithm, Vortex
    Optimisation Strategies (need 1 of each in colour and A3)

- 1) This is a 25 yo man, ~70 kg, who's had a post tonsillectomy bleed. You've just given preoxygenation, and given fentanyl, propofol, and suxamethonium with cricoid pressure, and you're about to have your first go with the glidescope.
  - a) Trial of:
    - i) Intubation VL fails due to blood/clots in oral cavity despite suction.
      DL also fails
    - ii) BMV (with guedels, etc) unsuccessful ventilation
    - iii) LMA unsuccessful ventilation
  - b) Once 1st SGA lifeline exhausted:
    - i) Call for Help airway skilled personnel (eg another anaesthetist, or ENT surgeon), more nursing staff (need at least 2)
    - ii) Allocate proceduralist
    - iii) Ask for CICO kit to be at bedside - specifically the Cannula cricothyroidotomy kit (if none available ask for "14g cannula, 5ml syringe and 10ml saline ampoule)
  - c) Once 2<sup>nd</sup> SGA lifeline exhausted:
    - i) Open kit and prepare equipment
    - ii) Identify anatomy (palpation, +/- US, +/- mark site +/-infiltrate with LA)
    - iii) Get poised to initiate neck rescue
  - d) Once 3<sup>rd</sup> SGA lifeline exhausted:
    - i) Declare "This is a Can't intubate, can't oxygenate (CICO) emergency"
    - ii) Extend the neck (+/- pull pt up towards head of bed, pillow under shoulders)
    - iii) Start FONA with cannula cricothyroidotomy (up to 3 times)
  - e) Call for Difficult Airway Trolley
  - f) Team roles:
    - i) Team leader/airway management
    - ii) 2<sup>nd</sup> anaesthetist to
      - (1) read out Priming Status tool (and make suggestions to optimize attempts at lifelines)
      - (2) read out CICO algorithm (& assist with procedure if need be)
    - iii) Another assistant to provide resources for CICO
    - iv) Another assistant to help with CICO procedures
    - v) Another assistant to provide ventilation/oxygenation from above (ie hold mask on)

- 2) This is a 50 yo man, ~90kg, who you've induced with alfentanil, propofol & rocuronium for an elective tonsillectomy for OSA. You're about to have your first go at DL with a MAC4 blade.
  - a) Trial of:
    - i) Intubation DL there is a large tumour obstructing the glottis from above. You think you might be able to sneak past it. As you put your ETT through, its quite friable and starts bleeding profusely. VL-unsuccessful too (same issue) SpO2 now 85% on 100% FiO2.
    - ii) BMV (with guedels, etc) unsuccessful ventilation
    - iii) LMA unsuccessful ventilation
  - b) Once 1st SGA lifeline exhausted:
    - i) Call for Help airway skilled personnel (eg another anaesthetist, or ENT surgeon), more nursing staff (need at least 2)
    - ii) Allocate proceduralist
    - iii) Ask for CICO kit to be at bedside - specifically the Cannula cricothyroidotomy kit (if none available ask for "14g cannula, 5ml syringe and 10ml saline ampoule)
  - c) Once 2<sup>nd</sup> SGA lifeline exhausted:
    - i) Open kit and prepare equipment
    - ii) Identify anatomy (palpation, +/- US, +/- mark site +/-infiltrate with LA)
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    - i) Declare "This is a Can't intubate, can't oxygenate (CICO) emergency"
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    - iii) Another assistant to provide resources for CICO
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- 3) This is a 30yo woman, ~80kg. She was a known Gd 4 laryngoscopy and difficult fibreoptic intubation. She's been intubated in ICU for the past 5 days for pneumonia, but extubated a few hours previously. However in the past 10 minutes there has been a rapid decompensation. Pt 's SaO<sub>2</sub> have dropped from 98% on 2L NP, to 85% on 100% FiO<sub>2</sub> and patient is obtunded. You've tried to intubate 3 times already with direct and videolaryngoscopy and unable to get a good view of the cords.
  - a) Trial of:
    - i) Intubation you've exhausted this pathway already and need to start Priming for CICO
    - ii) BMV (with guedels, etc) unsuccessful ventilation
    - iii) LMA unsuccessful ventilation
  - b) Once 1st SGA lifeline exhausted:
    - i) Call for Help airway skilled personnel (eg another anaesthetist, or ENT surgeon), more nursing staff (need at least 2)
    - ii) Allocate proceduralist
    - iii) Ask for CICO kit to be at bedside - specifically the Cannula cricothyroidotomy kit (if none available ask for "14g cannula, 5ml syringe and 10ml saline ampoule)
  - c) Once 2<sup>nd</sup> SGA lifeline exhausted:
    - i) Open kit and prepare equipment
    - ii) Identify anatomy (palpation, +/- US, +/- mark site +/-infiltrate with LA)
    - iii) Get poised to initiate neck rescue
  - d) Once 3rd SGA lifeline exhausted:
    - i) Declare "This is a Can't intubate, can't oxygenate (CICO) emergency"
    - ii) Extend the neck (+/- pull pt up towards head of bed, pillow under shoulders)
    - iii) Start FONA with cannula cricothyroidotomy (up to 3 times)
  - e) Call for Difficult Airway Trolley
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