Procedure Guideline – COVID-19 Intubation Plan Version 1.0

The Sutherland Hospital

Background

Airway management for potential COVID-19 positive patient is potentially a high-risk period for aerosol based transmission of the virus. Transmission of COVID-19 is primarily through droplets and surface contamination. Airway management procedures including NIV, HFNP, nebulisation of medications, CPR, tracheal suction, laryngoscopy, intubation and cricothyroidotomy.

The purpose of this document is to outline the procedure for the intubation and ventilation of a patient who is COVID-19 positive or there is clinical suspicion of them being positive due to clinical or epidemiological features.

Team roles

Designation of COVID-19 respiratory resus team prior to commencement of each shift. This will include the Acute Consultant or Senior Registrar as the most experienced intubator. Additionally, there will be a senior airway nurse and a medication administration doctor. Outside the room there will be a nurse allocated as a runner and scribe.

COVID Intubation Trolley and Equipment

The Preprepared COVID Airway Trolley is located in Resus 1. This trolley will be brought bedside during the intubation process and all the equipment inside of the trolley will be disposed of once the intubation is complete. This trolley contains:

Top of Trolley
Oxylog 3000 plus
Adult ventilator tubing with filter, gooseneck and test lung (leave test lung out of infectious area)

Attached to Trolley
Frova Bougie

Top Drawer
EtCO2 module
3 x Endotracheal tubes (size 6,7,8)
Closed suction catheter
Magill's Forceps
4 x Guedel's airway – size 2, 3, 4, 5
Lubricating jelly x 2
Tube tie
Facemask – size 4
Intubating stylet
4 x NP Airways – size 8.0, 7.5, 7.0, 6.5

Scalpel – Size 10
3 x gauze squares
Bluey

Middle Drawer
2 x Second generation LMA – Size 4, 5
Adult BVM with PEEP valve
HME filter
Bluey

Bottom Drawer
2 x NG tube – size 16, 18
50 mL syringe
Salem sump
Catheter Spigot
Portex drainage bag – 2L
Bluey

Workflow

Patient arrives in Emergency Department and is designated as a potential COVID-19 patient and is triaged preferentially to Acute Bed 23 as it is a negative pressure room. If this bedspace is unavailable the patient will be put into resus 4. If using resus 4, ensure that all existing paediatric equipment is removed prior to patient arrival.

Initial priorities at this point will be to get

- Monitoring
- IV access
- IV fluids
- Initial assessment
- Bloods
- Supplemental oxygen through NP, Hudson mask or NRBM only

At this point the team leader will communicate the decision to intubate the patient to the rest of the team. The COVID-19 intubating trolley will be brought into the room, along with the CMAC video laryngoscope with disposable blades. From this point onwards the personel in the room will be limited to the intubation team who will be in their full intubating PPE.

Runner nurse to get medications as needed by the team leader:

- Induction agent
- Paralysis
- Push dose pressor – Metaraminol/adrenaline
- Ongoing sedation

Team positioning

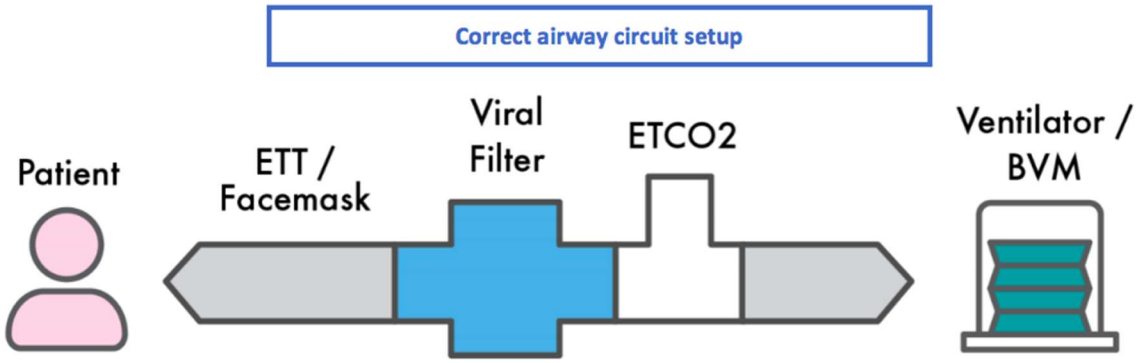
- Intubating doctor at the head of the bed

- Airway nurse at the head of the bead on the right side of patient
- Drug clinician to the right side of the patient

At this time, the COVID-19 Airway checklist will be completed which will be on top of the airway trolley.

The key differences for an intubation for a patient with potential COVID-19 as compared to a standard intubation

- Preoxygenation with low flow oxygen by Hudson Mask – if patient is persistently hypoxic despite this, preoxygenate with a tight-fitting facemask device with a viral filter and EtCO2 monitor in the circuit
- Manual ventilation with BVM should be minimalised unless required for rescue oxygenation
- No nasal prong apnoeic oxygenation to be used
- Video laryngoscopy will be used using the video screen to visualise the glottis, the operator should be standing upright with elbow straight to maximise the distance between the airway operators face and the patient
- The cuff should be ensured to be inflated prior to ventilation of the patient
- Plan be after a failed intubation attempt will be to go straight to LMA
- Removal of bougie from ETT is a high-risk time for aerosolising secretions – must be done with gauze to minimize this risk
- Utmost care must be taken in donning and doffing PPE



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