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Title: PERI – Anesthesia Recommendations for Airway Management of Patients with Suspected or Confirmed COVID-19

Applies to: All Hamilton Health Science (HHS) Anesthesiologists and physicians who routinely intubate as a part of their practice.

1.0 Purpose

1.1 To outline the recommendations for the intubation and extubation with associated airway care of the patients with suspected or confirmed COVID-19.

2.0 Equipment/Supplies

- N95 Masks
- Gloves
- Fluid resistant or impermeable gown
- Face shield
- Neck protection if needed

3.0 Policy

3.1 General Statements

3.1.1 HHS will endeavor to provide safe and timely care to all patients while maintaining a safe environment for all staff during the COVID-19 pandemic.

3.2.2 The steps and principles outlined below may be applicable to other physicians who routinely intubate as part of their practice, particularly Critical Care and Emergency Physicians.

4.0 Procedure

4.1 The following is recommended for intubation of patients with suspected or confirmed COVID-19

4.1.1 Planning and preparation is very important for the entire team. Please see the COVID OR Protocol. PERI - OR Protocol for the Management of the Suspected or Confirmed COVID-19 Patient Coming to the Operating Room for a Procedure Receiving a General Anesthetic

4.1.2 The patient is transported to the OR according to the Transportation of the Suspected or Confirmed COVID Patient document. IC – Transportation of Patients Within or Between Healthcare Facilities of Who are Suspected or Confirmed COVID-19

4.1.3 PPE for the anesthesiologist and assistant is a N95 respirator, hat, eye shield gloves, gown, foot cover and neck cover (if deemed necessary).

4.1.4 Limit the number of healthcare providers in the room where the patient is to be intubated.

4.1.5 The most senior/experienced physician (i.e. ER, ICU, Anesthesiologist) available should perform the intubation, if possible.

4.1.6 Anesthesia machine and equipment is set up as per the COVID OR document.

4.1.7 Standard monitoring or as appropriate of the patient is indicated.

4.1.8 Avoid awake fiber optic intubation unless specifically indicated. Atomized local anesthetic may aerosolize the virus. Consider using a glide scope or a similar device to maximize distance from the patient's airway and improve first-pass success. Avoid non-invasive modes of ventilation e.g. BiPAP. CPAP for the COVID OSA patient is to be avoided.

4.1.9 Plan for rapid sequence induction (RSI) and ensure that a skilled assistant is able to perform cricoid pressure, if deemed necessary. RSI techniques may need to be modified if the patient has very high alveolar-arterial gradient and is unable to tolerate 30 s of apnea.

4.1.10 Administer five minutes of pre-oxygenation with oxygen 100% with good mask fit.

4.1.11 Induction must include muscle relaxants preferable high dose rocuronium. Succinylcholine may be used but will be relatively short acting should intubation be difficult, and will result in

coughing as drug effect wanes. Other induction drugs are at the choice of the practitioner. Be prepared with vasopressors.

4.1.12 If you must use bag/mask ventilation, use a two hand technique with good seal and low ventilation pressure.

4.1.13 Intubate and connect the circuit and confirm correct tube placement. Use closed circuit ventilation.

4.1.14 There is no evidence that it is not safe to enter the room immediately after completions of a non-surgical AGMP.

4.2 The following is recommended for the extubation with patients suspected or confirmed COVID-19

4.2.1 Be confident the patient is suitable for extubation and will not need reintubation.

4.2.2 Extubation is considered a time of risk for the anesthesiologist or the individual performing the extubation.

4.2.3 Deep extubation is discouraged as is not a routine technique for the majority of anesthesiologists.

4.2.4 Use PPE as for intubation of the anesthesiologist and assistant.

4.2.5 Plan ahead for everything you need.

4.2.6 Only the anesthesiologists and assistant remain in the room for extubation.

4.2.7 Ensure the patient is reversed and meets criteria for extubation.

4.2.8 Once extubated, apply an oxygen mask and a surgical mask over the oxygen mask on the patient.

4.2.9 Recovery is in the OR as outlined in the COVID OR protocol document.

4.2.10 There is no evidence that it is not safe to enter the immediately after completion of a non-surgical AGMP.

4.3 The following is recommended re: supraglottic and other airway techniques in the suspected or confirmed COVID patient:
Note that airway management other than intubation is still controversial.

4.3.1 Paralysis of the suspected or confirmed COVID patient is a strong recommendation.

4.3.2 Placement of the Laryngeal Mask Airway is not considered an Aerosol Generating Medical Procedure according to the HHS directive of March 27. However at this time, it is reasonable to choose intubation as the preferred method for airway management in the suspected or confirmed COVID patient.

4.3.3 An LMA may be necessary should intubation fail and there is no other option. The LMA may be a reasonable choice in the case of a known difficult airway when asleep intubation is anticipated to be very difficult. Awake fiber optic is not the technique of choice in the known difficult airway.

4.3.4 The use of an oral airway after induction may be necessary in the paralyzed patient if gentle bag and mask ventilation must be instituted.

5.0 Cross References

PERI - OR Protocol for the Management of the Suspected or Confirmed COVID-19 Patient Coming to the Operating Room for a Procedure Receiving a General Anesthetic
IC – Transportation of Patients Within or Between Healthcare Facilities of Who are Suspected or Confirmed COVID-19

6.0 Other HHS References

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