

COVID-19 and airway management in Pediatric Patients

Recommended
Caution
Avoid

Pediatric Difficult Intubation (PeDI) Collaborative Consensus

Clinical summary for the positive or suspected COVID-19 pediatric patient

Case preparation



- Prepare all drugs and equipment in advance
- Open trash can and sharps containers
- No badges, keys, pagers, phones etc. in operating room

Premedication



- Use to reduce crying and aerosol generation
- Avoid nasal administration
- Avoid parental presence at induction

INDUCTION OF ANESTHESIA

Intravenous



- Preferred method of induction
- Neuromuscular blocking drug recommended
- Consider Rapid Sequence Induction

Mask induction (if required)



- Lowest possible flows
- Consider clear plastic barrier

Caution with bag mask ventilation if necessary

AIRWAY

Airway Device

- Cuffed tracheal tube preferred
- Video laryngoscopy preferred
- Most experienced laryngoscopist
- In-line closed suctioning preferred

- Laryngeal mask airway with good seal acceptable
- Simple face mask may reduce aerosol dispersion
- Nasal cannula, bag mask ventilation less desirable
- Avoid clinician exposure with leak checks, use equipment instead

Difficult Airway

Points to consider

- Assemble airway team
- Check equipment / Just in time review
- Most experienced airway manager to perform
- 1st - Videolaryngoscopy
- 2nd - Fiberoptic through LMA
- 3rd - Combined fiberoptic with video laryngoscopy
- 4th - Consider an invasive airway (FONA/surgical)
- Consider neuromuscular blocking agent
- If unable to avoid bag mask ventilation, use low tidal volumes with two-person technique
- Avoid passive oxygenation if tolerated
- LMA as rescue device

PROCEDURE

Maintenance



- Continue personal protective equipment use throughout, including airway, laparoscopic, and endoscopic procedures
- Utilize clear plastic barrier over laryngeal mask airway

Emergence



- In-line closed suctioning preferred
- Clear plastic barrier in place
- Recover in the operating room
- Consider deep extubation
- Minimize coughing (TIVA, Dexmed, Propofol, Lidocaine, etc.)
- Avoid common patient areas (ie. Post Anesthesia Care Unit)

Transporting Intubated Patients



- Viral filters on patient side and expiratory limb of ventilators
- Viral filter between endotracheal tube adaptor and manual transport circuit
- Consider optimizing sedation and/or neuromuscular blocking drug

Infrastructure



- Negative pressure room for AGMPs
- Ensure adequate air exchange
- If negative pressure rooms not available, use HEPA filter as appropriate for square footage