BAPA News

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For Paediatric Anaesthesiology

Although children seem to be relatively protected from severe forms of COVID-19, they can be vectors.

Therefore, all children with an upper respiratory infection with or without fever, with a recent history of gastrointestinal symptoms or children whose a family member suffers from COVID-19 must be considered as a potential vector.

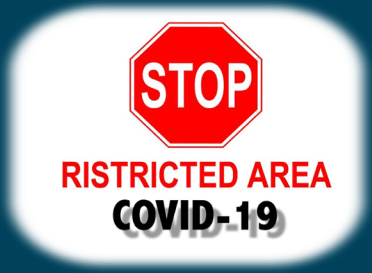
For weeks, only emergencies and cases that cannot be postponed (e.g., oncology) will be admitted to the OR. In order to protect caregivers and other patients, all children should wear a surgical face mask before entering the OR.

In this COVID-19 period, anesthesiologists should protect themselves and their environment from potential aerosolization and contamination by :

- wearing gloves and a surgical face mask for every contact with children
- wearing gown and glasses when staying close to the child's head (mask anesthesia or nitrous oxide analgesia)
- organising all sedation in ventilated areas (OR)
- avoiding using non-rebreathing circuit (high fresh gas flow, difficult to clean)
- protecting ventilator by placing 2 HME filters: one at the patient side and a second one on the expiratory limb of the circuit
- avoiding forced-air warming devices during induction and extubation (by using heat lamps).
- covering the child's head with a transparent plastic drap (e.g., delivered in the Neonatal Bair Hugger mattress) during surgery and extubation phase
- storing all used airway equipment on dedicated table
- prefering in the PACU puffs through chamber spacers than aerosols

Management of Suspected or COVID-19 children

Protective dressing and equipment decontamination should be performed according to the recent SARB recommendations and our local protocols



- Children are ***not*** brought to the holding area
- Children are managed in a dedicated COVID-OR
- Parental presence is problematic : psychological and / or pharmacological premedication should be anticipated (sedative and topical anesthetic)

- Non-rebreathing external pediatric circuits should be avoided
- A circle circuit is used with 2 filters: a HME filter on the mask (to protect the CO2 sampling) and an HEPA filter on the expiratory limb of the circuit (to protect the ventilator)

- The most experienced anesthesiologist manages the airway
- Intravenous induction is preferred to inhalational induction to shorten the potential aerosolization period
- Intubation under muscle relaxation is the preferred airway management
- Rapid sequence induction is preferred if tolerated by the child
- Lower pressure manual ventilation can be considered before intubation to avoid excessive desaturation. A transparent plastic drape over the child's head can be used during ventilation
- Video-laryngoscopy can be considered for oral intubation
- Cuffed endotracheal tubes are preferred to limit manipulations
- A HME patient filter is connected to the endotracheal tube prior to insertion

- Endotracheal aspiration is performed only if needed and ideally through a closed system
- Suction of the oropharyngeal cavity is performed carefully under deep anesthesia
- Extubation is performed deep or awake, trying to avoid any coughing or vomiting
  The transparent plastic drape is left over the child's head during this delicate phase

- Children should be recovered in the OR, in a dedicated COVID-PACU or transferred to ICU

Simulation scenarios can help checking equipment and writing local guidelines.
Change in practice should not be carried out at the expense of basic safety.

Based on ADARPEF - ESPA - SPA recommendations