MANAGING PAEDIATRIC PATIENTS DURING THE COVID PANDEMIC

MEDICLINIC

Paediatric admissions will be admitted via the Emergency Centre, as a direct admission from the Doctors rooms, or will be booked for an elective procedure. The child with the parent or caregiver (regardless of COVID positive or negative test result) are admitted as a "unit"

Paediatric care should take place in 3 distinct areas within the paediatric ward with all staff wearing surgical mask and visors for the duration of their shift

AREA ONE: NON-COVID children

Child who has tested negative and has no respiratory symptoms and requires normal paediatric care

AREA TWO: children with respiratory symptoms being treated as a suspected case, or emergency admissions awaiting routine admission PCR results.

Ideally the mother/child unit needs to be isolated or spaced out within the ward with dedicated staff if staffing allows. The staff will be wearing visors and mask , and will then change their aprons and gloves between patients.

AREA THREE: children with confirmed COVID-19 disease

Patients can be cohorted and looked after by same nursing staff

SEVERITY OF THE RESPIRATORY DISEASE IN CHILDREN

	MILD	MODERATE	SEVERE
MENTAL STATUS	NORMAL	RESTLESS	IRRITABLE/LETHARGIC
FEEDING	FINISHES FEED	DOES NOT FINISH FEED	UNABLE TO FEED
TALKING	FULL SENTENCE	INTERUPTED SENTENCE	UNABLE TO TALK
RESPIRATORY SYSTEM	< 40/MIN IF UNDER 1YEAR < 30/MIN IF 1-5 YEARS < 20/MIN IF OVER 5 YEARS	40-60/MIN IF UNDER 2 MONTHS 40-50/MIN IF 2-12 MONTHS 30-40/MIN IF 1-5 YEARS 20-30/MIN IF OVER 5 YEARS	> 60/MIN IF UNDER 2 MONTHS > 50/MIN IF 2-12 MONTHS > 40/MIN IF 1-5 YEARS > 30/MIN IF OVER 5 YEARS
RESPIRATORY SIGNS	NO DISTRESS	LOWER CHEST WALL INDRAWING	GRUNTING AND/OR SEVERE LOWER CHEST WALL INDRAWING
PULSEOXIMETRY	≥ 95% IN ROOM AIR	< 92% IN ROOM AIR	<92% IN ROOM AIR CENTRAL CYANOSIS

MILD DISEASE

- Treat at home if possible
- Educate the parent with regards to home isolation, managing a fever, and nutritional support
- Reassure parents that the majority of children have self-limiting mild illness
- Educate them about danger signs depending on age
- Ensure they have the transport and means to return if needed
- Admit child with the parent if home care is not feasible

MODERATE DISEASE

- Admit to paediatric ward
- 3 hourly vital signs including saturations, respiratory rate, and temperature
- Increase to 4 hourly if improving
- Keep saturations >92%, using nasal cannula→ Face mask→ Face mask and reservoir bag
- Manage temperature with antipyretics
- Normal feeds if tolerated
- Normal age appropriate IV fluid rates if required
- Empiric Antibiotics

SEVERE DISEASE

- Children with increasing respiratory distress and unable to maintain saturation > 92% on >40% oxygen must be admitted to a high care or PCCU setup
- Continuous saturation and cardio-respiratory monitoring
- Minimum of hourly observations are required
- Child on high flow oxygen must be observed closely for deterioration, and this should not be in a general ward setup.
- ⅔ maintenance IV Fluid rate
- Empiric antibiotics

SUPPORTIVE MEDICAL CARE

- Chest X-ray is not routinely required
- Antipyretic of choice is paracetamol (Avoid Ibuprofen in children with poor oral intake, and has been associated (but not proven) with poor outcome in adults with COVID-19)
- Start with low flow nasal cannula and beware of complications of high flow. (May cause aerolisation)
- Wheeze is not typical of COVID-19 and bronchodilators should not be routinely used
- Do not routinely use nebulization but use a MDI with spacer if required
- Children presenting with an asthma attack should receive normal treatment , bronchodilators and steroids
- Oral steroid use in adults has been associated with prolonged virus shedding, but should be used as normal in children with asthma
- Empiric antibiotics: Amoxicillin 45mg/kg/dose BD PO **OR** Ampicillin 50mg/kg/dose IVI QID and Gentamycin 6mg/kg IVI daily 5-10days

IMPORTANT

- During the pandemic all nursing staff must wear a surgical mask and visor while working in the paediatric ward, and change apron and gloves between patients
- Hand hygiene and environmental cleaning remain important!!! Normal cleaning of rooms between patients should take place
- If not enough isolation rooms ensure the children parent are spread out as much as possible
- Use the isolation rooms for the symptomatic child first
- Ensure ALL healthcare workers understand the droplet route of transmission , and principles of droplet and contact precautions.
- N95 respirator only required for aerosol generating procedures (Suctioning /High Flow oxygen/ventilation)
- Nurse to spend as little time as possible in the isolation room, or close to the child and allow parent/caregiver to do the majority of care
- Avoid nebulization as much as possible and if necessary allow parent to administer it and nursing staff to leave the room if feasible
- Consider reducing observation frequency once child is improving but do not withhold essential care
- Plan nursing tasks ahead of all patient interactions and do all tasks with one entry/consider working from the back of the child if this does not scare the child
- Parents do not require testing as they live with the child and appropriate PPE will be worn by the nursing staff
- Children have to date been mildly affected worldwide, and do not forget the normal childhood diseases and conditions

All references can be found in the **GUIDELINE FOR MANAGING PAEDIATRIC CASES OF SUSPECTED/CONFIRMED COVID-19**

Compiled by Aliné Hall. 18/06/2020