European Society of Paediatric and Neonatal Intensive Care

Nursing guidance for the care of the child with suspected or proven COVID-19 infection

- Full PPE should always be worn when nursing COVID-19 +ve children if available
- Aerosol-generating procedures are high risk and full Personal Protective Equipment (PPE) is required and these should be reduced to an absolute minimum [1,2] **ALWAYS PROTECT YOURSELF**
- Please note: 1 negative PCR does not rule out covid-19: adult recommendations state if patient has symptoms suggestive of COVID-19 repeat PCR (continue precautions) [1,2]

Aerosol-generating events

- Intubation/assisting with intubation
- Extubation
- Tracheal suction (without a closed system)
- Bag-mask ventilation
- NIV or PPV without an adequate seal
- Coughing/sneezing or any procedure inducing this
- High Flow Nasal Cannula
- Delivery of nebulised medications
- Cardiopulmonary resuscitation (prior to intubation)
- Any procedure which risks ventilator circuit disconnection (proning)

Airway and suctioning

No routine chest physiotherapy[3,4]

Full PPE should be worn if any risk of aerosols[1]

Always use closed (in-line) suction[2,3,4]

Leave in-line insitu unless contaminated [5]

Avoid ventilator circuit disconnection [2,3,4]

If disconnection essential: Stop flow in the ventilator before disconnecting and clamp ET tube to avoid droplet spray [4]

General Measures – Nursing Care

No routine ventilator circuit changes unless contaminated [6]

Check ETT cuff pressure 6-12 hourly for no leak and safe pressure <20cm H_2O [2,4]

Prone daily for at least 12 hours (avoid disconnection) [1,2,3,4]

Minimise oral care/hygiene to 12 hourly (high risk procedure) [7]

Enterally feed as tolerated & prevent pressure areas [8]

Caution with nebulised medications (full PPE) [9,10]

If on CPAP/NIV ensure good mask seal no leaks (preferably full-face mask or helmet) [11,12]

Maintaining child and family-centred care ****If child is COVID-19+ve parent/s = contacts*****

Extreme caution in visitation by parents until COVID-19 -ve. Provide instruction daily, before entry into the patient care area, on hand hygiene, limiting surfaces touched, and the use of PPE according to local policy [13]

Minimise child and family fears of health professionals in PPE through age/developmentally appropriate explanations and play [13]

Where possible, reassure child and involve parents/carers as much as possible. Use available technology (such as teleconferencing) to support communication between the child/parent/healthcare team and wider family [13]

To reduce exposure, minimise visitors to parents/primary carers only. The visitation of siblings should be avoided [4,13]

If parents or siblings become COVID-19 symptomatic they must alert staff immediately and should not visit [13]

Disclaimer: Please note this is intended as a guide only - follow your institutional or government specific guidance. Version 1.0 | 29-03-2020

Supporting evidence or recommendation

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2. ESICM Statement on the management of critically ill patients with COVID-19 March 2020
3. ESPNIC Guidance for the care of critically ill children with COVID-19: March 2020
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8. Expert opinion only: no evidence
9. Hui D et al. Exhaled air and aerosolised droplet dispersion during application of a jet nebulizer. **CHEST** 2009; 135: 648-654.
10. O'Neil C, Li J, Leavey A. et al. Characterization of aerosols generated during patient care activities. **Clin Infec Dis** 2017; 65.
11. Hui D et al. Exhaled air dispersion during high-flow nasal cannula therapy versus CPAP via different masks. **Eur Resp J** 2019; 53:
12. Hui D et al. Exhaled air dispersion during non-invasive ventilation via Helmets and a total facemask. **CHEST** 2015; 147: 1336-1343
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This statement has been reviewed and endorsed by ESPNIC Executive Committee

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