

Guideline for the management of bronchiolitis

Admission criteria

Saturations $\leq 92\%$ in air
Difficulty feeding ($<75\%$ normal volumes)
Significant respiratory distress

High risk patients:

Ex-premature infants with chronic lung disease
Infants ≤ 3 months of age
Congenital heart disease
Immunodeficiency

General Management

Minimal handling
PPE: Gloves, aprons + isolation
Nasopharyngeal Aspirate (NPA)
Consider caffeine citrate (NG/IV) if <3 months

Differential diagnosis:
Air leak, pneumonia, ARDS (sepsis), foreign body,
pulmonary oedema (myocardial failure, CHD)

Oxygenation – give O_2 if $SpO_2 \leq 92\%$

Nasal cannulae supplemental O_2
High flow Humidified Nasal O_2 : 2L/kg if increasing oxygen requirement/moderate - severe work of breathing
CPAP: weight <6 kg PEEP 6cm H_2O
Consider CXR if work of breathing or oxygenation worsens on NIV/supplemental oxygen, looking for pneumothorax, collapse, indicators of alternative diagnosis (cardiomegaly, pulmonary plethora, focal consolidation)

Nutritional support

NGT feeding @ 100mls/kg/day
Consider IV fluids if above NGT regime poorly tolerated or significant WOB despite NG feeding
IV fluids: 0.9% NaCl + 5/10% dextrose @ 75mls/kg/day if work of breathing remains significant despite NGT feeding.
Daily U+E's if on IV fluids. Avoid positive fluid balance with diuretics

BEWARE SIADH

Relative indications for invasive ventilation

Progressive tachypnoea + work of breathing, lethargy, worsening respiratory acidaemia, persistent/prolonged apnoeas, Increasing oxygen requirement

Invasive ventilation

Discuss with SORT + local ITU team. Ensure NGT in situ – aspirate stomach. 2 points of IV access

Induction: Ketamine 1-2mg/kg + Rocuronium 1mg/kg IV

ONCE STABILISED FOLLOWING INTUBATION (TUBE SECURED AND CHILD PARALYSED /SEDATED)
Physiotherapy with 0.5-1 ml/kg saline lavages to aid secretion clearance is key

General initial settings: PIP 15; PEEP ≥ 5 , if evidence of collapse on CXR will require more (6-8)
Ti 0.8-1.0; RR ≤ 30

Measures to improve oxygenation: Increase PEEP, prone positioning but aim for $SpO_2 \geq 88\%$
Measures to improve CO_2 clearance: Increase minute ventilation (RR + Peak inspiratory pressure)
Allow permissive hypercapnia: Aim pH ≥ 7.25

DISCUSS WITH SORT AT ANY TIME