CLINICAL GUIDELINE	
Respiratory Distress Syndrome (RDS)	
Scope (Staff):	Nursing and Medical Staff
Scope (Area):	NETS WA

Child Safe Organisation Statement of Commitment

CAHS commits to being a child safe organisation by applying the National Principles for Child Safe Organisations. This is a commitment to a strong culture supported by robust policies and procedures to reduce the likelihood of harm to children and young people.

This document should be read in conjunction with this DISCLAIMER

This is a quick reference guide for transportation purposes only. For further information please refer to the ***CAHS Neonatology 'Respiratory Distress Syndrome'*** guideline located **here**

Definition

Respiratory distress syndrome or surfactant deficient lung disease is respiratory distress persisting beyond 4 hours of age, in neonates with characteristic radiographic findings of bilateral air bronchograms with a ground glass or reticulogranular appearance in the lung fields.

Clinical Presentation

Usually presents within the first few hours following birth.

Signs include:

- Grunting respirations
- Subcostal / sternal recessions
- Nasal flaring
- Decreased air entry (bilateral)
- Hypoxemia
- Respiratory acidosis on blood gas analysis

Management

Management of surfactant deficiency depends on a number of factors e.g. gestation, oxygen requirements, current respiratory support and may include pressure support and surfactant replacement.

All babies are likely to commence CPAP of 6-7cms H_2O.

Refer to Continuous Positive Airway Pressure (CPAP) guideline.

If transportation of the infant is likely to be imminent the method of surfactant administration should be considered carefully e.g. INSURE (Intubate, Surfactant, Extubate to CPAP) is **not** currently recommended prior to transport.

For **severe** or worsening respiratory acidosis (e.g.$PaCO_2$ >60mmHg and pH <7.25); recurrent apnoea; or rising FiO_2 requirements, consider Intubation and ventilation in consultation with **on-call Neonatologist**.

Surfactant Administration

Surfactant is given to improve compliance, stabilise lung volumes and reduce work of breathing.

- **Always** discuss with the **on-call Neonatologist prior to administration.**

If referring centre has facilities to obtain a Chest X-ray it is preferable to do so before administration. If not, clinical examination may suffice to determine tube placement. Make sure that air entry is equal, i.e. avoid right main stem bronchus intubation/unilateral surfactant administration.

Please note: For an oral intubation, the level to strap the ETT at the lips is:

6 + weight (kg) = cm level at the lips e.g. for a 3kg baby: 6 + 3 = 9cms at the lips.

Type of surfactant varies dependant on gestation. Choice is at the discretion of the on-call Neonatologist. Please refer to the Neonatal Medication Protocols as the dose and administration frequency differs between the two products Survanta® and Curosurf®.

For administration instructions please refer to Surfactant Therapy**.**

It is important to note adverse reactions to surfactant administration include transient hypoxia, bradycardia and endotracheal tube blockage.

If there is significant desaturation or bradycardia, stop administration temporarily and make appropriate changes to the ventilator to ensure the surfactant fluid in the tracheal tube advances distally and flow is re-established.

PPV may be required with a T-Piece or bag and mask. Ensure all emergency equipment is readily available prior to administration.

Related CAHS internal policies, procedures and guidelines
Neonatology Guidelines • Continuous Positive Airway Pressure (CPAP) • Intubation • Surfactant Therapy Neonatology Medication Protocols • Curosurf • Survanta NETS WA • Intubation and Ventilation

This document can be made available in alternative formats on request for a person with a disability.

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