**Transient Tachypnoea of the Newborn (TTN)**

**Signs and Symptoms**
- RR >60
- Grunting
- Nasal flaring
- Intercostal and subcostal recessions
- Cyanosis

**Risk factors**
- Elective c-section,
- Pre-term
- Maternal diabetes
- Male gender

**Incidence:**
5 per 1000 births

**Natural history**
TTN is should be improved by 48 hours. If not, diagnosis should be reviewed at that point.

TTN is a delay in the normal process in which lung switches from actively secreting chloride & fluid to absorbing sodium and fluid through aquaporin 5. The absorption process is in response to catecholamines & glucocorticoids.

**Incidence:**
5 per 1000 births

**Diagnostic workup**
- Usually a term infant with mild to moderate respiratory symptoms shortly after birth
  - If the infant is stable with saturations >90% in room air, place in an incubator in the delivery suite or postnatal ward and observe for one hour.
  - If symptoms persist after one hour or saturations are <90% at initial assessment or infant looks unwell admit to neonatal unit.

- Place prone in incubator. Minimal handling
- Monitor pre and post ductal oxygen saturations
- Give supplemental O2 via head box or incubator oxygen/nasal prongs if head box is not available
- If tachypnoeic stop oral feeding give IV fluids 60ml/kg. Mild fluid restriction appears helpful in more severe cases
- Observe for worsening signs of respiratory distress
- Is there a Septic risk factor present?

**Septic work up**—
- FBC, CRP, blood culture
- Start IV antibiotics as soon as possible.

**Observe infant in unit.**
- If sepsis strongly considered, e.g. worsening respiratory distress or increasing O2 requirements, start IV antibiotics as soon as possible.

**If deteriorating clinically, do CXR immediately, or if infant remains symptomatic obtain CXR at 4 hours.**

**If infant is requiring >30% O2 CPAP can be considered particularly in late preterm infants.**

**If worsening resp. distress and/or increasing Fi02 blood gas should be done. If requiring 40% - 60% O2 consider intubation and ventilation, depending on CXR, blood gas and clinical status consultation with a tertiary unit and review the diagnosis. Consider PN if feeds are withheld for prolonged periods.**

**Radiological findings:**
- Increased lung volume with flat diaphragms.
- Mild cardiomegaly.
- Prominent vascular markings, originating at the hilum.
- Fluid in the right horizontal fissure.
- Pleural effusions.
- Fluffy densities.

**TTN is a diagnosis of exclusion.**
Differential includes;
- RDS, Pneumonia, Sepsis, Pneumothorax, Congenital lung anomalies, Congenital heart disease, Persistent pulmonary hypertension of the newborn.
References:


This care pathway has been produced by the National Paediatric and Neonatology Clinical Programme. It is aimed at medical, nursing and allied health professionals working in Irish neonatal units.