

Signs & Symptoms

- RDS: breathing difficulty due to underdeveloped lungs.
- Decreased O2 sats.
- Hands & feet cool to the touch.

Pathophysiology

Patients with Down Syndrome (DS) are at greater risk for developing PPHN, which happens when blood vessels do not open enough which limits oxygen to the rest of the body. The additional copy of chromosome 21 increases the risk of hypoxemia through impaired ventilation to perfusion matching secondary lung abnormalities.

Diagnostics/Labs

- Echocardiogram
- Pulse oximetry

“mild” Persistent Pulmonary Hypertension (PPHN) related to Downs Syndrome

Treatment/Medication

- High Flow nasal canula at 22% 2L
- Chlorothiazide (Diuril)
- Cholecalciferol (vitamin D-3)
- Monitoring progression to see if the condition resolves itself.

Nursing Implications

- Monitor O2 sats: >88%
- Gavage feeding when needed to reduce workload.
- Thermoregulation

Patient Teaching

- Do not remove leads/ oxygen mask even while holding/ bonding.
- Bottle feed at their pace and allow adequate rest periods (gavage feed when they are tired/ choking).
- Maintain good hygiene and standard precautions to prevent infection.
- Attend well-checks after discharge to monitor prognosis of PPHN.

D.O.B. 01/23/23

Gestational Age: 35[^]3 Adjusted Gestational Age: 37[^]3

Birthweight: 4 lbs. 7 oz./ 2007 grams

Current weight: 4 lbs. 14 oz./ 2200 grams

APGAR at birth: 8

Priority Nursing Diagnosis

Decreased Cardiac Output/ hypoxia.