NICU Disease Process Map

D.O.B.___03/24/2025_____ APGAR at birth: ____5_____

Gestational Age:_31weeks_6days_____ Adjusted Gestational Age_____

Birthweight___3__lbs.____2.8__oz./____1440_____grams

Current weight___4__lbs.___0___oz./____1815___grams

Disease Name: Respiratory Distress from Dx of Trisomy 21

What is happening in the body? Due to the patient being born prematurely the patient's lungs, airway, and cardiac are underdeveloped. This patient also has trisomy 21 and due to this diagnosis and their different genetic variations with contributes to varied degrees of phenotypic severities.

What am I going to see during my assessment? With this patient you will notice when during your assessment that her body is when holding her is limp and that she is very easy going. While auscultating her hear you can hear a grade 4 heart murmur related to her diagnosis. She also has the facial characteristics of a neonate born with trisomy 21. We would also hear some crackles when assess respiratory.

What trends and findings are expected? I would expect to see more urine output from the loop diuretic. I would also expect to see a trend of o2 sats increasing and decreasing as we will slowly start to wheen the patient off oxygen. I would expect cardiac function to get better due to the patient's vsd and asd getting smaller.

What tests and labs will be ordered? Due to the patient taking loop diuretics for heart I would suspect we would order BUN and a serum creatinine. We would also want to order a urinalysis to monitor for dehydration. We would want to order a CMP to monitor rbc and platelete count

What medications and nursing interventions/treatments will you anticipate? Some type of diuretic for this patient due to the heart conditions she has. I would also suspect caffeine citrate due to the dx of respiratory distress.

How will you know your patient is improving? If she is urinated which would indicate that the diuretic is working just as long as the urine output isn't an excessive amount which could lead to dehydration. We would also hear the lungs start to clear up and eventually not hear crackles when assessing the patient's respiratory status.

What are risk factors for the diagnosis? Heart defects, respiratory defects, thrombocytopenia, and airway obstruction due to the trisomy 21 diagnosis.

What are the long-term complications? Some long term complications that follow with a diagnosis of trisomy 21 would include an increased risk of respiratory infections as the neonate grows older. Sleep apnea, chronic lung diseases and pulmonary hypertension are also some long term complications that go with trisomy 21 with respiratory distress.

What patient teaching for management and/or prevention can the nurse do? When feeding the neonate to make sure they are in a upright position for better positioning. Making sure to frequently check O2 sats. for the patient and assess respiratory and cardiac every hour to make sure there are no changes in the patient. I would also give some education to the parent on how to look for early signs of respiratory distress in their child. I would also get them in touch with the social worker for some assistance in respiratory therapies, specialized care and some developmental support such as an early intervention program.