

Medications

Amlodipine- 0.4 mg, BID

Therapeutic classifications: Antianginal, antihypertensive

Pharmacological classifications: Calcium channel blocker

Reason client is taking: to decrease blood pressure (Jones & Bartlett Learning, 2022).

Nursing assessments: Monitor blood pressure daily and assess for chest pain frequently (Jones & Bartlett Learning, 2022).

Glycopyrrolate- 10 mcg, BID

Therapeutic classifications: Antiarrhythmic, anticholinergic, bronchodilator, and cholinergicadjunct

Pharmacological classifications: Anticholinergic

Reason client is taking: to decrease secretions (Jones & Bartlett Learning, 2022).

Nursing assessments: Monitor hydration status and temperature (Jones & Bartlett Learning, 2022).

Demographic Data

Admitting diagnosis: Congenital myopathy

Age of client: 102 days

Sex: Male

Weight in kgs: 4.38 kgs

Allergies: No known allergies

Date of admission: 10/04/2023

Pathophysiology

Disease process:

Muscle weakness is an uncommon hereditary disorder known as congenital myopathy. Myopathy occurs when there is an issue with the brain, a muscle, or a nerve that supplies the muscle. Myopathy means "disease of muscle," and congenital means "present at birth." Congenital myopathies cause babies to be born without muscular tone. More signs of the illness include respiratory difficulties, feeding difficulties, and skeletal abnormalities (such as weak or misaligned bones). Signs can start at birth, throughout early childhood, or in adolescence. Some signs and symptoms can stay the same but can also progress. Congenital myopathies come in various forms and range in severity, depending on the type of congenital myopathy the patient has (Phelps, 2020).

S/S of disease:

A few signs and symptoms of congenital myopathy include lack of muscle control and weakness, hypotonia, difficulty breathing and eating, delayed motor skills, skeletal problems, and slowness in reaching developmental goals (Phelps, 2020). My patient had severe hypotonia, respiratory distress, muscle weakness, delayed developmental goals, and difficulty eating. My patient was on a ventilator and will remain on it. He needed to be suctioned multiple times throughout my shift because he could not clear his airway of the mucous. The patient did not turn his head to noise, babble, or make eye contact; those are all age-appropriate growth milestones that a two-month-old baby should be able to do.

Method of Diagnosis:

A healthcare provider, such as a pediatrician or neonatologist, will do a physical examination to identify congenital myopathy. They will refer you to a neurologist and possibly a geneticist and might request further tests to confirm the diagnosis. A blood test, an electromyogram, a muscle biopsy, and genetic testing are some of the procedures that can be done to diagnose congenital myopathy (Capriotti, 2020).

Treatment of disease:

Congenital myopathy is often treated with a focus on symptom management and assistance to enhance the patient's quality of life. The particular course of treatment may change based on the kind and severity of the congenital myopathy. Some ways to manage the patient's symptoms include physical therapy, medication, rehabilitation therapy, and orthopedic management (Capriotti, 2020). My patient had respiratory therapy and several medications to help decrease mucous production and breathe better.

Admission History

ML was born at Carle on 07/10/2023 at 37w 1d and diagnosed with congenital myopathy at birth. Patient was transferred from Carle to Barns in St. Louis NICU for trach and G tube insertion. Pt was transferred back to Carle to continue care for respiratory failure and ventilator management. Patient will get discharged after proper education is given to family and supplies are provided.

Relevant Lab Values/Diagnostics

Glucose 122; Normal: 74-100 mg/dl

Reason: Glucose could be elevated due to a stress reaction (Jones & Bartlett Learning, 2022).

Creatinine 0.30; Normal: 0.70-1.30 mg/dl

Reason: low muscle mass can cause low creatinine levels (Jones & Bartlett Learning, 2022).

Phosphorus 5.3; Normal: 2.3-4.7 mg/dl

Reason: pre phosphorus levels can be elevated due to his high blood pressure (Jones & Bartlett Learning, 2022).

Albumin 3.5; Normal: 3.8-5.4 g/dl

Reason: Ventilated patients can have decreased albumin levels (Jones & Bartlett Learning, 2022).

AST 37; Normal: 5-34 u/L

Reason: muscle conditions can cause elevated AST levels (Jones & Bartlett Learning, 2022).

Diagnostics:

XR chest AP or PA only- to ensure trach placement.

CT CTA Abdomen- to identify muscular atrophy.

US abdomen- to ensure the diagnoses of Cryptorchidism.

Medical History

Previous Medical History: Hypertension and Cryptorchidism

Prior Hospitalizations: Pt has not left the hospital since birth

Past Surgical History: Trach insertion, G tube insertion, and circumcision

Social needs: Patient will need high supportive home with parents committed to giving him the best life possible.

Active Orders

Pediatric feeding EBM 27 kcals/ oz at 26 ml/hr

Reason: to keep nutrition stable

Weight once a week

Reason: to track weight gain or weight loss

I&O Q4

Reason: to track fluids, voids, and stools

Vital signs Q4

Reason: monitor patient status

Code Status Full treatment

Reason: family wishes

Assessment

General	Patient is in no acute distress
Integument	Skin is normal for ethnicity, warm, and dry. Capillary refill is less than 3 seconds in fingers and toes bilaterally.
HEENT	Head and neck are symmetrical, trachea midline without deviation. Bilateral carotid pulses are palpable and 2+. Bilateral sclera white, bilateral cornea clear, bilateral conjunctiva pink. Eyes appear swollen. Turbinates are pink and moist bilaterally, and no visible bleeding or polyps. The anterior fontanelle is wide open, soft, and flat. Pt is drooling and has a trach inserted.
Cardiovascular	Clear S1 and S2 without murmurs, gallops, or rubs. PMI is palpable at the fifth intercostal space at MCL. Normal rate and rhythm.
Respiratory	Normal rate and rhythm, along with the pattern of respirations. Respirations are symmetrical, with no respiratory distress. Crackles were heard upon auscultation.
Genitourinary	Urine is yellow without foul odor, no reported or observed difficulties or pain with voiding.
Gastrointestinal	Abdomen is nondistended, soft, and nontender to palpation. No CVA tenderness noted bilaterally. Last BM 10/20/2023. Pt has a G tube in place.
Musculoskeletal	All peripheral pulses are 2+. All extremities lack movement.
Neurological	Patient has been asleep.
Most recent VS (highlight if abnormal)	<p>Time: 0800</p> <p>Temperature: 97.4 F</p> <p>Route: Axillary</p> <p>RR: 48</p> <p>HR: 133</p> <p>BP and MAP: 101/53 and 71</p> <p>Oxygen saturation: 100%</p> <p>Oxygen needs: Pt is on a ventilator</p>
Pain and Pain Scale Used	0- rFLACC pain scale was used.

Nursing Diagnosis 1	Nursing Diagnosis 2	Nursing Diagnosis 3
Risk for ineffective airway clearance related to pulmonary disease evidenced by excessive sputum.	Risk for impaired cardiovascular function related to hypertension as evidenced by high blood pressure and heart rate.	Risk for injury related to impaired sensory and cognitive function as evidenced by hypotonia.
Rationale	Rationale	Rationale
Patient needed frequent suctioning due to the		The patient cannot move himself which puts him as

increased production of mucous in his throat.	Patient had elevated blood pressure and heart rates.	risk for a pressure injury.
<p style="text-align: center;">Interventions</p> <p>Intervention 1: Glycopyrrolate Intervention 2: Frequent suctioning</p>	<p style="text-align: center;">Interventions</p> <p>Intervention 1: Amlodipine Intervention 2: Continuous cardiac monitoring</p>	<p style="text-align: center;">Interventions</p> <p>Intervention 1: Rotate patient every two hours Intervention 2: Keep skin clean and dry</p>
<p style="text-align: center;">Evaluation of Interventions</p> <p>Patient tolerated the medication given and frequent suctioning.</p>	<p style="text-align: center;">Evaluation of Interventions</p> <p>Patient tolerated the medication and his blood pressure and heart rate stabilized.</p>	<p style="text-align: center;">Evaluation of Interventions</p> <p>Patient was turned every two hours and the nurses kept his skin clean and dry to prevent skin breakdown and pressure ulcers</p>

		What do you expect?	What did you observe?
Erickson's Psychosocial Developmental Stage	Trust vs mistrust	Infants realize they are separate beings from their caregivers. Infants tolerate small amounts of frustration.	My patient does not do either of those.
Piaget's Cognitive Developmental Stage	Sensorimotor	Thumb sucking, imitation, begins object permanence, infant shows affection	My patient did not do any of those. My pt lacks muscle tone.
Age-Appropriate Growth & Development Milestones	<ol style="list-style-type: none"> 1. Coos and smiles 2. Makes eye contact 3. Turns head toward sounds 		
Age-Appropriate Diversional Activities	<ol style="list-style-type: none"> 1. Tummy time 2. Baby rattles 3. Mobile 		

References (3):

Capriotti, T. (2020). *Davis advantage for pathophysiology: Introductory Concepts and Clinical Perspectives*. 2nd ed., F.A. Davis, 2020.

Jones & Bartlett Learning, LLC. (2022). *2022 Nurse's drug handbook* (20th ed.).

Phelps, L. L. (2020). *In Spark's & Taylor's nursing diagnosis reference manual* 11th ed. Wolters Kluwer.