Medications

Acetaminophen (Tylenol); 160mg/5mL oral liquid q4 hours prn (179.2mg)

Pharmacological Classification: analgesic and antipyretics (Jones & Bartlett Learning, 2022)
Therapeutic Classification: analgesic and antipyretics (Jones & Bartlett Learning, 2022)
Reason for Taking: for pain or fever prn (Jones & Bartlett Learning, 2022)
Nursing Interventions: assess pain levels and fever reduction (Jones & Bartlett Learning, 2022)

Ibuprofen oral suspension; 120mg every 6 hours prn

Pharmacological Classification: NSAID (Jones & Bartlett Learning, 2022)
Therapeutic Classification: NSAID (Jones & Bartlett Learning, 2022)
Reason for Taking: for pain or fever prn (Jones & Bartlett Learning, 2022)
Nursing Interventions: assess pain level and administer with food or after meals if GI upset occurs (Jones & Bartlett Learning, 2022)

Atenolol oral liquid 2mg/mL (not taking anymore)

Pharmacological Classification: beta blocker (Jones & Bartlett Learning, 2022)
Therapeutic Classification: beta blocker (Jones & Bartlett Learning, 2022)
Reason for Taking: SVT (Jones & Bartlett Learning, 2022)
Nursing Interventions: drug could mask symptoms of hypoglycemia. Monitor VS and toxicity (Jones & Bartlett Learning, 2022)

Demographic Data

Admitting diagnosis: rhinovirus/AMS/SVT

Age of client: 2 years old

Sex: Male

Weight in kgs: 12 kg

Allergies: NKA

Date of admission: 9/21/23

Admission History

This patient is a 2-year-old male who became lethargic and not acting normal on 9/20/23. The mother checked the heart rate and noted a rate of 30 bpm then jumped to 200 bpm. During this time, the patient appeared fussy and holding his chest. The patient also had peripheral cyanosis in fingers, hands, and feet. He appeared pale and tired. The mother didn't do anything to relieve the symptoms other than call 911. No recent illness. The patient has a history of SVT and was transferred from Crawford Memorial on 9/21/23 for further observation.

Pathophysiology

Disease process: Supraventricular tachycardia (SVT) occurs when there is a faulty electrical connection in the heart off a series of early beats in the upper chambers of the heart. When this occurs, the heart rate speeds up quickly. The heart doesn't have enough time to fill with blood before the chambers contract (Capriotti, 2020). As a result of this, it can cause lightheadedness or dizziness because your brain isn't getting enough blood and oxygen (Phelps, 2020).

S/S of disease: Signs and symptoms of SVT include, tachycardia, palpitations, fatigue, weakness, lightheadedness, dizziness, chest pain, shortness of breath. The patient experienced tachycardia, fatigue, and chest pain (Phelps, 2020).

Method of Diagnosis: A healthcare provider will examine you and ask questions about symptoms and your medical history. Blood tests will be done to check for other conditions that can cause similar symptoms, such as thyroid disease. Some diagnostic tests done include an electrocardiogram, Holter monitor, or exercise stress test. This patient is only two years old, and he had an echo done to diagnosis his SVT (Capriotti, 2020).

Treatment of disease: Treatments for this disease can range from minimally invasive to invasive. For example, the treatments and interventions include a minimally invasive maneuver to stop SVT such as bearing down. Medications such as calcium channel blockers, beta blockers, or adenosine to treat SVT. A few diagnostic tests such as electro cardioversion or catheter ablation can be done to treat SVT. This patient was put on the beta blocker, atenolol, but has not been taking it since he was admitted to the hospital. The patient was waiting to get an echo done and resulted (Capriotti, 2020).

Assessment	
General	Oriented to parent/caregiver. Patient in no acute distress and well-groomed
	, clean, dry and intact. Skin is normal for ethnicity, warm, and dry. Capillary refill is less than 3 seconds ally.
Genitourinary	Per the patient's mom, the Urine is yellow without fou
Gastrointestinal	Per the patient's mom, BM's have been less than usual; patient has not been eating as much as he usually does. Abdomen is nondistended, soft, and nontender to palpation. No CVA tenderness noted bilaterally. Last BM 9/20/23.
Musculoskeletal	All extremities have full ROM. Hand grips and pedal pushes and pulls demonstrate normal and equal strength.
Neurological	General and purposeful motor response. PERRLA bilaterally. Patient is anxious and has been trying to rest in between care.
Most recent VS (highlight if abnormal)	**Time:** 0800 **Temperature:** 97.8-degree Fahrenheit **Route:** axillary **RR:** 33

Relevant Lab Values/Diagnostics

CO2: 20.0 mmol/L Normal: 21-31 mmol/L

Reason: CO2 is low due to the patient being dehydrated

Cr: 0.46 mg/dL Normal: 0.50-1.00 mg/dL

Reason: Cr is low due to the patient being young and having low muscle mass

CRP: 13.22 mg/L Normal: 1.00 mg/dL

Reason: CRP is high due to the patient's positive rhinovirus test

Rhinovirus: Positive Normal: Negative

Reason: Rhinovirus was positive due to the patient being exposed to contaminated surfaces and objects.

No imaging or diagnostic tests was done/resulted prior to dismissal of clinical.

Medical History

Previous Medical History: SVT, atrial septal defect, PFO

Prior Hospitalizations: birth 8/11/21

Past Surgical History: bilateral achilles tenotomy and clubfoot cast 11/15/21

Social needs: parents together, no social needs needed

Active Orders

EEG: SVT and patient history

ECG 12 lead: SVT and patient history

Echo: SVT and patient history

Cardiac monitoring: SVT and patient history

Consult pediatric neurology: AMS and LOC

	HR: 132 **BP and MAP:** 141/81 (103) **Oxygen saturation:** 100% **Oxygen needs:** N/A on room air
Pain and Pain Scale Used	P: 0 on the rFLACC scale

Nursing Diagnosis 1	**Nursing Diagnosis 2**	**Nursing Diagnosis 3**
At risk for decreased cardiac output related to SVT as evidence by atenolol.	Sensory perception related to syncope as evidence by loss of consciousness.	Deficient knowledge related to hospitalization as evidence by positive rhinovirus test.
Rationale I chose this diagnosis because the patient has not been taking his atenolol since being in the hospital.	**Rationale** I chose this diagnosis because the patient did have an episode of LOC upon arrival to the hospital.	**Rationale** I chose this diagnosis because the child doesn't have the ability to understand the information necessary to continue their health care plan.
Interventions **Intervention 1:** Cardiac monitoring (Phelps, 2020). **Intervention 2:** Assess heart rate and rhythm (Phelps, 2020).	**Interventions** **Intervention 1:** Assess neuro status (Phelps, 2020). **Intervention 2:** Assess vitals every 4 hours (Phelps, 2020).	**Interventions** **Intervention 1:** Assess child/mother's literacy (Phelps, 2020). **Intervention 2:** Patient education (Phelps, 2020).
Evaluation of Interventions Patient was placed on continuous cardiac monitoring. Heart rate and rhythm are assessed at every assessment.	**Evaluation of Interventions** Patient gets assessed every 4 hours and was waiting for and EEG test to be done.	**Evaluation of Interventions** Mother showed understanding and the importance of preventative measures such as hand washing, covering nose and mouth when coughing or sneezing, and disinfecting areas.

		What do you expect?	What did you observe?
Erickson's Psychosocial Developmental Stage	Autonomy vs shame and doubt	Developing a sense of independence, walk on own, pick a toy, choose what you wear and eat.	The patient is 2 years old, not potty trained, chose his breakfast and encouraged by his mother to make his own decisions.
Piaget's Cognitive Developmental Stage	Preoperational Stage	Symbolic thought, demonstration of memories, domestic mimicry, and egocentric, and imaginary friends.	The patient is 2 years old, did not talk much, clung to his mother, and had a hard time understanding what everyone in his room was doing for him.
Age-Appropriate Growth & Development Milestones	1. Talking 2. Walking 3. Potty trained		
Age-Appropriate Diversional Activities	1. Stacking blocks 2. Reading/turning pages of books 3. Scribble with crayons		

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. Essay*. Wolters Kluwer.