

Medications

Acetaminophen (Tylenol)- Using for fever, Q4h PRN

160mg/5ml- Oral

120 mg- Rectal

Pharmacological class- Analgesics (Jones & Bartlett Learning, 2022).

Therapeutic class- Antipyretic (Jones & Bartlett Learning, 2022).

The nurse should assess the patient's fever before administering acetaminophen to make sure it is not the result of an underlying condition. (Jones & Bartlett Learning, 2022).

Demographic Data

Admitting diagnosis: Rhinovirus

Age of client: 10 months

Sex: Female

Weight in kgs: 9.52 kgs

Allergies: No known allergies

Date of admission: 9/21/2023

Psychosocial Developmental Stage: Infancy, Trust vs. Mistrust

Cognitive Development Stage: Sensorimotor

Admission History

Patient is a 10 month old female that came to the Carle emergency department on 9/21 for a reported fever. The patient's mother stated that the fever has been going on for the past two days. The mother also reported that the patient has been not willing to eat and has been vomiting. When the patient came to the emergency department it was reported that she was breathing heavier than normal

Pathophysiology

Disease process: Rhinovirus is the most frequent cause of the common cold. On average children will have two rhinovirus infections each year and adults will have one. Rhinoviruses are commonly seen in children hospitalized for respiratory illness. For this patient rhinovirus was giving her a fever. Rhinovirus is spread through respiratory droplets that are released when an infected person coughs or sneezes. People can also get rhinovirus by touching contaminated objects and then touching their eyes, nose, or mouth (Capriotti, 2020).

S/S of disease: The signs and symptoms of Rhinovirus are those of a common cold. The main symptoms are coughing, sneezing, runny nose, nasal congestion, sore throat, headache, body aches, and fevers. For this patient she was mainly experiencing a high fever. Symptoms of rhinovirus will usually last about 7 days but can last as long as 2 weeks. (Phelps, 2020).

Method of Diagnosis: Providers will usually diagnose rhinovirus by taking a medical history and doing a physical assessment. The provider may choose to verify the diagnosis by testing a sample of mucus. For this patient they did a Rhinovirus lab test and found that rhinovirus was detected (Capriotti, 2020).

Treatment of disease: There is no cure for rhinovirus so the best form of treatment is to help manage the symptoms until the virus passes. Some important things to do while you have rhinovirus is to drink plenty of fluids and get plenty of rest. You can also take over the counter medications to lessen the symptoms. For this patient she was taking acetaminophen orally and rectally as needed to help reduce her fever (Capriotti, 2020).

Relevant Lab Values/Diagnostics

WBC: 19.02 (Normal range 4.5-11)
WBC's are elevated due to the patient having a rhinovirus, a viral infection (Jones & Bartlett Learning, 2022).

Absolute Neutrophils: 9.61 (Normal range 2.5-6)
Neutrophils are high due to the patient having a viral infection (Jones & Bartlett Learning, 2022).

Absolute monocytes: 2.16 (Normal range 0.2-0.8)
Monocytes are high due to the patient having a viral infection (Jones & Bartlett Learning, 2022).

Absolute eosinophils: 0.0 (Normal range 30-350)
Low eosinophil count could indicate that the patient has excessive stress (Jones & Bartlett Learning, 2022).

Rhinovirus: Detected

Glucose: 110 (Normal range 70-100)
Glucose is elevated likely due to the patient being stressed considering this the first time they have been hospitalized (Jones & Bartlett Learning, 2022).

Creatinine: 0.53 (Normal range 0.7-1.3)
Creatinine is low because the patient has muscle mass due to their age (Jones & Bartlett Learning, 2022).

AST: 45 (Normal range 8-33)
AST is increased due to the patient having a viral infection (Jones & Bartlett Learning, 2022).

Medical History

Previous Medical History: Double ear infection (2 weeks ago)

Prior Hospitalizations: None

Past Surgical History: None

Social needs: None (Parents reported none as well)

Active Orders

Isolation- Patient is on droplet precaution for Rhinovirus

Vitals Q4h- Assess for elevated temperature and monitor for signs and symptoms of dehydration.

Notify Physician- The physician should be notified when the patient temperature is elevated

Assessment

General	Patient is alert and oriented and in no acute distress.
Integument	Patients was clear and warm upon palpation with no rashes, lesions, or bruises noted upon inspection.
HEENT	Head and neck are symmetrical, trachea is midline without deviation, thyroid is not palpable, no noted nodules. Bilateral sclera white, bilateral cornea clear, bilateral conjunctiva pink, no visible drainage from eyes. Bilateral lids are moist and pink without lesions or discharge noted. PERRLA bilaterally. Bilateral auricles no visible or palpable deformities, lumps, or lesions. Septum is midline, turbinate's are moist and pink bilaterally and no visible bleeding or polyps. Patient does not have all of her teeth yet; oral mucosa overall is moist and pink without lesions noted.
Cardiovascular	Clear S1 and S2 without murmurs, gallops, or rubs. PMI palpable at fifth intercostal space at MCL. Normal rate and rhythm. Pulses are +2 bilaterally throughout. Capillary refill is less than 3 seconds in fingers and toes bilaterally.
Respiratory	Normal rhythm rate and pattern of respirations, respirations symmetrical, no respiratory distress. No wheeze, crackles, rhonchi noted.
Genitourinary	Urine is yellow and clear with normal distribution. Patient has not been urinating often due to dehydration.
Gastrointestinal	Abdomen is nondistended, soft, and nontender to palpation. Bowel sounds normoactive in all four quadrants. Patients last bowel movement was 9/21. Patient has vomited twice since arrival.
Musculoskeletal	All other extremities have full ROM. Patient was able to move all her extremities.
Neurological	Patient has full level of consciousness and is a alert and oriented. Patient reacts to noises and movements appropriately.
Most recent VS (highlight if abnormal)	<p>Time: 12:00pm</p> <p>Temperature: 98.2° F.</p> <p>Route: Axillary</p> <p>RR: 36 (Normal for age)</p> <p>HR: 140 (Normal for age)</p> <p>BP and MAP: 111/73</p> <p>Oxygen saturation: 100</p> <p>Oxygen needs: Room air</p>
Pain and Pain Scale Used	No pain detected, FLACC pain scale used Patient did not seem to be in any distress, very calm and relaxed.

Nursing Diagnosis 1 Risk for imbalanced body temperature related to rhinovirus as evidenced by elevated temperature.	Nursing Diagnosis 2 Risk for deficient fluid volume related to dehydration as evidenced by emesis and not drinking fluids.	Nursing Diagnosis 3 Risk for deficient knowledge related to parent inexperience as evidenced by patient's first hospitalization.
<p style="text-align: center;">Rationale</p> <p>Patient reported to the emergency department and had a 104° temperature.</p>	<p style="text-align: center;">Rationale</p> <p>Patient has not been wanting to drink anything and has vomited twice since arrival to hospital.</p>	<p style="text-align: center;">Rationale</p> <p>This is the first time that the patient has been hospitalized and the parents do not know how to handle it.</p>
<p style="text-align: center;">Interventions</p> <p>Intervention 1: Assess temperature every 4 hours (Phelps, 2020). Intervention 2: Maintain adequate fluid intake (Phelps, 2020).</p>	<p style="text-align: center;">Interventions</p> <p>Intervention 1: Measure intake and output (Phelps, 2020). Intervention 2: Obtain a daily weight of the patient (Phelps, 2020).</p>	<p style="text-align: center;">Interventions</p> <p>Intervention 1: Establish trust with patient and the parents (Phelps, 2020). Intervention 2: Develop learning goals that are specific to the patient (Phelps, 2020).</p>
<p style="text-align: center;">Evaluation of Interventions</p> <p>The patient will maintain an adequate temperature between 98.6° and 99.5°.</p>	<p style="text-align: center;">Evaluation of Interventions</p> <p>The patient will have stable vital signs and will maintain an adequate fluid volume.</p>	<p style="text-align: center;">Evaluation of Interventions</p> <p>The patient's parents will communicate desire to understand disease state and how they can properly treat it.</p>

References (3):

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.

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