

Medications

Pantoprazole (Protonix) delayed release tablet 40 mg Oral, daily
Pharmacologic class: Proton pump inhibitor; the patient is taking this medication to decrease stomach acidity and relieve symptoms of GERD
Nursing considerations: Monitor for diarrhea with blood, mucus. Monitor for hyponatremia; hypomagnesemia in patients using product 3 months to 1 year (Skidmore-Roth, 2022).
Folic acid tablet 1 mg Oral daily 0900
Pharmacologic class: Vitamin B complex group
Nursing considerations: Urine will turn bright yellow, notify prescriber of allergic reaction (Skidmore-Roth, 2022).
Polyethylene glycol (MiraLax) 119g in Gatorade
Function class: laxative & cathartics
Nursing considerations: Assess frequency and characteristics of stool (Skidmore-Roth, 2022).
Vancomycin 1500 mg in 250 mL IVPB
Pharmacologic class: Antiinfective
NC: Nephrotoxicity: I&O ratio, report hematuria; Red man syndrome (Skidmore-Roth, 2022).
Calcium carbonate (Tums) chewable tablet 400 mg dose Oral TID
Pharmacologic class: Antacid
Nursing considerations: Milk-alkali syndrome: nausea, vomiting, disorientation, headache; hypercalcemia, hypocalcemia (Skidmore-Roth, 2022).
Cefepime injection 1 g 134.4 mL/hr IVPB Every 6 hours
Pharmacologic class: cephalosporin antibiotics - 4th generation
Nursing considerations: Assess for infection: fever, WBC >10,000/mm³ (Skidmore-Roth, 2022).
Enoxaparin (Lovenox) syringe 40 mg subcutaneous daily
Pharmacologic class: anticoagulant
Nursing considerations: Monitor for bleeding: petechiae, ecchymosis, hematuria (Skidmore-Roth, 2022).
Gabapentin (Neurontin) capsule 600 mg TID
Pharmacologic class: anticonvulsant
Nursing considerations: Assess mental status: mood, behaviorial changes (Skidmore-Roth, 2022).

Demographic Data

Date of Admission: 7/6/2022
Admission Diagnosis/Chief Complaint: Septic shock with hypovolemic shock
Age: 69
Gender: Female
Race/Ethnicity: White/Caucasian
Allergies: No known allergies
Code Status: DNAR
Height: 157.5 cm
Weight: 56.7 kg
Psychosocial Developmental Stage: Integrity v. despair
Cognitive Developmental Stage: Formal operational
Braden Score: 12 High Risk
Morse Fall Score: 60 High Risk
Infection Control Precautions: None

Pathophysiology

Disease process: Septic shock from lower left lobe community acquired pneumonia caused by gram positive cocci, Streptococcus pneumoniae. Pneumonia is commonly caused by inhalation of droplets containing bacteria which then enter the upper airways and then enter the lung tissue. The pathogens adhere to the respiratory epithelium and stimulate an inflammatory reaction which then spreads to the lower respiratory tract and alveoli. The microbial exotoxin stimulates potent widespread vasodilation and the increase of fluids and vasoconstrictors cannot raise blood pressure. Low blood volume causes low blood pressure. Mucous and exudative edema accumulate between alveolis and capillaries as a result of the inflammation and in turn, hinders optimal gas exchange of O₂ and CO₂ at the pulmonary capillaries (Capriotti, 2020).
S/S of disease: The patient was hypotensive with systolic blood pressure in the 70s. Initial symptom was a productive cough with sputum. Nonspecific symptoms were abdominal pain, nausea and vomiting. Chronic diarrhea contributed to hypovolemic shock.

Method of Diagnosis: Radiology imaging remarkable for lower left lobe pneumonia.

Treatment of disease:

- Vancomycin 1500 mg in 250 mL IVPB
- cefepime injection 1 g 134.4 mL/hr IVPB Every 6 hours
- Supplemental oxygen
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Lab Values/Diagnostics

Calcium (8.7-10.5) 6.3, albumin (3.5-6g/dL) 0.9, RBC (4.0-4.9) 2.55, Hgb (12-16) 7.3, Hct (37-48%) 23.2%, INR (0.8-1.2) 1.5, Prothrombin time (11-13) 17
Chest XR: Patchy pneumonitis at the left base. Kyphosis. Possible nodule in the LUL.

XR Hip Bilateral AP: Findings: Severe degenerative arthritis in the bilateral hips with complete loss of the joint spaces and associated deformity of the femoral heads. Mild associated protrusio acetabuli on the left. Diffuse osteopenia. Degenerative change in the lumbar spine.

Sputum culture: Positive for gram+ cocci (S.pneumoniae)
MRSA, C.diff, and GPP – Negative
Active problem: Enterocolitis

Medical History

Previous Medical History

Gallstones, hypokalemia, hypomagnesemia, gram negative septicemia, acute gallstone pancreatitis, common bile duct obstruction
Colonoscopy
Prior Hospitalizations: Pancreatitis
Esophagogastroduodenoscopy (EGD)
Previous Surgical History: Gallbladder removal
Regional History:

Social History:

Never smoker, never smokeless tobacco, never alcohol

Physical Exam/Assessment

- General:** Alert and oriented to person, place, time, and situation. The patient is well groomed with no signs of distress. The patient appeared fatigued.
- Integument:** The patient's skin is warm to touch, dry, and color is normal. The patient has stage 1 pressure sores on the sacrum, the heels of the feet, and the right lateral side of the fifth metatarsal. The patient has normal quality, distribution, and texture of hair. Skin turgor is normal with capillary refill less than 3 seconds.
- HEENT:** Head is midline to the spine. Trachea is midline without deviations and bilateral carotid pulses are 2+. PERRLA and EOMs intact bilaterally.
- Cardiovascular:** Clear S1 and S2 sound without murmurs, gallops, or rubs. Normal rate and rhythm.
- Respiratory:** Respirations were non-labored and symmetrical throughout. No wheezes or rhonchi noted. No use of accessory muscles noted.
- Genitourinary:** Urinary incontinence. Urine is clear, light amber in color. Absence of pain, urgency, frequency, or retention.
GI: Stools were watery, loose and yellow green
- Musculoskeletal:** Normal findings in upper extremities. Patient moved upper extremities well and demonstrated normal hand grip strength. Weakness noted in the lower extremities with reduced muscle tone. Swelling noted in the right calf. Tenderness on palpation of the right calf. Morse fall scale: 60. Right hip was tender to touch with reduced range of motion.
- Neurological:** Alert and oriented to person, place, time, and situation. Ability to follow instructions. PERRLA intact. Motor strength in upper extremities equal bilaterally. Clear and appropriate speech. Symmetrical facial expressions.

Most recent VS (include date/time and highlight if abnormal):

Temperature: 36.5 C
BP : 106/55
Respiration: 18
BPM: 86
SpO2: 96
Pain: 5/10

Pain and pain scale used: Pain 5 out of 10 on number scale. Pain is intermittent between 5 and 7.

<p align="center">Nursing Diagnosis 1</p> <p>Risk for infection with community acquired pneumonia related to sepsis as evidenced by positive sputum culture for gram positive cocci.</p>	<p align="center">Nursing Diagnosis 2</p> <p>Fall injury risk related to altered mobility secondary to musculoskeletal weakness as evidenced by reduced muscle tone in legs and Morse Fall Scale Score of 60.</p>	<p align="center">Nursing Diagnosis 3</p> <p>Risk for impaired skin integrity related to bedrest as evidenced by stage one pressure ulcers observed on sacrum, heels of feet, and lateral side of right foot.</p>
<p align="center">Rationale</p> <p>This nursing diagnosis was chosen due to the septic shock due to lower left lobe community acquired pneumonia.</p>	<p align="center">Rationale</p> <p>Alterations in nutritional state as a result of persistent poor appetite and difficulty keeping up with PO intake. The client also has chronic diarrhea contributing to musculoskeletal wasting.</p>	<p align="center">Rationale</p> <p>The nursing diagnosis was chosen because the client has 4 stage one pressure sores on the feet and sacrum. It is important to prevent pressure sores from progressing. The client is also having difficulty keeping up with PO intake and is at risk for dehydration which can further risk for pressure sores.</p>
<p align="center">Interventions</p> <p>Intervention 1: Elevate the head of the bed and change position frequently.</p> <p>Intervention 2: Maintain adequate hydration of 2-3L/day</p>	<p align="center">Interventions</p> <p>Intervention 1: Use proper technique and/or Hoyer lift when transferring the patient to and from bed.</p> <p>Intervention 2: Orient client to surroundings and place articles within easy reach of the patient.</p>	<p align="center">Interventions</p> <p>Intervention 1: Implement measures to prevent shearing by keeping the head of the bed as flat as possible, gatch knees when head of the bed is elevated 30 degrees or higher, and limit the client's time spent in semi-Fowlers's position to 30-minute intervals.</p> <p>Intervention 2: Assist client to turn every 2 hours.</p>
<p align="center">Evaluation of Interventions</p> <p>The client will maintain a patent airway with breath sounds clear and absence of dyspnea.</p>	<p align="center">Evaluation of Interventions</p> <p>The client is free from falls.</p>	<p align="center">Evaluation of Interventions</p> <p>The client will not develop any new pressure sores and current pressure sores will heal and decrease in size.</p>

References (3) (APA):

Capriotti, T. (2020). Chapter 20: Respiratory Inflammation and Infection. In *Davis Advantage for pathophysiology: Introductory concepts and clinical perspectives* (pp. 483–484). essay, F.A. Davis.

Haugen, N., & Galura, S. (2022). *Ulrich & Canale's Nursing Care Planning Guides: Prioritization, delegation, and clinical reasoning*. Elsevier.

Skidmore-Roth, L. (2022). *Mosby's 2022 nursing drug reference*. Elsevier.