

N431 Care Plan

Lakeview College of Nursing

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10/14/2021

Demographics (3 points)

Date of Admission 10/07/2021	Patient Initials L.B.	Age 82	Gender Female
Race/Ethnicity Caucasian	Occupation Retired	Marital Status Widowed	Allergies Iodine - Pruritus, Penicillin - Urticaria, Relafen - Rash.
Code Status DNR	Height 151 cm, 5ft 0 in	Weight 48.0 kg, 105 lb.	

Medical History (5 Points)

Past Medical History: The client has a history of arthritis, breast cancer, colon cancer, metastatic to the lung, cardiomyopathy, fall history, and paroxysmal atrial fibrillation.

Past Surgical History: The client had a colonoscopy with esophagogastroduodenoscopy on 3/4/2019, cataract extraction, hysterectomy, left knee replacement, lumpectomy of the left breast, and resection.

Family History: The client's father has a history of cardiovascular disease, and the client reports no history from her mother.

Social History (tobacco/alcohol/drugs): The client denies alcohol use and illicit drug use; she stated she stopped smoking cigarettes 55 years ago when she was 27 years old.

Assistive Devices: The client uses a walker when needed, and she is a one assist at the hospital with walker usage.

Living Situation: The client lives at home with her daughter.

Education Level: The client states she did not graduate high school and completed half of her 11th-grade year.

Admission Assessment

Chief Complaint (2 points): Acid reflux and burning throat with shortness of breath starting on 10/5/2021

History of present Illness (10 points): An 82-year-old Caucasian female presented to the emergency department with complaints of gradual acid reflux and a burning throat sensation that started on 10/5/2021; furthermore, the patient stated she did have some acute chest pain and

shortness of breath with an onset of the morning of 10/7/21. The patient stated the chest pain feels like an achy sensation and ranks it a 4/10 on the numerical scale, and she stated the chest pain does not worsen or radiate and lasts about 20 seconds every few hours. The client states nothing aggravates it and stated she tried to sleep as relieving factor, and no medications were attempted for the pain.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): Upper respiratory infection secondary to RSV diagnosis

Secondary Diagnosis (if applicable): Community-acquired pneumonia

Pathophysiology of the Disease, APA format (20 points):

Respiratory syncytial virus (RSV) is a widespread pathogen of humans due to the lack of long-term immunity after infection, making reinfection frequent (P. Legg, 2019). It usually infects 90% of children within the first two years and frequently reinfects older children and adults (P. Legg, 2019). Most patients with RSV will have an upper respiratory illness, but a significant minority will develop lower respiratory tract illness, predominantly in the form of bronchiolitis (P. Legg, 2019). Furthermore, RSV is spread from person to person via respiratory droplets (P. Legg, 2019). The incubation period after inoculation with RSV ranges from 2 to 8 days, with a mean incubation of 4 to 6 days, depending on host factors such as the patient's age and whether it is the patient's primary infection with RSV (Capriotti & Frizzell, 2020). After inoculation into the nasopharyngeal or conjunctival mucosa, the virus rapidly spreads into the respiratory tract, where it targets the preferred growth medium: apical ciliated epithelial cells (P. Legg, 2019). It binds to cellular receptors using RSV-G glycoprotein, then uses the RSV-f fusion glycoprotein to

fuse with host cell membranes and initiates cellular replication (P. Legg, 2019). Once cellular replication begins, it will initiate host inflammatory immune response, including both humoral and cytotoxic T-cell activation (P. Legg, 2019). A combination of viral cytotoxicity and the host's cytotoxic response causes necrosis of respiratory epithelial cells, leading to downstream consequences of small airway obstruction and plugging by mucus, cellular debris, and DNA (P. Legg, 2019). The invasion of the virus into the smaller bronchioles and lower respiratory tract epithelium is bronchiolitis (Capriotti & Frizzell, 2020). Mucus and cellular debris obstruct the narrowed airways, and oxygen and carbon dioxide exchange are impaired (Capriotti & Frizzell, 2020). If limited to the upper respiratory tract, RSV presents with rhinorrhea, nasal congestion, cough, sneezing, and sometimes fever and myalgia (P. Legg, 2019). However, progression is into the lower respiratory tract clinical findings would be bronchiolitis: rhonchorous breath sounds, tachypnea, accessory muscle use, wheezes, and prolonged expiration (P. Legg, 2019). It may also present with viral pneumonia, hypoxia, lethargy, apnea, and acute respiratory failure (P. Legg, 2019). It is likely to hear wheezes, rhonchi, and crackles in the lung (Capriotti & Frizzell, 2019).

In most cases, it is likely to notice a fever of 38.0 C, respiratory rate above 20, and heart rate above 100, and oxygen saturation below 92% (P. Legg, 2019). Diagnostic testing consists of rapid assays for RSV and influenza from nasal washings; chest X-rays are used to determine if the patient has pneumonia and rule out foreign body aspiration; and lastly, a lateral neck x-ray can rule out epiglottitis (Capriotti & Frizzell, 2020). A CT angiochest with contrast, respiratory ID panel, and chest x-ray confirmed the RSV diagnosis and interstitial fibrosis. Treatment of RSV consists of three categories: supportive care, immune prophylaxis, and antiviral medication (P. Legg, 2019). Most treatment is supportive with supplemental oxygen and fluids, and antibiotics

are secondary for bacterial infections (Capriotti & Frizzell, 2020). The patient is undergoing Rocephin treatment had oxygen administration her first two days. However, she has not needed supplemental oxygen since then. The patient's elevated WBC counts, subjective and objective physical findings would affirm this diagnosis.

Pathophysiology References (2) (APA):

Capriotti, T., & Frizzell, J. P. (2020). *Human pathophysiology: Introductory concepts and clinical perspectives*.

P. Legg, J. (2019). Disease severity in respiratory syncytial virus infection: Role of viral and host factors. *The Burden of Respiratory Syncytial Virus Infection in the Young*. <https://doi.org/10.5772/intechopen.88782>

Laboratory Data (15 points)

CBC Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab	Normal Range	Admission Value	Today's Value	Reason for Abnormal Value
RBC	3.8 – 5.41 (Sarah Bush Lincoln, 2021).	3.16	2.65	Community-Acquired pneumonia is known to cause a decrease RBC count due to anemia syndrome (Budnevsky et al., 2016). The client has pneumonia that she developed secondary to her RSV infection.
Hgb	11.3 – 15.2 (Sarah Bush Lincoln, 2021).	9.9	8.5	Community-Acquired pneumonia is known to cause a decrease Hgb count due to anemia syndrome (Budnevsky et al., 2016). The client has pneumonia that she developed secondary to her RSV infection.
Hct	33.2 – 45.3 (Sarah Bush Lincoln, 2021).	29.7	25.0	Community-Acquired pneumonia is known to cause a decrease Hct count due to anemia syndrome (Budnevsky et al., 2016). The client has pneumonia that she developed secondary to her RSV infection.

Platelets	149 – 393 (Sarah Bush Lincoln, 2021).	230	197	N/A
WBC	4 – 11.7 (Sarah Bush Lincoln, 2021).	12.2	8.6	Leukocytosis occurs in acute infections, in which the degree of increase of leukocytes depends on the severity of the infection (Fischbach & Fischbach, 2017). Upon admission, the client had an untreated RSV infection, which would indicate the increase at admission.
Neutrophils	45.3%-79%	80	70	An increased neutrophil count, better known as neutrophilia, could be caused by a bacterial infection and severe stress (Fischbach & Fischbach, 2017). The client has a diagnosis of pneumonia secondary to RSV infection, which indicates the increase in this lab value.
Lymphocytes	11.8-45.9% (Sarah Bush Lincoln, 2021).	8.8	15.2	Lymphopenia is secondary to a weakened immune system and could give rise to community-acquired pneumonia (Bellelli et al., 2019).
Monocytes	4.4 – 12 (Sarah Bush Lincoln, 2021).	10.1	9.4	N/A
Eosinophils	0 – 6.3 (Sarah Bush Lincoln, 2021).	0.3	5.0	N/A
Bands	0 – 5 (Sarah Bush Lincoln, 2021).	N/A	N/A	N/A

Chemistry Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab	Normal Range	Admission Value	Today's Value	Reason For Abnormal
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Na-	136 – 145 (Sarah Bush Lincoln, 2021).	130	138	Decreased sodium levels are associated with excessive fluid loss (severe diarrhea, vomiting, and sweating) (Fischbach & Fischbach, 2017). The client complained of bouts of diarrhea, for which she is receiving in-patient treatment.
K+	3.5 – 5.1 (Sarah Bush Lincoln, 2021).	4.6	3.8	N/A
Cl-	98 – 107 (Sarah Bush Lincoln, 2021).	96	110	The client has a decreased chloride level on admission, likely caused by gastrointestinal loss from vomiting, severe diarrhea, nasogastric suctioning, or fistula (Fischbach & Fischbach, 2017). The client complained of diarrhea which affirms the admission diagnosis.
CO2	21 – 31 (Sarah Bush Lincoln, 2021).	24	23	N/A
Glucose	74 – 109 (Sarah Bush Lincoln, 2021).	101	78	N/A
BUN	7 – 25 (Sarah Bush Lincoln, 2021).	20	13	N/A
Creatinine	0.7 – 1.3 (Sarah Bush Lincoln, 2021).	1.23	0.8	N/A
Albumin	3.5 – 5.2 (Sarah Bush Lincoln, 2021).	3.4	2.5	Decreased albumin is associated with acute and chronic inflammation and infections (Fischbach & Fischbach, 2017). This rationale would coincide with the client's recent RSV diagnosis.
Calcium	8.6 – 10.3 (Sarah Bush Lincoln, 2021).	8.2	7.4	Vitamin D deficiency could cause the client's steady decrease in calcium levels (Fischbach & Fischbach, 2017). This rationale coincides with the client's

				medication (Calcium-Vitamin D).
Mag	1.6 – 2.4 (Sarah Bush Lincoln, 2021).	N/A	N/A	N/A
Phosphate	2.5 – 4.5 (Sarah Bush Lincoln, 2021).	N/A	N/A	N/A
Bilirubin	0.3 – 1 (Sarah Bush Lincoln, 2021).	0.4	0.3	N/A
Alk Phos	34 – 104 (Sarah Bush Lincoln, 2021).	99	70	N/A
AST	13 – 39 (Sarah Bush Lincoln, 2021).	21	18	N/A
ALT	7 – 52 (Sarah Bush Lincoln, 2021).	9	11	N/A
Amylase	6.6 – 35.2 (Sarah Bush Lincoln, 2021).	N/A	N/A	N/A
Lipase	0 – 160 (Sarah Bush Lincoln, 2021).	N/A	N/A	N/A
Lactic Acid	0.3-2.6 (Sarah Bush Lincoln, 2021).	0.6	N/A	N/A
Troponin	0 – 0.3 (Sarah Bush Lincoln, 2021).	<0.010	N/A	N/A
CK-MB	0.6 – 6.3 (Sarah Bush Lincoln, 2021).	N/A	N/A	N/A
Total CK	30 – 223	N/A	N/A	N/A

	(Sarah Bush Lincoln, 2021).			
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Other Tests **Highlight All Abnormal Labs**—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab Test	Normal Range	Value on Admission	Today's Value	Reason for Abnormal
INR	11 – 12.5 (Sarah Bush Lincoln, 2021).	N/A	N/A	N/A
PT	11 – 12.5 (Sarah Bush Lincoln, 2021).	N/A	N/A	N/A
PTT	30 – 40 (Sarah Bush Lincoln, 2021).	N/A	N/A	N/A
D-Dimer	0 – 0.62 (Sarah Bush Lincoln, 2021).	N/A	N/A	N/A
BNP	0 – 100 (Sarah Bush Lincoln, 2021).	382	N/A	A 300-600 ng/L level may indicate mild heart failure (Keogh, 2017). Studies have shown that a transient rise in BNP and CRP can be correlated back to community-acquired pneumonia (Ozer et al., 2021)
HDL	23 – 92 (Sarah Bush Lincoln, 2021).	N/A	N/A	N/A
LDL	< 100 (Sarah Bush Lincoln, 2021).	N/A	N/A	N/A
Cholesterol	< 199 (Sarah Bush Lincoln, 2021).	N/A	N/A	N/A
Triglycerides	0 – 149	N/A	N/A	N/A

	(Sarah Bush Lincoln, 2021).			
Hgb A1c	<6.4 (Sarah Bush Lincoln, 2021).	N/A	N/A	N/A
TSH	0.45 – 5.33 (Sarah Bush Lincoln, 2021).	N/A	N/A	N/A

Urinalysis **Highlight All Abnormal Labs**—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab Test	Normal Range	Value on Admission	Today's Value	Reason for Abnormal
Color & Clarity	Clear/Yellow (Sarah Bush Lincoln, 2021).	N/A	N/A	N/A
pH	5 – 8 (Sarah Bush Lincoln, 2021).	N/A	N/A	N/A
Specific Gravity	1.005 – 1.034 (Sarah Bush Lincoln, 2021).	N/A	N/A	N/A
Glucose	Normal (Sarah Bush Lincoln, 2021).	N/A	N/A	N/A
Protein	Negative (Sarah Bush Lincoln, 2021).	N/A	N/A	N/A
Ketones	Negative (Sarah Bush Lincoln, 2021).	N/A	N/A	N/A
WBC	<5 (Sarah Bush Lincoln, 2021).	N/A	N/A	N/A

	Lincoln, 2021).			
RBC	Negative (Sarah Bush Lincoln, 2021).	N/A	N/A	N/A
Leukoesterase	Negative (Sarah Bush Lincoln, 2021).	N/A	N/A	N/A

Arterial Blood Gas **Highlight All Abnormal Labs**—Explanations must be in complete sentences and contain in-text citations in APA format.

Test	Normal Range	Value on Admission	Today's Value	Explanation of Findings
pH	7.31 – 7.41 (Sarah Bush Lincoln, 2021).	N/A	N/A	N/A
PaO2	80 – 100 (Sarah Bush Lincoln, 2021).	N/A	N/A	N/A
PaCO2	40 – 50 (Sarah Bush Lincoln, 2021).	N/A	N/A	N/A
HCO3	22 – 28 (Sarah Bush Lincoln, 2021).	N/A	N/A	N/A
SaO2	96 – 100 (Sarah Bush Lincoln, 2021).	N/A	N/A	N/A

Cultures Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Test	Normal Range	Value on Admission	Today's Value	Explanation of Findings
Urine Culture	Negative (Sarah Bush Lincoln, 2021).	<i>Klebsiella pneumonia</i> (+)	N/A	The client presented with an increased WBC, which indicates the urine culture findings, eluding that the client had a urinary tract infection. The client has Rocephin as a treatment for this.
Blood Culture	Negative (Sarah Bush Lincoln, 2021).	N/A	N/A	N/A
Sputum Culture	Negative (Sarah Bush Lincoln, 2021).	Moderate yeast	N/A	A positive sputum culture could be secondary to bacterial, mycoplasmal, and suspected viral pneumonia (Fischbach & Fischbach, 2017). This rationale coincides with the client's pneumonia diagnosis and RSV infection.
Stool Culture	Negative (Sarah Bush Lincoln, 2021).	N/A	N/A	N/A

Lab Correlations Reference (1) (APA):

Bellelli, V., D'Ettorre, G., Celani, L., Borrazzo, C., Ceccarelli, G., & Venditti, M. (2019).

Clinical significance of lymphocytopenia in patients hospitalized with pneumonia caused by influenza virus. *Critical Care*, 23(1). <https://doi.org/10.1186/s13054-019-2608-1>

Budnevsky, A. V., Esaulenko, I. E., Ovsyannikov, E. S., Labzhaniya, N. B., Voronina, E. V., & Chernov, A. V. (2016). Anemic syndrome in patients with community-acquired pneumonia. *Clinical Medicine (Russian Journal)*, 94(1), 56-60.

<https://doi.org/10.18821/0023-2149-2016-94-1-56-60>

Fischbach, F. T., & Fischbach, M. A. (2017). *A manual of laboratory and diagnostic tests*. LWW.

Keogh, J. (2017). *Nursing laboratory & diagnostic tests demystified* (2nd ed.). McGraw-Hill Education / Medical.

Ozer, P. K., Govdeli, E. A., Baykiz, D., Karaayvaz, E. B., Medetalibeyoglu, A., Catma, Y., Elitok, A., Cagatay, A., Umman, B., Oncul, A., Tukek, T., & Bugra, Z. (2021). Impairment of right ventricular longitudinal strain associated with severity of pneumonia in patients recovered from COVID-19. *The International Journal of Cardiovascular Imaging*, 37(8), 2387-2397. <https://doi.org/10.1007/s10554-021-02214-2>

Sarah Bush Lincoln Health Center. (2021). Cerner. <https://www.sarahbush.org>

Diagnostic Imaging

All Other Diagnostic Tests (5 points): CT angiochest with pulmonary contrast and chest radiograph, two views. The client presented with shortness of breath, which warranted the CT scan angiochest with contrast ("CT scan," 2020). CT scans help diagnose bone disorders, cancers, heart disease, lung nodules, lower masses, and more ("CT scan," 2020). Furthermore, the client presented with shortness of breath. A chest radiograph helps the physician determine if the client has heart problems, collapsed lung, pneumonia, broken ribs, emphysema, cancer, or several other conditions ("Chest X-rays," 2020). Lastly, the client's ECG was completed in the ED because the client presented with shortness of breath, which could possibly indicate arrhythmias, coronary artery disease, and pacemakers ("Electrocardiogram (ECG or EKG)," 2020).

Diagnostic Test Correlation (5 points): The client's CT scan showed widespread interstitial fibrosis and indications of pneumonia; the client's ECG read normal sinus rhythm, and the chest x-ray showed stable chronic lung changes with acute abnormalities.

Diagnostic Test Reference (1) (APA):

Chest X-rays. (2020, May 2). Mayo Clinic - Mayo Clinic. <https://www.mayoclinic.org/tests-procedures/chest-x-rays/about/pac-20393494>

CT scan. (2020, February 28). Mayo Clinic - Mayo Clinic. <https://www.mayoclinic.org/tests-procedures/ct-scan/about/pac-20393675>

Electrocardiogram (ECG or EKG). (2020, April 9). Mayo Clinic - Mayo Clinic. <https://www.mayoclinic.org/tests-procedures/ekg/about/pac-20384983>

**Current Medications (10 points, 1 point per completed med)
*10 different medications must be completed***

Hospital Medications (5 required)

Brand/Generic	Pravastatin /Pravachol	Lovenox/ Enoxapar in Sodium	Ceftriaxone sodium/Roc ephin	Metoprolol succinate/Toprol -XL	Diphenox ylate-atropine/ Lomotil
Dose	40 mg	40 mg	2,000 mg	100 mg	2.5 mg - 0.025 mg
Frequency	Daily	Daily	Q24 HRS	Daily	PRN
Route	Oral	SQ	IV – Piggyback	Oral	Oral

Classification	Antilipemic HMG CoA reductase inhibitors.	Anticoagulant Antithrombotic	Antibiotic Third-Generation Cephalosporin	Antihypertensive Beta blocker	Antidiarrheal Anticholinergic
Mechanism of Action	Inhibits HMG CoA Reductase, an early (and rate-limiting) step in cholesterol biosynthesis.	Accelerates formation of antithrombin III-thrombin complex and deactivates thrombin, preventing conversion of fibrinogen to fibrin. Drug has a higher antifactor-Xa to antifactor-IIa activity ratio than heparin.	Inhibit cell wall synthesis, promoting osmotic instability; usually bactericidal .	Unknown. A selective beta blocker that selectively blocks B₁ receptors: decreases cardiac output, peripheral resistance, and cardiac oxygen consumption; and depresses renin secretion.	Activates presynaptic opioid receptors in the enteric nervous system to block acetylcholine release and decrease peristalsis .
Reason Client Taking	Hyperlipidemia	Pulmonary Embolism and DVT prevention.	Respiratory tract infection	Hypertension	Diarrhea
Contraindications (2)	Use cautiously in patients who consume large quantities	Contraindicated in client with a hypersensitivity to drug,	Contraindicated in patients hypersensitive to drug or other cephalosporins	Contraindicated in patients with bradycardia, greater than first-degree heart block, cardiogenic	Patients with obstructive jaundice. Patient's who have

	<p>of alcohol have a history of liver disease. Contraindicated in patients with hypersensitivity to drug and in those with active liver disease.</p>	<p>pork products, or benzyl alcohol. Use cautiously in patients with history of aneurysms, cerebrovascular hemorrhage, spinal, or epidural punctures.</p>	<p>rin's. May Use cautiously in patients with history of colitis, renal insufficiency, or GI or gallbladder disease.</p>	<p>shock, sick sinus syndrome. Use cautiously in patients with heart failure, diabetes, or respiratory or hepatic disease.</p>	<p>known hypersensitivity to diphenoxylate or atropine.</p>
<p>Side Effects/Adverse Reactions (2)</p>	<p>Ataxia. Peripheral edema.</p>	<p>Thrombocytopenia. Hemorrhage.</p>	<p>Pseudomembranous colitis. Thrombocytosis.</p>	<p>Bronchospasm. Bradycardia.</p>	<p>Seizure-like activity. Headache.</p>
<p>Nursing Considerations (2)</p>	<p>Monitor patient for fatigue and severe signs or symptom affecting muscles. Obtain LFT results at start of therapy and then periodically. A liver biopsy may be performed if elevated liver enzymes</p>	<p>Do not try to expel the air bubble from the pre-filled syringe, this may lead to loss of drug and incorrect dose.</p>	<p>Monitor patient for signs and symptoms of superinfection. Monitor Pt and INR in patients with impaired vitamin K synthesis or low vitamin K stores.</p>	<p>Always check patients apical pulse rate before giving drug. If it is slower than 60 bpm, withhold drug and call prescriber immediately. Monitor BP frequently, drug therapy masks common signs and symptoms of shock.</p>	<p>May cause constipation, tachycardia, dizziness, or ileus.</p>

	persists.				
Key Nursing Assessment(s)/Lab(s) Prior to Administration	Monitor ALT, AST, alkaline phosphatase, HbA_{1c} fasting glucose, and bilirubin levels.	Monitor platelet counts regularly. Draw blood to establish baseline coagulation parameters before therapy.	Monitor liver labs (AST, ALT, bilirubin, BUN), and LDH levels because treatment could lead to an increase in these values. Monitor CBC and CMP levels because therapy could lead to a decrease in these levels.	Monitor transaminase, alkaline phosphatase, LDH, and uric acid levels	Monitor liver function as medications is excreted by the liver.
Client Teaching needs (2)	Tell patient to notify prescriber of adverse reactions, particularly, muscle aches and pains. Inform patient it will take up to 4 weeks to achieve full therapeutic effect.	Show patient how to properly administer subcutaneous injection. Instruct patient and family to watch for signs of bleeding or abnormal bruising.	Instruct patient to report discomfort at IV insertion site immediately. Tell patients to notify prescribers about loose stools or diarrhea.	Instruct patient to take drug exactly as prescribed and with meals. Tell patient to report all adverse reactions, especially shortness of breath.	Advise the patient to avoid alcohol and foods that may increase GI irritation and diarrhea. Instruct the client not to double up the dosage.

(Learning, 2021)

Home Medications (5 required)

Brand/Generic	Aspirin/	Losartan	Diphenhyd	Vitamin D/	Gabapent
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	Acetylsalicylic acid	potassium / Cozaar	ramine hydrochloride/Benadryl	Cholecalciferol	in/Gralise
Dose	81 mg	50 mg	25 mg	600mg-400	300 mg
Frequency	qAM	Daily	TID/PRN	Daily	QPM
Route	Oral	Oral	Oral	Oral	Oral
Classification	NSAIDs Salicylates	Antihypertensive Angiotensin II receptor Antagonist	Antihistamine Antianaphylaxis adjunct	Vitamins Vitamin D Analogs	Anticonvulsants I-amino-methylcyclohexane acetic acid
Mechanism of Action	Thought to produce analgesia and exert its anti-inflammatory effect by inhibiting prostaglandin and other substances that sensitize pain receptors.	Inhibits vasoconstriction and aldosterone secreting action of angiotensin II by blocking angiotensin II receptor on the surface of vascular smooth	Competes with histamine for H₁-receptor sites. Prevents, but does not reverse, histamine-mediated responses, particularly those of the bronchial tubes, GI tract, uterus, and blood vessels.	Cholecalciferol is used as a dietary supplement in people who do not get enough vitamin D in their diets to maintain adequate health.	Unknown . Structurally related to GABA but doesn't interact with GABA receptors, isn't converted into GABA or GABA agonist, doesn't inhibit GABA reuptake, and doesn't prevent degradation.
Reason Client Taking	Arthritis pain	Hypertension	Allergy symptoms	Decreased Vitamin D levels	Neuralgia /

					Neuropathic Pain
Contraindications (2)	Avoid use in patients with severe hepatic impairment or history of active peptic ulcer disease. Use cautiously in patients with GI lesions, impaired renal functions, and vitamin K deficiency.	Contraindicated in patients hypersensitive to drug. Use cautiously in patients with impaired renal or hepatic function.	Avoid use in clients taking MAO inhibitors. Use with caution in patients with asthma, COPD, increased IOP, hyperthyroidism, CV disease, and HTN.	Hypersensitivity to vitamin D. Already high levels of vitamin D in the body.	In elderly patients, adjust dosage based on CrCl values due to potentially decreased renal function. Contraindicated in patients hypersensitive to drug.
Side Effects/Adverse Reactions (2)	Thrombocytopenia. Hyperkalemia	Angioedema. Hypoglycemia.	Seizures. Thrombocytopenia.	Weakness. Metallic taste in the mouth.	Ataxia. Peripheral edema.
Nursing Considerations (2)	Monitor elderly patients closely because they may be more susceptible to aspirin's toxic effects. During prolonged therapy, assess hematocrit, Hb level, PT, INR, and renal function	Drug can be used alone or with other hypertensives. Monitor for patients who are also taking diuretics for symptomatic hypotension.	Stop drug 4 days before diagnostic skin testing. Infection form is for IV or IM administration only.	Monitor for clients taking this medication along with aspirin, because of risk for GI upset. Monitor for existing arrhythmias.	Closely monitor all patients taking or starting AEDs for changes in behavior indicating worsening of suicidal thoughts. Do not suddenly withdraw other anticonvulsants in

	periodically .				patients starting gabapentin therapy.
Key Nursing Assessment(s)/Lab(s) Prior to Administration	Monitor platelet and WBC counts during therapy because they can decrease.	Monitor liver labs because therapy could increase liver enzymes and bilirubin levels.	Monitor Hb level and hematocrit because therapy may decrease these levels.	Obtain a baseline vitamin D level	Medication interactions- antacids are likely to decrease absorption of gabapentin. Monitor WBC count because gabapentin could lead to a decrease.
Client Teaching needs (2)	Advise patient to drug with food, milk, antacid, or large glass of water to reduce GI reactions. Tell patient not to crush or chew enteric coated or extended-release forms but to swallow them whole.	Advise patient to report all adverse reactions and to immediately report swelling of the face, eyes, lips or tongue or breathing difficulty.	Advise the patient to avoid alcohol and hazardous activities that require alertness until CNS effects of drug use are known. Warn patient of possible photosensitivity and advise the use of sunblock.	If you miss a dose, take the medication as soon as you can, however, do not take two doses at one time. Monitor for Vitamin D overdose such as chest pain and feeling short of breath.	Instruct patient to take first dose at bedtime to minimize adverse reactions. Advise patient to not stop drug abruptly.

(Learning, 2021)

Medications Reference (1) (APA):

Learning, J. &. (2021). *2021 nurse's drug handbook*.

Assessment

Physical Exam (18 points)

<p>GENERAL (1 point): Alertness: Orientation: Distress: Overall appearance:</p>	<p>The client was alert and oriented x 4 during the assessment. The client appeared to be in slight distress when standing because she appeared to have dyspnea on exertion. The client's appearance is appropriate for her setting.</p>
<p>INTEGUMENTARY (2 points): Skin color: Character: Temperature: Turgor: Rashes: Bruises: Wounds: Braden Score: 17 Drains present: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Type:</p>	<p>The client's skin color was normal for her race, Caucasian American. Her skin was warm, dry, and intact. The patient's skin turgor showed less than 3 seconds; the client has no bruises or rashes; however, she has a grade 1 pressure wound noted in the coccyx area.</p>
<p>HEENT (1 point): Head/Neck: Ears: Eyes: Nose: Teeth:</p>	<p>Upon assessment, the client's skull is normocephalic and symmetrical, with no discharge from the eyes or ears and gray tympanic membranes. PERRLA noted in the eyes; the client has no deviation or tenderness. The client's teeth are in good condition with no signs of dental caries, oral mucosa is moist and pink.</p>
<p>CARDIOVASCULAR (2 points): Heart sounds: S1, S2, S3, S4, murmur etc. Cardiac rhythm (if applicable): Peripheral Pulses: Capillary refill: Neck Vein Distention: Y <input type="checkbox"/> N <input checked="" type="checkbox"/></p>	<p>The client is normal sinus rhythm; S1 and S2 sounds are both present. The client's pulses are +3 bilaterally in radial and pedal locations. The client's capillary refill is under 3 seconds in upper and lower extremities bilaterally (fingers and toes); she has 1+ edema non-pitting noted bilaterally in both of her feet and</p>

<p>Edema Y <input checked="" type="checkbox"/> N <input checked="" type="checkbox"/> Location of Edema: 1+ Both feet.</p>	<p>nowhere else—no signs of neck vein distension.</p>
<p>RESPIRATORY (2 points): Accessory muscle use: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Breath Sounds: Location, character</p>	<p>The client's breath sounds are heard anteriorly and posteriorly in all five lobes of the lung. The client's respiration pattern is normal and unlabored. Upon auscultation, coarse crackles are heard in the lungs' upper and lower left lobes, and crackles are noted in the three lobes of the right lung. Upon auscultation, lung aeration is greater than on right than the left.</p>
<p>GASTROINTESTINAL (2 points): Diet at home: Current Diet Height: 151 cm, 55 ft 0 in Weight: 48.0 kg, 105.6 lb Auscultation Bowel sounds: Last BM: 10/11/21 Palpation: Pain, Mass etc.: Inspection: Distention: Incisions: Scars: Drains: Wounds: Ostomy: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Nasogastric: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Size: Feeding tubes/PEG tube Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Type:</p>	<p>The client's home diet is regular and regular here at the hospital. The client is 151 cm tall and weighs 48 kg. The client has active bowel sounds in all four quadrants, with clicks and gurgles noted. The client's last bowel movement was 10/11/2021. Upon palpation of the stomach, the client had no pain, masses, distension, incisions, scars, drains, or wounds present. No ostomy, nasogastric tube, PEG, or feeding tubes present.</p>
<p>GENITOURINARY (2 Points): Color: Character: Quantity of urine: Pain with urination: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Dialysis: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Inspection of genitals: Catheter: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Type: Size:</p>	<p>The client's urine was clear yellow. The client voided 301 mL in the two days before this assessment. The client reports no pain with urination, no need for dialysis, and no catheter present</p>
<p>MUSCULOSKELETAL (2 points): Neurovascular status: ROM: Supportive devices:</p>	<p>The client is alert and oriented x4. The client moves all extremities well and has a full range of motion. When necessary, the client uses a walker; the client's strength is equal</p>

<p>Strength: ADL Assistance: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Fall Risk: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Fall Score: 85 Activity/Mobility Status: Independent (up ad lib) <input type="checkbox"/> Needs assistance with equipment <input type="checkbox"/> Needs support to stand and walk <input type="checkbox"/></p>	<p>bilaterally in all four extremities. The client does not need assistance with her activities of daily living. The client has a fall score of 85, which places her at a high fall risk. The client is independent and up ad-lib</p>
<p>NEUROLOGICAL (2 points): MAEW: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> PERLA: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Strength Equal: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> if no - Legs <input type="checkbox"/> Arms <input type="checkbox"/> Both <input checked="" type="checkbox"/> Orientation: Mental Status: Speech: Sensory: LOC:</p>	<p>The client is awake, alert, and oriented x 4. The client moves all extremities well. The client is PERRLA, and the client's strength is normal for age and equal bilaterally in all four extremities. The client's mental status is normal for age, and her speech is clear. The client's sensory was intact, and she had no loss of consciousness.</p>
<p>PSYCHOSOCIAL/CULTURAL (2 points): Coping method(s): Developmental level: Religion & what it means to pt.: Personal/Family Data (Think about home environment, family structure, and available family support):</p>	<p>The client reports that she often attends church and practices the Christian religion. The client's developmental level is appropriate for her age, completing the 11th grade but not graduating high school or getting her GED. The client is retired, and her daughter is her support system and coping method.</p>

Vital Signs, 2 sets (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0740	82	115/58	18	98.2	90% on room air
0920	84	131/77	16	98.2	96% on room air

Vital Sign Trends: The client, around 0700 hours, all vitals but oxygen saturation was stable, showing 90%, which is 2% below the baseline. By promoting the use of the incentive spirometer to promote deep breathing, she did and raised the piston to the 1000 marker, which helped the

client cough and break up some of the secretions. At 0920, following physical, the client's vital signs were all stable and no outliers.

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
0740	Numerical	N/A	N/A	N/A	N/A
0920	Numerical	Right shoulder	3/10	Soreness	The client stated the pain was not too bad and did not see the need for a pain pill at this moment; however, the client did state she would press her call light if the pain worsened.

IV Assessment (2 Points)

IV Assessment	Fluid Type/Rate or Saline Lock
Size of IV: Location of IV: Date on IV: Patency of IV: Signs of erythema, drainage, etc.: IV dressing assessment:	The client has a port in her right upper chest accessed on 10/7/2021 with a 20g port-a-cath —no signs of erythema, drainage, phlebitis, or infiltrations. Port line is heparinized to prevent a blood clot from forming, flushes well with good blood return, and saline lock present. The Tegaderm dressing was clean, dry, and intact.

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
10/9/21	10/9/21

<p>240 mL (Water)</p> <p>300 mL (Water)</p> <p>240 mL (Water)</p>	<p>1 mL (Urine)</p>
<p>10/10/21</p>	<p>10/10/21</p>
<p>780 mL (Water)</p> <p>100 mL (Ceftriaxone & Sodium Chloride</p> <p>0.9%)</p>	<p>300 mL (Urine)</p>

Nursing Care

Summary of Care (2 points)

Overview of care: During this shift, the nursing care centered on monitoring the patient's oxygen status. The patient's laboratory values were monitored daily; the nurse administered her home medications and hospital medications during this shift. Lastly, the patient has significantly improved from her initial admission assessment.

Procedures/testing done: The client underwent a CT angiostest with pulmonary contrast, which showed widespread interstitial fibrosis, and a chest x-ray.

Complaints/Issues: The client only complained about her right shoulder, ranking it a 3/10 on the numerical pain scale.

Vital signs (stable/unstable): All vital signs were stable besides oxygen saturation early in the morning, which showed 90%.

Tolerating diet, activity, etc.: She tolerated her diet well and had no problems with chest physiotherapy.

Physician notifications: Pulmonologist consult on 10/11/2021.

Future plans for patient: Follow-up with the pulmonologist and ensure the incentive spirometer use while at home to help break up the secretions.

Discharge Planning (2 points)

Discharge location: Home with daughter.

Home health needs (if applicable): None.

Equipment needs (if applicable): Oxygen carrying case or bag, oxygen tubing, and skin guards to prevent skin breakdown.

Follow up plan: With PCP in two weeks, and pulmonologist as soon as possible.

Education needs: Signs and symptoms of acute shortness of breath, handwashing, infection prevention, and supplemental oxygen education.

Nursing Diagnosis (15 points)

Must be NANDA approved nursing diagnosis and listed in order of priority

<p>Nursing Diagnosis</p> <ul style="list-style-type: none"> • Include full nursing diagnosis with “related to” and “as evidenced by” components 	<p>Rational</p> <ul style="list-style-type: none"> • Explain why the nursing diagnosis was chosen 	<p>Intervention (2 per dx)</p>	<p>Evaluation</p> <ul style="list-style-type: none"> • How did the patient/family respond to the nurse’s actions? • Client response, status of goals and outcomes, modifications to plan.
<p>1. Impaired gas exchange related to RSV infection as evidenced by dyspnea, tachycardia, hypoxia.</p>	<p>1. The client has a recent diagnosis of RSV accompanied by a low oxygen saturation on room air and dyspnea upon exertion.</p>	<p>1. Assess and record pulmonary status every 4 hours or more frequently. 2. Change patient's position at least every 2 hours to mobilize secretions and allow aeration of</p>	<p>Goal met; the patient was content with vital signs every 4 hours and understood the rationale as to why. Goal met; the nursing assistant, did turning every 2 hours, and the patient was able to cough up secretions.</p>

	The client's CT showed widespread interstitial fibrosis, which impairs gas exchange.	all lung fields.	
2. Imbalanced nutrition: Less than the body requirements related to insufficient dietary intake, evidenced by the patient not eating her entire meal.	The patient stated she does not eat much and is rarely hungry; the patient ate two bites of her bagel and a few spoonfuls of her cereal.	1. Monitor fluid intake and output. 2. Determine food preferences and provide them within the limitations of patients prescribed.	Goal met; The client was okay with urine catches, did not complain, and understood its reasoning. Goal met; introducing food, the client enjoys ensures the proper daily caloric intake.
3. Impaired Skin Integrity related to moisture and pressure over bony prominences evidenced by pressure on the coccyx area.	The patient has a pressure ulcer on her coccyx area from sitting and moisture; she states that she has been treating it with silvadene cream.	1 Inspect patient skin every 8 hours, describe and document skin condition, and report changes. 2 Position patient for comfort and minimal pressure on bony prominences. Change patient's position at least every 2 hours— monitor frequency of turning and skin condition.	Goal met; the client was okay with skin check every 8 hours and did not complain. Goal met; the client knew the reasoning for turning every 2 hours.
4. Risk for falls related to impaired gait as evidenced by	The client is a high fall risk with a score of 85, and the client had a recent fall;	1. Provide additional patient education for household safety.	Goal met; the client was able to repeat the reasoning behind the education of household

<p>morse fall score of 85 and a recent fall.</p>	<p>furthermore, the client has an unsteady gait, uses a walker, has an IV, and has a secondary diagnosis.</p>	<p>2. Teach patients with unstable gait the proper use of assistive devices. Many patients never learn to use canes, crutches, and so on correctly.</p>	<p>safety. Goal met; the client was able to display proper usage of her walker to the nurse and the nursing assistant.</p>
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(Phelps, 2020)

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Concept Map (20 Points):

Subjective Data

Nursing Diagnosis/Outcomes

The client presented to the ED with a chief complaint of "woke up with acid reflux and a burning throat", furthermore she states she has SOB and chest pain with an acute onset of 10/7/2021.

1. Impaired gas exchange related RSV infection as evidenced by dyspnea, tachycardia, and hypoxia.
 - a. Goals met; vital signs every 4 hours and postural drainage was achieved from Q2 turns.
2. Imbalanced nutrition: Less than the body requirements related to insufficient dietary intake, evidenced by the patient not eating her entire meal.
 - a. Goals met; the client used the urine hat and finished the entire meal after diet changes.
3. Impaired Skin Integrity related to moisture and pressure over bony prominences evidenced by pressure on the coccyx area.
 - a. Goal met; the client understood the rationale behind skin checks every 8 hours, and Q2 turns for pressure ulcer prevention.
4. Risk for falls related to impaired gait as evidenced by morse fall score of 85 and a recent fall.
 - a. Goals met; the client understood the household safety, and she explained the

Objective Data

Nursing Interventions

1. Assess and record pulmonary data 4 hours or more frequently.
 - o Decreased RBC, HgB, and Hct
 - o An 82-year-old Caucasian female presents to the emergency department with shortness of breath, with a history of arthritis, breast cancer, colon cancer, metastasis cardiomyopathy, CT Angiochest showed emphysema and paroxysmal atrial fibrillation.
2. Change patient's position at least every 2 hours to mobilize secretions and allow aeration of all lung fields.
 - o Increased WBC and neutrophil levels.
3. Monitor fluid intake and output.
4. Determine food preferences and consult for modifications of patients prescribed.
 - o and k. pneumoniae, respectively.
5. Inspect patient skin every 8 hours for redness, skin condition, and report changes.
 - o Chest X-ray
 - o metastasis
6. Position patient for comfort and minimize pressure over bony prominences. Change patient's position every 2 hours and monitor frequency of turning and skin condition.
 - o CT Angiochest showed emphysema and paroxysmal atrial fibrillation.
7. Provide additional patient education for household safety.
 - o EKG showed Normal Sinus rhythm.
8. Teach patients with unstable gait the proper use of assistive devices. Many patients never learn to use canes, crutches, and so on correctly.
 - o Vital Signs
 - o BP: 115/58, Pulse: 82, RR: 18, Temp 98.2, and O2 90%.

Patient Information



