N441 Care Plan

Lakeview College of Nursing

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Demographics (3 points)

Date of Admission 03/03/2022	**Client Initials** S.W.	**Age** 69	**Gender** Male
Race/Ethnicity Caucasian	**Occupation** Retired	**Marital Status** Married	**Allergies** Amoxicillin (Disorientation) Chantix (Diarrhea) Keplex (Vomit) Lisinopril (Unknown) Nicotine (Unknown) Nitroglycerin (Unknown) Tamsulosin Hydrochloride (Dizziness) Varenicline (Unknown)
Code Status DNR	**Height** 172.7 cm	**Weight** 94.3 kg	

Medical History (5 Points)

Past Medical History: Acid Reflux, Atrial Fibrillation, Carotid Stenosis, Chronic Obstructive Pulmonary Disease (COPD), Coronary Arteriosclerosis, Chronic Heart Disease, Depression, Eczema, Gastroesophageal Reflux Disease (GERD), History of Coronary Artery Bypass Graft Surgery, Hypercholesterolemia, Hypertension, Hypertensive Cardiovascular Disease, Obstructive Sleep Apnea, Pulmonary Nodule, Sciatica, Traumatic Brain Injury, Type 2 Diabetes Mellitus.

Past Surgical History: Arthroscopy Right Shoulder and Rotator Cuff Repair (10/10/2019), Colonoscopy with Biopsy (07/19/2018), Left Transforaminal Epidural Steroid Injection with Fluoroscopy (09/20/2017)

Family History: Mother - Coronary Vascular Disease, Type 2 Diabetes Mellitus, Heart Disease

Father - Alzheimer's Disease, Coronary Vascular Disease, Dementia, Heart Disease

Sister - Coronary Vascular Disease

Social History (tobacco/alcohol/drugs including frequency, quantity and duration of use):

The patient is currently a tobacco smoker. S.W states he smokes two packs of cigarettes a day and has been smoking for about four years, starting in 2018. S.W. is a past alcohol user. S.W. states he used to drink a pack of beer a day starting in 2017 and stopped in 2019; the patient denies using any illicit and recreational drugs.

Assistive Devices: The patient uses a walker to help him ambulate.

Living Situation: The patient lives at home with his spouse Becky.

Education Level: The patient's highest level of education is a high school diploma.

Admission Assessment

Chief Complaint (2 points): SW's chief complaint is shortness of breath.

History of Present Illness – OLD CARTS (10 points):

The 69-year-old Caucasian male presented to the emergency room on 03/03/2022 with shortness of breath. The patient states, "I am not feeling well and experiencing shortness of breath and chest pain." The patient mentions he feels pain in his abdomen, chest, and throat and states the pain is sharp, aching, throbbing. The patient mentions he has a sore throat, productive cough, and a headache that has been ongoing for the past 1-2 hours. The patient states that both his legs are weak, and walking and standing aggravate his pain. The patient reported Advil helps relieve his pain.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): Empyema

Secondary Diagnosis (if applicable): COPD exacerbation

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

Empyema's medical condition is defined as collecting pus in the pleural cavity (Hinkle & Cheever, 2018). Empyema can be associated with pneumonia but may also develop after thoracic

surgery or thoracic trauma (Hinkle & Cheever, 2018). Infections with Streptococcus or Staphylococcus bacteria most commonly cause this disease (Hinkle & Cheever, 2018). The morbidity and mortality rate related to empyema is around 20% to 30% of patients affected with this condition die in the first year of developing symptoms or require further surgery (Hinkle & Cheever, 2018). Early interventions are crucial in the management of empyema cases.

The pathophysiology of empyema is a sequence of events relating to pneumonia, diabetes mellitus, gastric acid reflux, and immunosuppression (Capriotti, 2020). During an inflammatory process such as pneumonia, there is an increase in fluid production in the pleural cavity, known as the exudate stage (Capriotti, 2020). The exudate stage is the initial bacterial infection that causes an acute inflammatory response between the pulmonary parenchyma and the visceral pleural (Capriotti, 2020). Proinflammatory cytokines cause increased capillary permeability, which leads to an influx of neutrophil-rich fluid into the pleural space (Capriotti, 2020). The exudative fluid is free-flowing and resolved through antibiotic treatment (Capriotti, 2020). The bacteria can colonize the fluid and generate empyema if the condition worsens (Capriotti, 2020). The fluid is composed of elevated lactate dehydrogenase, dead cells, proteins, and neutrophils (Capriotti, 2020). Macroscopically, the fluid is thick opaque in fibrinopurulent (Capriotti, 2020). The fibrinopurulent stage can result from an absence of appropriate treatment (Capriotti, 2020). The outflow can become complicated because of the fibrin clots resulting in isolated fluid collections in the pleural space (Capriotti, 2020). In this stage, bacteriology becomes positive, which causes antimicrobials and drainage (Capriotti, 2020). Suppose the drainage is not taken care of; this can cause fibroblasts to merge to form a thick pleural peel between the visceral and parietal pleura associated with the chronic organizational stage (Capriotti, 2020). The peel can

encase the underlying lung parenchyma and further complicate the inhibition of adequate gas exchange (Capriotti, 2020).

Patients with empyema generally present late symptoms due to untreated pneumonia or mismanaged complications of pleural effusions (Hinkle & Cheever, 2018). Physical exams of a patient diagnosed with empyema can show dullness to percussion, decreased breath sounds, cough, fever, dyspnea, sputum production, and pleuritic-type chest pain (Hinkle & Cheever, 2018). SW's signs and symptoms included shortness of breath and chest pain. The patient also mentioned he has a sore throat, productive cough, and a headache that has been ongoing for the hours. Some complications of empyema can involve patients succumbing to worsening sepsis, septic show, or even death (Hinkle & Cheever, 2018). Complications can arise because of incomplete drainage due to tube malposition or tube malfunction (Hinkle & Cheever, 2018). Worsening conditions have led to pneumothorax, bronchopleural fistulas, and pleural fibrosis with a trapped lung (Hinkle & Cheever, 2018). During the first assessment at 0900, the patient's blood pressure was 117/54 mmHg, the temperature was 36.7 degrees Celsius, pulse was 88 beats per minute, respirations were 16 beats per minute, and 96% on room air. During this student's second assessment, the patient's temperature was 36.6 degrees Celsius, and pulse was 82 beats per minute. The patient's systolic and diastolic blood pressure decreased from 117/54 mmHg to 110/50 mmHg during this clinical shift, indicating she was hypotensive due to hypovolemia.

Expected findings related to empyema include an infection spreading from the lungs and leading to an accumulation of pus in the pleural space (Hinkle & Cheever, 2018). The infected fluid can build up to about a pint or more, causing pressure buildup on the lungs, which results in shortness of breath and pain (Hinkle & Cheever, 2018). The diagnosis of empyema involves diagnostic imaging of a chest X-ray or computerized chest tomography (CT) scan and a

thoracentesis (Hinkle & Cheever, 2018). The patient's diagnostic tests include x-ray chest 1 view, ultrasound renal complete with bladder, CT chest without contrast and electrocardiogram. A thoracentesis will collect pleural fluid and can be used to identify the specific type of bacteria causing the infection (Hinkle & Cheever, 2018). Laboratory tests include a CBC, chemistry lab test, arterial blood gas, urinalysis, and culture and sensitivity test (Capriotti, 2020). SW had a CBC and chemistry lab test, INR, PT, D-dimer, and ABG. SW had his pulse oximetry monitored throughout his hospital stay to monitor the oxygen saturation throughout his body.

Treatment includes antibiotic therapy to treat the infection and chest tube placement to drain the fluid (Capriotti, 2020). SW. has been taking ceftriaxone IV piggyback to treat the bacterial infection. The fluid is removed via thoracentesis to diagnose the empyema, but if the empyema has been present for an extended period, this can cause complications (Capriotti, 2020). Empyema that is present for a long time, can become loculated when the scar tissue forms and separates the fluid onto separate cavities (Capriotti, 2020). Surgery may be needed to remove any scar tissue and parts of the pleura infected by the inflammation and infection (Capriotti, 2020). With video-assisted thoracoscopic decortication, a thoracotomy or thoracoscopic surgery can be effective and less invasive (Capriotti, 2020). The treatment plan for this patient includes hydration, frequent position changes, deep breathing exercises, and medication.

Pathophysiology References (2) (APA):

Capriotti, T. (2020). *Pathophysiology: Introductory concepts and clinical perspectives* (2nd ed.). F.A. Davis.

Hinkle, J.L., & Cheever, K. H. (2018). *Brunner & Suddarth's textbook of medical-surgical nursing* (14th ed.). Wolters Kluwer Health Lippincott Williams & Wilkins.

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	3.80-5.41	3.13	2.88	**Low-** The patient is diagnosed with empyema resulting in anemia and the resistance of erythropoietin production (Pagana et al., 2019).
Hgb	3.80-5.41	9.8	8.5	**High-** The patient is diagnosed with empyema causing the red blood cell production to increase to make up for low blood oxygen levels due to poor lung function (Pagana et al., 2019).
Hct	33.2-45.3	29.8	25.7	**Low-** production of red blood cells resulting in an insufficient supply of red blood cells (Pagana et al., 2019).
Platelets	149-393	326	280	
WBC	4-11.7	17	19.9	**High-** The patient is diagnosed with empyema causing a lack of protection in leukocytosis resulting in inflammation (Pagana et al., 2019).
Neutrophils	45.3-79	47.2	55.4	
Lymphocytes	11.8-45.9	0.2	2.4	**Low-** The patient is diagnosed with empyema, causing decreased pulmonary function (Pagana et al., 2019).
Monocytes	4.4-12.9	0.3	4.8	**Low-** The patient is diagnosed with empyema resulting in decreased migratory ability (Pagana et al., 2019).
Eosinophils	0-6.3	N/A	N/A	
Bands	0.0-6.0	1.0	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
Na-	135-145	135	142	
K+	3.5-5.1	4.8	4.0	
Cl-	98-107	99	105	
CO2	21-31	28	24	
Glucose	74-109	98	91	
BUN	7-25	88	28	**High-** The patient is diagnosed with empyema causing decreased protein breakdown and decreased kidney function resulting in BUN levels rising (Pagana et al., 2019).
Creatinine	0.6-1.2	4.43	1.71	**High-** The patient is diagnosed with empyema causing a low urine output causing the creatine levels to rise (Pagana et al., 2019).
Albumin	3.5-5.2	2.9	2.1	**Low-** The patient is diagnosed with empyema relating to damaged kidneys, which causes albumin to be passed from the blood into the urine (Pagana et al., 2019).
Calcium	8.6-10.3	8.9	7.1	**Low-** The patient is diagnosed with empyema causing an increase in production of the parathyroid leading to increased phosphate and binding to calcium resulting in decreased calcium (Pagana et al., 2019).
Mag	1.6-2.4	2.3	N/A	
Phosphate	2.5-4.5	N/A	N/A	
Bilirubin	0.3-1	0.4	0.4	
Alk Phos	34-104	87	47	

AST	13-39	27	13	
ALT	7-52	13	19	
Amylase	100-300	N/A	N/A	
Lipase	0-60	N/A	N/A	
Lactic Acid	3-23	N/A	N/A	
Troponin	<0.05	N/A	N/A	
CK-MB	4-6	N/A	N/A	
Total CK	50-204	N/A	N/A	

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	0.86-1.14	1.23	N/A	**High-** The patient is diagnosed with empyema causing liver disease and multiple potential bleeding risks (Pagana et al., 2019).
PT	11.9-15.0	16.0	N/A	**High-** The patient is diagnosed with empyema causing liver disease and poor renal function resulting in multiple potential bleeding risks (Pagana et al., 2019).
PTT	22.6-35.3	N/A	N/A	
D-Dimer	0.00-0.62	5.28	N/A	**High-** The patient is diagnosed with empyema and is at risk for inflammation, PE, and DVT in the exacerbation period (Pagana et al., 2019).
BNP	<100	270	N/A	**High-** The patient is diagnosed with empyema increasing the circulatory blood volume resulting in volume overload and arterial stiffness, causing BNP to rise (Pagana et al., 2019).

HDL	40-60	N/A	N/A	
LDL	<100	N/A	N/A	
Cholesterol	<200	N/A	N/A	
Triglycerides	<150	N/A	N/A	
Hgb A1c	4-5.5%	N/A	N/A	
TSH	0.4-4.2	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	Yellow/clear	N/A	N/A	
pH	4.5-8	N/A	N/A	
Specific Gravity	1.005-1.034	N/A	N/A	
Glucose	Negative	N/A	N/A	
Protein	<20mg/dL	N/A	N/A	
Ketones	Negative	N/A	N/A	
WBC	>5 hpf	N/A	N/A	
RBC	>5 hbf	N/A	N/A	
Leukoesterase	Negative	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	7.35-7.45	7.22	N/A	

PaO2	75-85	70.0	N/A	**Low-** The patient is diagnosed with empyema causing low oxygen tension due to the inability of the lungs to oxygenate the blood properly (Pagana et al., 2019).
PaCO2	35-45	62.2	N/A	**High-** The patient is diagnosed with empyema causing carbon dioxide to build up in the lungs due to the lung's inability to function during gas exchange properly (Pagana et al., 2019).
HCO3	22-26	22.7	N/A	
SaO2	95-98	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	N/A	N/A	
Blood Culture	Negative	N/A	N/A	
Sputum Culture	Negative	N/A	N/A	
Stool Culture	Negative	N/A	N/A	

Lab Correlations Reference (1) (APA):

Pagana, K. D., Pagana, T. J., & Pagana, T. N. (2019). *Mosby's diagnostic and laboratory test reference.* Elsevier.

Sarah Bush Lincoln Health Center (2020). *Reference range (lab values).* Mattoon, IL.

Diagnostic Imaging

All Other Diagnostic Tests (5 points):

Computed Tomography (CT) Chest Without Contrast (03/03/2022)

Indication: Evaluate status post intrapleural lytic therapy

Impression: Increase the size of the right side of the lung. Pleural effusion decreased right lower lobe airspace opacities post chest tube placement. No new abnormality was reported.

Electrocardiogram (EKG): (03/03/2022, 03/08/2022)

Results: Shows normal sinus rhythm (NSR), no noted abnormalities

Ultrasound Renal Complete with Bladder (03/03/2022)

Indication: Acute kidney injury and low urine output

Impression: Right-sided renal cysts, normal appearance of kidney

X-ray Chest 1 View (03/07/2022)

Indication: Chest tube placement

Impression: Right chest tube remain in place, no visual pneumothorax

Diagnostic Test Correlation (5 points):

Computed Tomography (CT) Chest Without Contrast:

The indications for this diagnostic test were to evaluate status post intrapleural lytic therapy. The intrapleural lytic therapy helps dissolve fibrin clots and membranes and prevents fluid accumulation from improving drainage. A CT chest without contrast provides detailed pictures of the organs and structures inside of the chest (Kocak, 2022). Images can show infection, inflammation, and edema of the lung parenchyma (Kocak, 2022). Results indicated that the patient's right lung has increased in size, and the pleural effusion decreased right lower lobe after the chest tube placement.

Electrocardiogram (EKG):

The indications for this diagnostic test were to measure the electrical signals in the heart. According to Johns Hopkins Medicine (2019), an EKG is used to evaluate the heart's function. The test uses electrodes connected to an ECG machine by lead wires to record the heart's impulses and see how fast the heart is beating, the rhythm of the heartbeats, and the strength and timing of the electrical impulses (Johns Hopkins Medicine, 2019). This test was done to show if the patient is having any change in the electrical signals in the heart (Kocak, 2022). This test shows that she was in normal sinus rhythm, and there were no noted abnormalities.

Ultrasound Renal Complete with Bladder:

The indications for this diagnostic test were to determine the patient's acute kidney injury and urine output level. According to Kocak (2022), a renal ultrasound is a test that uses sound waves to create images of the kidney, bladders, and ureters that help detect complications with the urinary system. The results indicated right-sided renal cysts and a normal appearance of the kidney.

X-ray Chest 1 View:

The indications for this diagnostic test were to show the placement of the patient's chest tube after insertion into the lungs. Continuous x-rays will show the progression of drainage in the lungs and confirm if the patient's lung has fully re-expanded. A chest x-ray determines complications involving the cardiovascular, respiratory, and skeletal structures in the lung cavity. It also evaluates potential disease processes and identifies the presence of an infection. Chest x-rays help detect pleural effusions that appear to be located at the lung base (Capriotti, 2022). An x-ray can show a fluid buildup in the pleural space and areas of the lung tissue and chest wall

(Capriotti, 2022). Results indicated that the chest tube placement was placed on the right side of the lung and remained in place with no visual pneumothorax.

Diagnostic Test Reference (1) (APA): (FIX APA Format)

Capriotti, T. (2020). *Pathophysiology: Introductory concepts and clinical perspectives* (2nd ed.). F.A. Davis.

John Hopkins Medicine. (2019). *Electrocardiogram*. https://www.hopkinsmedicine.org/health/treatment-tests-and-therapies/electrocardiogram

Kocak, M. (2022). *Overview of imaging tests - special subjects*. Merck Manuals Consumer Version.https://www.merckmanuals.com/home/special-subjects/common-imaging-tests/overview-of-imaging-tests

Current Medications (10 points, 1 point per completed med)
10 <u>different</u> medications must be completed

Home Medications (5 required)

Brand/Generic	Lipitor/ atorvastatin calcium	Celexa/ citalopram hydrobromide	Oracea/ doxycycline	Lasix/ furosemide	Prilosec/ omeprazole
Dose	40 mg	20 mg	100 mg	40 mg	50 mg
Frequency	Daily	Daily	Daily	BID	Daily
Route	PO	PO	PO	PO	PO
Classification	HMG-CoA reductase inhibitor; antihyperlip	Selective serotonin reuptake inhibitor	Tetracycline ; antibiotic	Loop diuretic; antihypertensive,	Proton pump inhibitor, antiulcer

	idemic	(SSRI); Antidepressant		diuretic	
Mechanism of Action	Reduces plasma cholesterol and lipoprotein levels by inhibiting HMG-CoA reductase and cholesterol synthesis in the liver and increasing the number of LDL receptors on the liver cells to enhance LDL uptake and breakdown.	Blocks serotonin reuptake by adrenergic nerves, which generally release this neurotransmitter from their storage sites when activated by a nerve impulse. This blocked reuptake increases serotonin levels at nerve synapses, elevating mood and reducing depression.	Exerts a bacteriostatic effect against a wide variety of gram-positive and gram-negative organisms. Doxycycline is lipophilic, which allows it to pass more quickly through the bacterial lipid bilayer, where it binds reversibly to ribosomal subunits. Bound doxycycline blocks the binding of aminoacyl transfer RNA to messenger RNA, thus inhibiting bacterial protein synthesis. _	It inhibits sodium and water reabsorption in the loop of Henle. It increases urine formation as the body's plasma volume decreases and aldosterone production increases, promoting sodium reabsorption and the loss of potassium and hydrogen ions. The drug reduces blood pressure and decreases cardiac output by reducing intracellular and extracellular fluid volume. Cardiac output returns to regular	Omeprazole interferes with gastric acid secretion by inhibiting the hydrogen potassium adenosine triphosphatase enzyme system, or proton pump, in gastric parietal cells. Omeprazole irreversibly blocks the exchange of intracellular H+ and extracellular K+. By preventing H+ from entering the stomach lumen, omeprazole keeps additional HCl from

				overtime.	forming,
Reason Client Taking	Lower cholesterol and reduce the risk of acute cardiovascular events such as angina, CVA, or MI.	To treat depression.	To treat bacterial infection and all other infections caused by susceptible organisms.	To reduce edema caused by heart failure, and renal disease, including nephrotic syndrome.	To treat conditions where there is too much acid in the stomach. Also, to treat symptomatic GERD.
Contraindications (2)	-Active hepatic disease or unexplained persistent elevated liver enzymes - Hypersensitivity to atorvastatin or its components	-Pimozide therapy -MAO inhibitor therapy due to the increased risk of serotonin syndrome.	- Hypersensitivity to doxycycline or other tetracyclines and their components -Use within penicillin or isotretinoin.	-Anuria -Electrolyte imbalance	- Hypersensitivity to other proton pump inhibitors - Concurrent therapy with rilpivirine
Side Effects/Adverse Reactions (2)	- Arrhythmias -Dyspnea	-Acute renal failure -Agitation	-Diarrhea -Urticaria	- Arrhythmias -Azotemia	- Bronchospasms - Hypertension
Nursing Considerations (2)	- Monitor diabetic patients' blood glucose levels because atorvastatin therapy can affect blood glucose	-Use citalopram cautiously in patients with other cardiac conditions. EKG monitoring may be ordered to	-Give doxycycline without regard to meals. Food and milk may delay absorption, but they do not significantly	-Obtain patient's weight before and periodically during furosemide therapy to monitor fluid loss. -Prepare	-Give omeprazole before meals, preferably in the morning, for once-daily dosing. -Monitor

	control. -Atorvastatin is used in patients with homozygous familial hypercholesterolemia as an adjunct medication with other lipid medication or alone if other treatments are not available.	monitor the patient's QT interval and detect the development of arrhythmias. -Assessed elderly patients were taking diuretics for signs suggesting syndrome of inappropriate secretion of antidiuretic hormone.	reduce it. -Expect oral doxycycline to increase the risk of oral or rectal candidiasis, especially in elderly patients and those on prolonged therapy due to the change of normal balance of microbial flora.	drugs for infusion with standard saline solution, lactated Ringer's solution, or D5W.	patients for macrocytic anemia because drugs can interfere with absorption of vitamin B12.
Key Nursing Assessment(s)/Lab(s) Prior to Administration	-Monitor liver functions, blood sugar, kidney function, blood pressure, and heart function.	-Monitor mental status changes, pupillary dilation, electrolytes (magnesium and potassium), and cardiac arrhythmias.	-Monitor liver function test, visual changes, intracranial pressure, electrolyte imbalance, diarrhea, and adverse skin reaction.	-Monitor electrolyte imbalance, weight, periodic hearing test, hepatic and renal function, blood pressure, and blood glucose.	-Monitor patient for bone fractures, osteoporosis, gastric tumors, stool for C.diff, and electrolytes for hypomagnesemia.
Client Teaching needs (2)	-Educate patients to take drugs at the same time each day to maintain their effects. -Instruct patient to take a	-Inform the patient that citalopram's full effects may take up to 4 weeks. -Caution patient not to stop citalopram abruptly	-Instruct patients not to take doxycycline before bed because it may not dissolve properly and may cause	-Instruct patients to take furosemide several hours before bedtime to avoid sleep interruption from diuresis.	-Advise patients to notify the provider about abdominal pain, diarrhea, rash, or joint pain. -

	missed dose as soon as possible. If it is almost time for the next dosage, the patient should skip the missed dose and do not double the dose .	because doing so may lead to severe adverse reactions.	esophageal burning and ulceration. -Instruct patients to drink plenty of fluids while taking doxycycline to reduce risk of esophageal burning and ulceration.	-Emphasize the importance of weight and diet control, incredibly limiting sodium intake.	Encourage patient to avoid alcohol, aspirin, ibuprofen, and foods that may increase gastric secretions during therapy.

Hospital Medications (5 required)

Brand/Generic	Neurontin/ gabapentin	Toprol-XL/ metoprolol succinate	Protonix/ pantoprazole sodium	Atrovent/ ipratropium bromide	Rocephin/ ceftriaxone sodium
Dose	400 mg	25 mg	40 mg	3 mL	2000 mg/ 2mL
Frequency	Daily	Daily	Daily	TID	Daily
Route	PO	PO	PO	Nebulized Inhalation	IV
Classification	1-amino-methyl cyclohexane acetic acid; anticonvulsant	Beta1-adrenergic blocker; antianginal, antihypertensive	Proton pump inhibitor; antiulcer	Anticholinergic; bronchodilator	Third-generation cephalosporin; antibiotic
Mechanism of Action	GABA inhibits the rapid firing of neurons associated with seizures. It may prevent exaggerated	Inhibits stimulation of beta 1-receptor sites, located mainly in the heart, resulting in	Interferes with gastric acid secretion by inhibiting the hydrogen-potassium-adenosine triphosphatase enzyme	After acetylcholine is released from cholinergic fibers, ipratropium	Interferes with bacterial cell wall synthesis by inhibiting cross-linking of

	responses to painful stimuli and pain-related responses to a normally innocuous stimulus to account for its effectiveness in relieving postherpetic neuralgia.	decreased cardiac excitability, cardiac output, and myocardial oxygen demand. Metoprolol also helps reduce blood pressure by decreasing the renal release of renin.	system, or proton pump, in gastric parietal cells. Pantoprazole irreversibly inhibits the final step in gastric acid production by blocking the exchange of intracellular H+ and extracellular K+, thus, preventing H+ from entering the stomach and HCl from forming.	prevents it from attaching to muscarinic receptors on membranes of smooth muscle cells. By blocking acetylcholine's effects in bronchi and bronchioles, ipratropium relaxes smooth muscles and causes bronchodilation.	peptidoglycan strands. Peptidoglycan makes the cell membrane rigid and protective. Without it, bacterial cells rupture and die.
Reason Client Taking	To manage postherpetic neuralgia.	To manage hypertension	To treat conditions where there is too much acid in the stomach. Also, to treat erosive esophagitis associated with gastroesophageal reflux disease short-term.	To treat bronchodilator and COPD.	To treat bacterial infection.
Contraindications (2)	- Hypersensiti	- Cardiogenic	-Concurrent therapy with	- Hypersens	-Calcium-containing

	vity to gabapentin or its components -Myoclonus	shock -Pulse less than 45 beats/min	rilpivirine-containing products -Substituted benzimidazoles (omeprazole, lansoprazole, rabeprazole sodium).	itivity to atropine, ipratropium bromide, or their components. -Hypersensitivity to peanuts, soybeans, or related products (with an aerosol inhaler).	IV solutions -IV administration of ceftriaxone solutions containing lidocaine
Side Effects/Adverse Reactions (2)	-Palpitations -Hyperglycemia	-Arrhythmia -Bronchospasms	-Chest pain -Dizziness	-Atrial fibrillation -Wheezing	-Seizures -Nephrotoxicity
Nursing Considerations (2)	-Administer the initial dose at bedtime to minimize adverse reactions. -Give the drug at least 2 hours after the antacid.	-Assess the EKG of patients who take metoprolol because they may be at risk for AV block. -Check for signs of poor glucose control in patients with diabetes mellitus. Metoprolol may interfere with the therapeutic effects of	-Be aware that symptomatic response to the drug does not rule out the presence of a gastric tumor. -Monitor patients for bone fracture because proton pump inhibitors increase the risk of osteoporosis-related fractures of the hip, spine, or wrist.	-When using a nebulizer, apply a mouthpiece to prevent the drug from leaking out around the mask and causing blurred vision or eye pain. -Monitor patient for hypersensitivity reactions that could be life-	-Monitor BUN and serum creatinine levels to detect early signs of nephrotoxicity. -Assess for signs of superinfection, such as cough or sputum changes, diarrhea, drainage, fever, malaise, pain, perineal

		insulin and oral antidiabetic drugs.		threatening. If present, stop the drug immediately.	itching, rash, redness, and swelling.
Key Nursing Assessment(s)/Lab(s) Prior to Administration	-Monitor renal function, mental status changes, and oral reactions (gingivitis).	-Monitor blood glucose, cardiac functions, blood pressure, and thyroid function.	-Monitor PT or INR, bone fractures, renal and hepatic function, gastric acidity, and stool for C. Diff.	-Monitor cardiac and respiratory functions, candidiasis, and vision changes.	-Monitor renal and hepatic function, complete blood count (CBC), hematocrit, bowel patterns, and electrolyte changes.
Client Teaching needs (2)	-Caution patient to not stop the drug abruptly. -Inform patients about possible ataxia, dizziness, drowsiness, and nystagmus.	-Instruct patients to take metoprolol with food at the same time each day. -Advise patient to notify the provider if pulse rate falls below 60 beats/minute or is significantly lower than usual.	-Instruct patient to swallow pantoprazole tablets whole and not chew or crush drug. -Advise patients to expect relief of symptoms within two weeks of starting therapy.	-Inform the patient that although some people feel relief within 24 hours of drug use, the maximum effect may take up to 2 weeks. -Instruct patients to rinse their mouth after each nebulizer or inhaler treatment to help minimize	-Advise patients to report any hypersensitivity reaction, such as a rash, itching skin, or hives, to the provider and stop taking the drug immediately. -Urge patients to report watery, bloody stools to the

				throat dryness and irritation.	prescriber immediately.

Medications Reference (1) (APA):

Jones & Bartlett Learning. (2020). *2020 Nurse's drug handbook* (19th ed.). Jones & Bartlett Learning.

Assessment

Physical Exam (18 points) – HIGHLIGHT ALL PERTINENT ABNORMAL FINDINGS

GENERAL: **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	**Alertness:** The patient was A&O x 4 **Orientation:** The patient was alert and oriented and was able to verify name, DOB, and location (hospital) **Distress:** The patient is not visibly distressed; he was calm and cooperative. **Overall appearance:** The patient was well-groomed and had a clean look.
INTEGUMENTARY: **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** **Braden Score: 16** **Drains present: Y☒ N ☐** **Type:** Chest tube on right side.	**Skin color:** Color was usual for ethnicity **Character:** Dry and warm to the touch. The patient was weeping due to being very edematous. **Temperature:** Warm **Turgor:** Edematous **Rashes:** Rash is located on both upper extremities (forearm) due to eczema. **Bruises:** No bruises present **Wounds:** No wounds present **Braden Score:** 16; mild risk The patient is at a mild risk for skin pressure injury due to being on bed rest with a chest tube drain on the right side of the chest. I could not assess the patient's back due to patient refusal and insertion of the chest tube on the right side.

HEENT: **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	**Head/Neck:** The trachea is midline; the oral mucosa is moist and intact. The uvula is midline, no tonsil enlargement was noted. The tongue is pink with no lesions. Lymph nodes were soft and moveable. Carotid pulses were palpated and strong—no signs of jugular vein distention. **Ears:** Symmetrical, the tympanic membrane is pink, gray, and intact bilaterally—no signs of jugular vein distention. **Eyes:** PERRLA patient's pupils constricted normally, EOM was normal. Sclera appears white with no inflammation or drainage bilaterally. Conjunctiva is pink and moist. **Nose:** Septum and turbinate is midline, no sign of bleeding, mucus, or polyps. **Teeth:** No cavity present, teeth were intact and had a yellow tint.
CARDIOVASCULAR: **Heart sounds:** **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable):** **Peripheral Pulses:** **Capillary refill:** **Neck Vein Distention: Y ☐ N ☒** **Edema Y ☒ N ☐** **Location of Edema:**	**Heart sounds:** Loud, high-pitch, S1, S2 sounds present **Cardiac rhythm:** Normal sinus rhythm **Peripheral Pulses:** Radial and pedal pulses were 3+ bilaterally. **Capillary refill:** Normal, fingertips and toes blanched white in less than 3 seconds **Edema Y ☒ N ☐** **Location of Edema:** The patient was fluid overloaded and was on Lasix to help remove any excess fluid. Both patients' upper extremities were 3+ pitting edema. Both patients' lower extremities were 2+ pitting edema.
RESPIRATORY: **Accessory muscle use: Y☐ N ☒** **Breath Sounds: Location, character** **ET Tube:** **Size of tube:** **Placement (cm to lip):** **Respiration rate:**	**Breath Sounds:** Accessory muscle was not used during respiration **Location:** All lobes posteriorly and anteriorly were equal and regular, with coarse crackles in both lungs bilaterally. **Character:** Loud, high-pitched bronchial breath

FiO2: **Total volume (TV):** **PEEP:** **VAP prevention measures:**	sounds **Respiratory Rate:** During both vital signs assessments (18 breaths per minute), respirations were regular in rhythm, even, and appeared unlabored; the patient was on oxygen 100% room air. **ET Tube:** **Size of tube:** N/A **Placement (cm to lip):** N/A **Respiration rate:** N/A **FiO2:** N/A **Total volume (TV):** N/A **PEEP:** N/A **VAP prevention measures:** Ensure proper hand hygiene when caring for the ET tube, provide oral care for the patient every 2 hours, brush patients teeth every 12 hours, elevate the head of the bed for the patient above 30 degrees to avoid aspiration and choking hazards, suction the patient's ET tube to help reduce aspirating on secretions, and promote early mobility if possible.
GASTROINTESTINAL: **Diet at home:** **Current Diet** **Height:** **Weight:** **Auscultation Bowel sounds:** **Last BM:** **Palpation: Pain, Mass etc.:** **Inspection:** **Distention:** **Incisions:** **Scars:** **Drains:** **Wounds:** **Ostomy: Y ☐ N ☒** **Nasogastric: Y ☐ N ☒** **Size:** **Feeding tubes/PEG tube Y ☐ N ☒** **Type:**	**Diet at home:** Patient's diet at home is a regular diet with no restrictions. **Current Diet:** Patient's current diet is a regular diet with no restrictions. **Height:** 172.7 cm **Weight:** 94.3 kg **Auscultation Bowel sounds:** Active bowel sounds in all 4 quadrants. **Last BM:** 03/08/2022 **Palpation: Pain, Mass etc.:** Abdomen is soft to touch, non-tender to palpitation **Inspection** **Distention:** Non-distended **Incisions:** N/A **Scars:** N/A **Drains:** N/A **Wounds:** N/A
GENITOURINARY:	

Color: **Character:** **Quantity of urine:** **Pain with urination: Y ☐ N ☒** **Dialysis: Y ☐ N ☒** **Inspection of genitals:** **Catheter: Y ☒ N ☐** **Type:** **Size:** **CAUTI prevention measures:**	**Color:** Yellow **Character:** Cloudy with sediment in the foley catheter. **Quantity of urine:** Urine output collected during the clinical shift was 1080 mL. **Inspection of genitals:** The patient's genitals were red and erythema due to the insertion of the foley catheter. The patient stated the foley irritates him, and he accidentally pulls on it at times. **Catheter: Y ☒ N ☐** **Type:** Foley **Size:** 16 French **CAUTI prevention measures:** Proper hand hygiene while caring for the urinary catheter, using 2% chlorhexidine gluconate (CHG) wipes, providing catheter care every 12 hours to help keep the area clean, using aseptic technique when inserting a foley catheter, limiting the use and duration of urinary catheter as necessary.
MUSCULOSKELETAL: **Neurovascular status:** **ROM:** **Supportive devices:** **Strength:** **ADL Assistance: Y☒ N ☐** **Fall Risk: Y ☒ N☐** **Fall Score: 60; High Risk** **Activity/Mobility Status:** **Independent (up ad lib) ☐** **Needs assistance with equipment ☐** **Needs support to stand and walk☒**	**Neurovascular status:** Radial and pedal pulse are 3+ bilaterally. Skin is warm to touch in upper and lower extremities. The patient's skin color is normal for ethnicity. **ROM:** The upper and lower extremities have a full range of motion when extending and flexing. I was able to do passive range of motion exercises on the patient, and I could move all the patient's extremities. The patient complained of pain when lifting his legs bilaterally during the assessment due to weakness. **Supportive devices:** Walker for mobility. **Strength:** Lower extremities are equally weak bilaterally, upper extremities are strong and equal in strength bilaterally **ADL Assistance:** One assist to mobilize **Fall risk**: **Y ☒ N☐** **Fall Score:** 60; High Risk **Activity/Mobility Status:** The patient needs support to stand and walk after being on bedrest for a few days of admission and general weakness on both lower extremities.

NEUROLOGICAL: **MAEW: Y☐ N☒** **PERLA: Y ☒ N☐** **Strength Equal: Y ☒ N ☐ if no -** **Legs ☐ Arms ☐ Both ☒** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	**MAEW:** The upper extremities are equal in strength bilaterally; lower extremities are equally weak bilaterally. The patient complained of pain when lifting his legs bilaterally during the assessment. **PERLA:** Pupils constrict normally **Strength Equal:** No, upper extremities are equally strong bilaterally, lower extremities are equally weak bilaterally. The patient complained of pain when lifting his legs bilaterally during the assessment. **Orientation:** A & O x 4, Patient was alert and oriented. Patient was able to verify his name, DOB, and location (hospital). **Mental Status:** Alert and Oriented **Speech:** Clear **Sensory:** Intact **LOC:** Patient was alert, awake, oriented, and responsive.
PSYCHOSOCIAL/CULTURAL: **Coping method(s):** **Developmental level:** **Religion & what it means to pt.:** **Personal/Family Data (Think about home environment, family structure, and available family support):**	**Coping method(s):** The patient identifies his wife, Becky, as his primary support. The patient watches TV and sleep as coping mechanisms. **Developmental level:** The patient has an appropriate developmental level for his age. The patient stated his highest level of education is a high school diploma and has no learning barriers or limitations. **Religion:** Patient's chart stated he is Christian. **Personal/Family Data:** The patient lives at home and says his wife Becky is his primary support system. She helps him with his activities of daily living and helps him ambulate around the house.

Vital Signs, 2 sets (5 points) – HIGHLIGHT ALL ABNORMAL VITAL SIGNS

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0900	88 beats per minute	117/54 mmHg	16 respirations	36.7	96% on room

			per minute	Celsius (Oral)	air
1102	82 beats per minute	110/50 mmHg	18 respirations per minute	36.6 Celsius (Oral)	98% on room air

Vital Sign Trends/Correlation:

According to the patient's vital sign trends, minimal changes occurred between the vital signs taken at 0900 and 1102. During the first vital signs assessment, the patient's vital signs were within normal ranges; his pulse (88 beats per minute), respiration rate (18 respirations per minute), temperature (36.7 degrees Celsius), and oxygen (96% on room air). During the patient's second assessment at 1102, his pulse was 82 beats per minute, his respiration rate was 18 respirations per minute, the temperature was 36.6 degrees Celsius, and oxygen was 98% on room air. On the second assessment, the patient had an abnormal systolic blood pressure upon both assessments of 117/54 mmHg and 110/50 mmHg. These values decreased during this student's second assessment, indicating that the patient was hypotensive at the time of the evaluation due to being hypovolemic.

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
0900	Numeric	N/A	0	N/A	N/A

1102	Numeric	N/A	0	N/A	N/A

IV Assessment (2 Points)

IV Assessment	**Fluid Type/Rate or Saline Lock**
Size of IV: 20 gauge **Location of IV:** Left antecubital **Date on IV:** 03/06/2022 **Patency of IV:** Flushes well with no difficulties and is patent. **Signs of erythema, drainage, etc.:** No signs of erythema, drainage, or complications. **IV dressing assessment:** No phlebitis or infiltration present. IV dressing was clean, dry and intact.	Saline Locked
Other Lines (PICC, Port, central line, etc.)	
Type: N/A **Size:** N/A **Location:** N/A **Date of insertion:** N/A **Patency:** N/A **Signs of erythema, drainage, etc.:** N/A **Dressing assessment:** N/A **Date on dressing:** N/A **CUROS caps in place:** N/A **CLABSI prevention measures:** Perform good hand hygiene prior to administration of medication, use appropriate skin antiseptic technique, ensure skin is clean and dry before utilizing line, ensure antiseptic technique, proper use of CUROS cap, ensure dressings are clean and dry.	

Intake and Output (2 points)

Intake (in mL)	**Output (in mL)**
240 mL - Water 3 mL- Normal Saline flush 2 mL- ceftriaxone sodium IV	1080 mL - Urinary Catheter 100 mL- Chest tube drainage

Total Intake: 245 mL	**Total Output: 1180 mL**

Nursing Care

Summary of Care (2 points)

Overview of care: This student performed and documented the physical assessment for this client. This student also obtained his vital signs and pain level twice during the clinical shift, administered his daily morning medications, promoted bed rest, changed his soiled gown and incontinence pad. Performed CHG bath catheter care and placed intermittent pneumatic compression device on patient's calves. Maintained the patient's blood sugars between 140-180, monitored the patient's chest tube drainage, and discussed the patient's care goals to the patient and spouse.

Procedures/testing done: Computed tomography (CT) chest without contrast, electrocardiogram (EKG), Ultrasound renal complete with bladder, and x-ray chest one view.

Complaints/Issues: SW reported not feeling any pain during this student's clinical shift. The patient complained that his body was edematous and felt uncomfortable moving his upper extremities due to the insertion of the chest tube. The patient stated he wants to be discharged and is waiting for the provider to take the chest tube.

Vital signs (stable/unstable): SW's vital signs showed stability during this clinical shift except for the changes in his blood pressure. The patient's systolic and diastolic blood pressure at 0900 was 117/54 mmHg, and at 1102, his blood pressure decreased to 110/50 mmHg. During this clinical shift, the patient's pulse, respiratory rate, temperature, and oxygen levels remained within normal limits.

Tolerating diet, activity, etc.: The patient is tolerating his diet well and is on a regular diet with no restrictions.

Physician notifications: The patient was prescribed metoprolol succinate. Due to the patient's current low blood pressure, this student and the nurse questioned whether to administer or hold the blood pressure medication. This student and the nurse reported the patient's vital signs and clarified with the provider if the medication administration was appropriate. The provider clarified the order and told us to administer the medication due to the patient's history of atrial fibrillation. This student and nurse reported to the provider that the patient asked when he could discharge from the hospital, and the provider indicated he would meet with the patient to plan the appropriate time of discharge and plan of care.

Future plans for client: A meeting is scheduled for today to talk to the patient about the appropriate discharge time and plan of care. The patient currently still has a drain in place and needs to speak to the provider about the possible removal date of the chest tube.

Discharge Planning (2 points)

Discharge location: The patient is to be discharged to go home with his wife in Champaign, Illinois.

Home health needs (if applicable): The patient does not require home health needs.

Equipment needs (if applicable): The patient requires a walker to assist with ambulation. The patient showed weakness in both lower extremities bilaterally during the physical assessment. The patient also requires a continuous positive airway pressure (CPAP) to help treat his obstructive sleep apnea.

Follow up plan: The patient's follow-up plan includes scheduling an appointment to see his cardiologist and pulmonologist one-month post-discharge. The patient should also plan to

meet with his primary care provider one-week post-discharge to check on his progress and ensure no misunderstandings and unanswered questions in his plan of care.

Education needs: The patient requires additional information regarding consuming a healthier lifestyle nutritionally and physically. Educating the patient about the importance of smoking cessation and managing COPD symptoms can prevent further health complications. The patient will also need education on using his walker appropriately to strengthen his lower extremities to ambulate better. It is also essential to educate the patient on the importance of complying with his medication regimen to promote optimal health.

Nursing Diagnosis (15 points)
Must be NANDA approved nursing diagnosis and listed in order of priority

Nursing Diagnosis ● Include complete nursing diagnosis with "related to" and "as evidenced by" components ● Listed in order by priority – highest priority to lowest priority pertinent to this client	**Rationale** ● Explain why the nursing diagnosis was chosen	**Interventions (2 per dx)**	**Outcome Goal (1 per dx)**	**Evaluation** ● How did the client/family respond to the nurse's actions? ● Client response, status of goals and outcomes, modifications to plan.
1. Ineffective airway clearance is related to	The nursing diagnosis was chosen because the patient complained of a	1. Elevate the head of the bed and change position frequently (Vera, 2017).	**1.** Promote maximum chest expansion of the lungs and facilitate easier breathing (Vera, 2017).	-The patient responded well to the nurse's actions because he reported breathing easier without complications.

increased production of secretions, as evidenced by pleuritic pain (Vera, 2017).	productive cough.	2. Auscultate posterior and anterior breath sounds bilateral, noting decreased or absent airflow, crackles, and wheezes (Vera, 2017).	**2.** Patient has loud, high-pitched bronchial breath sounds (Vera, 2017).	-Goal met: The patient maintained respiration rates within normal ranges by the end of the clinical shift.
2. Impaired gas exchange due to collection of pus in the pleural space as evidenced by dyspnea and irritability (Vera, 2017).	The nursing diagnosis was chosen because the patient reported shortness of breath upon admission.	**1.** Maintain bedrest by planning activity and rest periods to minimize energy use (Vera, 2017). **2.** Elevate the head of the bed and encourage frequent position changes, deep breathing, and effective coughing (Vera, 2017).	**1.** Prevent exhaustion and reduce oxygen demands to facilitate the resolution of infection (Vera, 2017). **2.** Promote lung and chest expansion, mobilize secretions and improve ventilation (Vera, 2017).	- The patient responded well to the nurse's actions because he could perform proper deep-breathing exercises without complications. -Goal met: The patient was able to identify and demonstrate proper breathing techniques to achieve optimal lung expansion by the end of the clinical shift.

3. Ineffective breathing pattern related to decreased proper lung expansion as evidenced by changes in rate and respirations (Vera, 2017).	The nursing diagnosis was chosen because the patient had pus in his lungs and complained of shortness of breath.	1. Encourage diaphragmatic breathing and utilize incentive spirometers (Vera, 2017). 2. Ambulate the patient as soon as possible as tolerated with doctor's orders (Vera, 2017).	**1.** Relax accessory muscles and increase the patient's oxygen levels (Vera, 2017). **2.** Early ambulation further breaks up and moves secretions that block the airways (Vera, 2017).	- The patient responded well to the nurse's actions because he did not use his accessory muscles during inhalation and exhalation. -Goal met: The patient was able to identify and demonstrate proper breathing techniques to achieve optimal lung expansion by the end of the clinical shift.
4. Acute pain is related to persistent cough, as evidenced by pleuritic chest pain and restlessness (Vera, 2017).	The nursing diagnosis was chosen because the patient complained of pleuritic chest pain and restlessness.	**1.** Instruct and assist the patient in chest splinting techniques during cough episodes (Vera, 2017). **2.** Administer analgesics as prescribed and encourage pain control (Vera, 2017).	**1.** Control chest discomfort during coughing episodes while enhancing the effectiveness of cough effort (Vera, 2017). 2. Medications allow for pain relief and the ability to breathe deeply and cough. Analgesics help prevent peak periods of pain (Vera, 2017).	- The patient responded well to the nurse's actions because he reported feeling no pain during both pain assessments. -Goal met: The patient verbalized that his pain was controlled by the end of the clinical shift. SW reported his pain as a 0/10 on a numeric scale ranging from 0-10 by the end of the clinical shift.
5. Activity intolerance is related to general weaknes	The nursing diagnosis was chosen because the patient could not stand or walk	**1.** Educate the patient about the importance of rest in the treatment plan and the	**1.** Bedrest helps decrease metabolic demands and conserve energy for healing (Vera, 2017).	-The patient responded well to the nurse's interventions because he could practice range of motion exercises in

s in both lower extremities, as evidenced by a walker to ambulate (Vera, 2017).	independently due to weakness in both lower extremities bilaterally.	necessity of balancing rest activities with a range of motion exercises (Vera, 2017). **2.** Assist with self-care activities and provide a progressive increase in activities during the recovery phase and demand (Vera, 2017).	2. Minimize exhaustion and help balance oxygen supply and demand (Vera, 2017).	bed. -Goal met: The patient demonstrated an increase in tolerance to range of motion activities without signs of shortness of breath and weakness in both lower extremities bilaterally.

Other References (APA):

Vera, M. (2017). *Respiratory care plans.* Nurseslabs. https://nurseslabs.com/pneumonia-nursing-care-plans/4/

Subjective Data

Subjective Data

The patient states, “I am not feeling well and experiencing shortness of breath and chest pain.”
The patient stated he feels pain in his abdomen, chest, and throat and states the pain is sharp, aching, throbbing.
The patient stated he has a sore throat, productive cough, and a headache that has been ongoing for the past 1-2 hours.
The patient stated that both his legs are weak.

Nursing Diagnosis/Outcomes

Nursing Diagnosis/Outcomes

1. Ineffective airway clearance related to increased production of secretions as evidenced by pleuritic pain (Vera, 2017).
Promote maximum chest expansion of the lungs and facilitate easier breathing (Vera, 2017).
Patient has loud, high-pitched bronchial breath sounds (Vera, 2017).
Goal met: The patient was able to maintain respiration rates within normal ranges by the end of the clinical shift.
2 Impaired gas exchange due to collection of pus in the pleural space as evidenced by dyspnea and irritability (Vera, 2017).
Prevent exhaustion and reduce oxygen demands to facilitate the resolution of infection (Vera, 2017).
Promote lung and chest expansion, mobilize secretions and improve ventilation (Vera, 2017).
Goal met: The patient was able to identify and demonstrate proper breathing techniques to achieve optimal lung expansion by the end of the clinical shift.
3 Ineffective breathing pattern related to decreased right lung expansion as evidenced by changes in rate and depth of respirations (Vera, 2017).
Relax accessory muscles and increase the patient’s oxygen levels (Vera, 2017).
Early ambulation further breaks up and moves secretions that block the airways (Vera, 2017).
Goal met: The patient was able to identify and demonstrate proper breathing techniques to achieve optimal lung expansion by the end of the clinical shift..
4.Acute pain related to persistent cough as evidenced by pleuritic chest pain and restlessness (Vera, 2017).
Control chest discomfort during coughing episodes while enhancing the effectiveness of cough effort (Vera, 2017).
Medications allow for pain relief and the ability to deep breathe and cough. Analgesics help prevent peak periods of pain (Vera, 2017).
Goal met: The patient verbalized his pain was controlled by the end of the clinical shift. SW reported his pain as a 0/10 on a numeric scale ranging from 0-10 by the end of the clinical shift.
5. Activity intolerance related to general weakness on both lower extremities as evidenced by utilizing a walker to ambulate (Vera, 2017).
Bedrest helps decrease metabolic demands and conserve energy for healing (Vera, 2017).
Minimize exhaustion and help balance oxygen supply and demand (Vera, 2017).
Goal met: The patient demonstrated an increase in tolerance to range of motion activities without signs of shortness of breath and weakness in both lower extremities bilaterally.

Objective Data

Objective Data

Vital signs: 0900: HR: 88bpm, B/P: 117/54, RR: 16 respirations per min, T: 36.7 C, O2: 96% on room air, 1102: HR: 82bpm, B/P: 110/50, RR: 18 respirations per min, T: 36.6 C, O2: 98% on room air
Diagnostic tests: CT chest without contrast, X-ray chest 1 view, Ultrasound complete with bladder, EKG
- Patient was diagnosed with empyema.
- Patient has COPD exacerbation
- Patient’s urine output was 1180mL and patient’s intake was 245mL.

Client Information

Client Information

The 65-year-old Caucasian male presented to the emergency room on 03/03/2022 with shortness of breath. The patient has a history of acid reflux, atrial fibrillation, carotid stenosis, chronic obstructive pulmonary disease (copd), coronary arteriosclerosis, chronic heart disease, depression, eczema, gastroesophageal reflux disease (gerd), history of coronary artery bypass graft surgery, hypercholesterolemia, hypertension, hypertensive cardiovascular disease, obstructive sleep apnea, pulmonary nodule, sciatica, traumatic brain injury, type 2 diabetes mellitus. The patient’s surgical history includes arthroscopy right shoulder and rotator cuff repair (10/10/2019), colonoscopy with biopsy (07/19/2018), left transforaminal epidural steroid injection with fluoroscopy (09/20/2017). The patient is currently a tobacco smoker. S.W states he smokes two packs of cigarettes a day and has been smoking for about four years, starting in 2018. S.W. is a past alcohol user. S.W. states he used to drink a pack of beer a day starting in 2017 and stopped in 2019; the patient denies using any illicit and recreational drugs.

Nursing Interventions

Nursing Interventions

Promote maximum chest expansion of the lungs and facilitate easier breathing (Vera, 2017).
Patient has loud, high-pitched bronchial breath sounds (Vera, 2017).
Prevent exhaustion and reduce oxygen demands to facilitate the resolution of infection (Vera, 2017).
Promote lung and chest expansion, mobilize secretions and improve ventilation (Vera, 2017).
Relax accessory muscles and increase the patient’s oxygen levels (Vera, 2017).
Early ambulation further breaks up and moves secretions that block the airways (Vera, 2017).
Control chest discomfort during coughing episodes while enhancing the effectiveness of cough effort (Vera, 2017).
Medications allow for pain relief and the ability to deep breathe and cough. Analgesics help prevent peak periods of pain (Vera, 2017).
Bedrest helps decrease metabolic demands and conserve energy for healing (Vera, 2017).
Minimize exhaustion and help balance oxygen supply and demand (Vera, 2017).

BRADEN PRESSURE ULCER RISK ASSESSMENT

ACT TO PREVENT PRESSURE ULCERS

SENSORY PERCEPTION Ability to respond meaningfully to pressure -related discomfort	**NO IMPAIRMENT** Responds to verbal commands. Has no sensory deficit which would limit ability to feel or voice pain or discomfort.	**SLIGHTLY LIMITED** Responds to verbal commands but cannot always communicate discomfort or ask to be moved or turned OR has some sensory impairment which limits ability to feel pain or discomfort in 1 or 2 extremities.	**VERY LIMITED** Responds only to painful stimuli. Cannot communicate discomfort except by moaning or restlessness OR has a sensory impairment which limits the ability to feel pain or discomfort over 1/2 of body.	**COMPLETELY LIMITED** Unresponsive (does not moan, flinch, or grasp) to painful stimuli due to diminished level of consciousness or sedation OR limited ability to feel pain over most of body surface.	4 3 2 1 ADD TO TOTAL SCORE
MOISTURE Degree to which skin is exposed to moisture	**RARELY MOIST** Skin is usually dry; linen only requires changing at routine intervals.	**OCCASIONALLY MOIST** Skin is occasionally moist, requiring an extra linen change approximately once a day.	**OFTEN MOIST** Skin is often but not always moist. Linen must be changed at least once a shift.	**CONSTANTLY MOIST** Skin is kept moist almost constantly by perspiration urine, etc. Dampness is detected every time patient is moved or turned.	4 3 2 1 ADD TO TOTAL SCORE
ACTIVITY Degree of physical activity	**WALKS FREQUENTLY** Walks outside the room at least twice a day and inside room at least once every 2 hours during waking hours.	**WALKS OCCASIONALLY** Walks occasionally during day but for very short distances, with or without assistance. Spends majority of each shift in bed or chair.	**CHAIRFAST** Ability to walk severely limited or non existent. Cannot bear own weight and/or must be assisted into chair or wheelchair.	**BEDFAST** Confined to bed	4 3 2 1 ADD TO TOTAL SCORE
MOBILITY Ability to change and control body position	**NO LIMITATIONS** Makes major and frequent changes in position without assistance.	**SLIGHTLY LIMITED** Makes frequent though slight changes in body or extremity position independently.	**VERY LIMITED** Makes occasional slight changes in body extremity position but unable to make frequent or significant changes independently.	**COMPLETELY IMMOBILE** Does not make even slight changes in body or extremity position without assistance.	4 3 2 1 ADD TO TOTAL SCORE
NUTRITION Usual food intake pattern [1]NPO: Nothing by mouth. [2]IV: Intravenously. [3]TPN: Total parenteral nutrition.	**EXCELLENT** Eats most of every meal. Never refuses a meal. Usually eats a total of 4 or more servings of meat and dairy products. Occasionally eats between meals. Does not require supplementation.	**ADEQUATE** Eats over half of most meals. Eats a total of 4 servings of protein (meat, dairy products) each day. Occasionally will refuse a meal, but will usually take a supplement if offered, OR is on a tube feeding or TPN[3] regimen, which probably meets most of nutritional needs.	**PROBABLY INADEQUATE** Rarely eats a complete meal and generally eats only about 1/2 of any food offered. Protein intake includes only 3 servings or meat or dairy products per day. Occasionally will take a dietary supplement, OR receives less than optimum amount of liquid diet or tube feeding.	**VERY POOR** Never eats a complete meal. Rarely eats more than 1/3 of any food offered. Eats 2 servings or less of protein (meat or dairy products) per day. Takes fluids poorly. Does not take a liquid dietary supplement, OR is NPO[1] and/or maintained on clear liquids or IV[2] for more than 5 days.	4 3 2 1 ADD TO TOTAL SCORE
FRICTION & SHEAR		**NO APPARENT PROBLEM** Moves in bed and in chair independently and has sufficient muscle strength to lift up completely during move. Maintains good position in bed or chair at all times.	**POTENTIAL PROBLEM** Moves feebly or requires minimum assistance. During a move, skin probably slides to some extent against sheets, chair, restraints, or other devices. Maintains relatively good position in chair or bed most of the time but occasionally slides down.	**PROBLEM** Requires moderate to maximum assistance in moving. Complete lifting without sliding against sheets is impossible. Frequently slides down in bed or chair, requiring frequent repositioning with maximum assistance. Spasticity, contractures, or agitation leads to almost constant friction.	4 3 2 1 ADD TO TOTAL SCORE

RISK SCALE	NONE 23 22 21 20 19	MILD 18 17 16 15	MODERATE 14 13	HIGH 12 11 10 SEVERE 9 8 7 6
EQUIPMENT	No additional pressure support required	High specification foam mattress or static air overlay. Consider cushion for chair, Bedcradle/gooseneck		Dynamic air overlay, Dynamic air cushion Dynamic mattress Replacement or Low Air Loss
PRACTICE	• Educate Weight-shifting, Skin inspection • Evaluate on change of condition	• Reposition Weight-shifting, Skin inspection • Promote Activity • Manage individual risk factors nutrition; shear; friction; continence • Educate		ALL PLUS • Supplement with small positional shifts • Seating/posture assessment • Nutritional assessment • Educate

TOTAL SCORE
USE CHART ON LEFT TO DETERMINE YOUR PATIENTS RISK

15

Reference: "The Braden Scale of Predicting Pressure Sore Risk" [from] Braden, B et al. Nursing Research 1987 Vol 36 No 4 pp205-210.
Issued by Royal Adelaide Hospital Staff Development Department in conjunction with South Australian Quality Council Pressure Ulcer Prevention Practices - Integration of Evidence

Choose highest applicable score from each category		**Circle all that apply at the time of this fall**
History of falling	No	0
	Yes	25
Secondary diagnosis (More than one diagnosis)	No	0
	Yes	15
Ambulatory aid	None, on bedrest, uses W/C, or nurse assists	0
	Crutches, cane(s), walker	15
	Furniture	30
IV/Heparin lock or saline PIID	No	0
	Yes	20
Gait/transferring	Normal, on bedrest, immobile	0
	Weak (Uses touch for balance)	10
	Impaired (Unsteady, difficulty rising to stand)	20
Mental status	Oriented to own ability	0
	Forgets limitation	15
Total Morse Fall Scale score at the time of fall (high risk >50)		Total: 60