N441 Care Plan

Lakeview College of Nursing

Mallorie Mason

Demographics (3 points)

Date of Admission 2/6/2022	**Client Initials** J.S.	**Age** 64 years old	**Gender** Male
Race/Ethnicity Caucasian	**Occupation** Retired	**Marital Status** Married	**Allergies** NKA
Code Status Full Code	**Height** 173 cm	**Weight** 96.5 kg	

Medical History (5 Points)

Past Medical History: Hyperlipidemia, Hypertension, Coronary artery disease, atypical chest pain, myofascial pain, low back pain, lumbar radiculopathy

Past Surgical History: Two transforaminal lumbar epidural steroid injection with fluoroscopy, trigger point injections, and a vasectomy.

Family History: Mother: Heart attack
Grandparent: Diabetes mellitus and Heart attack

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

The patient states that they use alcohol one to two times per month. The patient uses oral tobacco. The patient does not smoke tobacco. The patient quite using oral tobacco in 2010 and started using again in 04/21/2021. The patient denies using other drugs.

Assistive Devices: The patient uses no assistive devices

Living Situation: The patient is independent and lives at home with his wife.

Education Level: The patient education level was not charted in the patient's chart. The chart did explain that the patient worked in a harsh environment with strenuous physical activity.

Admission Assessment

Chief Complaint (2 points): Shortness of breath

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

On 2/1/2022, the patient went to his doctor's office for shortness of breath. The patient denied a COVID-19 test at his doctor's office. On 2/5/2022, the patient arrived at the emergency room by

ambulance. The patient was extremely dyspneic. The patient's oxygen saturation was 64%, and the EMS could not get the patient's oxygen saturation above 70% with the BiPap. The patient denied any pain in the emergency room. The patient denied having a fever, but the patient did have a fever when coming into the emergency room. It was hard to receive a history or information from the patient due to his condition arriving at the emergency room. A COVID-19 test was performed in the emergency room, and the patient tested positive for COVID-19.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): COVID-19

Secondary Diagnosis (if applicable): Pneumonia

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

The pathogen responsible for the atypical infection outbreak in 2019 was a coronavirus and belonged to the Coronaviridae family (Parasher, 2021). The virus was named severe acute respiratory syndrome coronavirus –2 (SARS-CoV-2), and for a simpler term, coronavirus disease 2019 (COVID-19). The virus is transmitted through respiratory droplets and aerosols from person to person. Once the virus enters the body, the virus will bind to hos receptors and enter host cells through endocytosis or membrane fusion. ACE-2 is identified as a functional receptor for SARS-CoV-2, and ACE-2 is found and highly expressed on the pulmonary epithelial cells (Parasher, 2021).

COVID-19 signs and symptoms may appear two to 14 days after exposure. The time after exposure and before symptoms is called the incubation period, and a person can still spread COVID-19 before their symptoms start (Mayo Clinic, 2022). Common signs and symptoms of

COVID-19 include cough, fever, and tiredness. Other signs and symptoms of COVID-19 include shortness of breath, difficulty breathing, headache, chest pain, chills, muscle aches, and sore throat (Mayo Clinic, 2022). People with existing medical conditions are at higher risk of serious illness from COVID-19. Medical conditions include heart failure, coronary artery disease, cardiomyopathy, chronic obstructive pulmonary disease, obesity, diabetes mellitus, hypertension, and chronic lung diseases (Mayo Clinic, 2022). The patient has several medical conditions that place him a risk for severe illness from COVID-19, including coronary artery disease and hypertension. Complications that can stem from COVID-19 include pneumonia, trouble breathing, blood clots, severe organ failure, heart problems, acute respiratory distress syndrome, acute kidney injury, viral and bacterial infections (Mayo Clinic, 2022). The patient developed pneumonia, and was identify on 2/5/2022 in the chest x-ray.

A mild case oxygen saturation level will be 94%- 97% on room air. In moderate cases, oxygen saturation levels will be 90%-94% on room air. In severe cases, oxygen saturation will be less than 90% (Parasher, 2021). The patient oxygen saturation level was at 64% in the emergency room. A COVID-19 patient, if severe enough, may need intubation. COVID-19 patients will be tachycardia, tachypnea, and hypotensive and require vasopressors, hemodynamically unstable, use of accessory muscles, high oxygen demand, and may have a fever (Parasher, 2021). The patient was tachycardia, tachypnea, use of accessory muscles, hypotension, fever, and needed a high oxygen demand in the emergency room. Patients may have elevated lactic acid levels due to sepsis/septic shock.

The diagnostic test for COVID-19 is a molecular test (RT-PCR). Samples are collected from the upper respiratory tract by nasopharyngeal and oropharyngeal swabs. A blood test may show decreased white blood cell and lymphocyte counts, indicating a worsening condition (Parasher,

2021). The patient lymphocyte count was decreased on today's value. Increase lactic acid, c reactive protein, creatine kinase, aspartate aminotransferase, and alanine aminotransferase (Parasher, 2021). The patient had increased lactic acid, aspartate aminotransferase, and alanine amino-transferase. Increased d-dimmer and neutrophils are seen in some patients. Coagulation abnormalities are sometimes observed, such as increased prothrombin time and international normalized ratio (Parasher, 2021). The patient had elevated d-dimer test, coagulation studies, and multiple venous duplex ultrasounds, showing no evidence of deep vein thrombosis. A chest x-ray is performed and can show bilateral multifocal opacities (Parasher 2021). The patient had a chest x-ray completed in the emergency department that showed extensive diffuse bilateral airspace opacities consistent with pneumonia. A computer tomography (CT) is used to diagnose COVID pneumonia. The patient received a chest CT and showed a slight improvement in extensive bilateral opacities.

Management of COVID-19 depends on the severity of the case. A simple facemask or nasal cannula is used if the patient is a mild case. For moderate cases, high flow nasal oxygen is recommended, and for severe cases, the patient will have to be intubated (Parasher, 2021). A prone position for 16-18 hours per day is recommended for severe cases with acute respiratory syndrome distress, and high positive end-expiratory pressure is suggested (Parasher, 2021). The patient was intubated but received a tracheostomy on 2/16/2022. Venous thrombosis prophylaxis will be given if the patient stays at the hospital for an extended period. The venous thrombosis is typically Lovenox. The patient received Lovenox daily as venous thrombosis prophylaxis. Antibiotics are used if the patient has developed pneumonia or secondary infections. The patient is receiving the antibiotic Zosyn. Corticosteroids are used; common medications are

Dexamethasone and Methylprednisolone. Antiviral drugs such as Remdesivir, Oseltamivir, and Favipiravir (Parasher, 2021).

Pathophysiology References (2) (APA):

Mayo Clinic. (2022). *Coronavirus disease 2019 (COVID-19).* https://www.mayoclinic.org/diseases-conditions/coronavirus/symptoms-causes/syc-20479963

Parasher, A. (2021). COVID-19: Current understanding of its pathophysiology, clinical presentation and treatment. *Postgraduate Medical Journal, 97,* 312-320.

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	4.4-5.8	3.94	3.27	Low RBC can indicate a problem with the kidneys. A problem with the kidneys can cause a decrease in erythropoietin which causes the RBC to be low (Hinkle & Cheever, 2018). The patient can also be malnourished or deficiency in vitamins B12 or B6, and deficiency in iron.
Hgb	11.3-15.2	11.5	9.2	Hgb normally follows the trend of RBC. Hgb is low because of a decrease in erythropoietin from the kidneys, malnutrition, or deficiency in vitamins or iron which can cause anemia (Hinkle & Cheever, 2018).
Hct	33.2-45.3	33.1	28.2	If Hgb is low normal hematocrit is low. This can be a cause from decrease erythropoietin by the kidneys, malnourishment, or anemias (Hinkle & Cheever, 2018).
Platelets	149-393	158	391	
WBC	4.0-11.7	8.1	12.0	The patient WBC is high due to an infection. White blood cells fight infection (Hinkle & Cheever, 2018). The patient has pneumonia. They also did several CT scans to determine if there was another underlying infection.
Neutrophils	45.3-79.0	80.3	80.9	Neutrophils are elevated when there is an infection and specifically a bacterial infection

				(Hinkle & Cheever, 2018). The patient has pneumonia.
Lymphocytes	11.8-45.9	89.6	6.5	On admission the lymphocyte count was high due to an infection in the body. Lymphocytes are the principal cells of the immune system, produce antibodies, and identify foreign organism (Hinkle & Cheever, 2018). Low lymphocyte count means that it is harder for the body to fight off infection (Hinkle & Cheever, 2018). The patient has pneumonia.
Monocytes	4.4-12.0	6	7.9	
Eosinophils	0.0-6.3	4.3	3.6	
Bands	0-10	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
Na-	136-145	138	142	
K+	3.5-5.1	4.4	4.1	
Cl-	98-107	109	103	Increased chloride levels can be caused by the loss of bicarbonate ions and metabolic acidosis (Hinkle & Cheever, 2018).
CO2	21-31	23	31	
Glucose	74-109	179	159	Glucose levels can rise shortly after eating a meal. The patient takes a steroid medication at home, and steroid medications make glucose rise (Hinkle & Cheever, 2018).
BUN	7-25	27	32	Elevated Bun indicates reduced renal perfusion and decreased cardiac output, or fluid volume deficit as a result of diuretic therapy or dehydration (Hinkle & Cheever, 2018). The patient creatinine is normal but BUN is elevated this is a prime indicator that the patient has a fluid volume deficit (Hinkle & Cheever, 2018). The patient is receiving a diuretic.
Creatinine	0.70-1.3	1.10	1.03	
Albumin	3.5-5.2	2.7	2.6	Albumin is low due to malnutrition, shock, or inflammation. The patient may not be getting enough or absorbing enough nutrients (Van Leeuwen & Bladh, 2021).

Calcium	8.6-10.3	7.4	7.9	Low calcium levels may indicate the patient is malnourished. A subcutaneous infection and peritonitis lower levels of calcium (Hinkle & Cheever, 2018). The patient did receive a CT scan of abdomen and pelvis looking for an intrabdominal infection or abscess. The patient has low albumin levels which cause low calcium levels. Also, the patient is taking a loop diuretic, proton pump inhibitor at the hospital and a steroid at home all three of those medications decrease calcium levels (Hinkle & Cheever, 2018).
Mag	1.8-3.0	3.0	2.5	
Phosphate	2.4-4.5	N/A	N/A	
Bilirubin	0.3-1.0	0.4	0.5	
Alk Phos	34-104	58	57	
AST	13-39	48	31	AST is present in tissues that have high metabolic activity and may be increased if there is damage or death to tissues or organs of the heart, liver, skeletal muscle, and kidney (Hinkle & Cheever, 20218).
ALT	7-52	99	50	ALT is increased primarily because of liver disorders and may be used to monitor the course of hepatitis or cirrhosis or the effects of treatment that may be toxic to the liver (Hinkle & Cheever, 2018).
Amylase	60-100	N/A	N/A	
Lipase	0-160	N/A	N/A	
Lactic Acid	0.5-2.2	2.2-3.0	N/A	An increase is caused by insufficient oxygen in tissues and decreased blood flow. Severe respiratory disease with extreme work of breathing activates anaerobic metabolism causing increase lactic acid levels (Van Leeuwen & Bladh, 2021). The patient was in severe respiratory depression arriving to the hospital.
Troponin	< 0.03	0.272-0.303	N/A	An increase in the level of troponin can be detected within a few hours during an acute myocardial infarction. Troponin can also rise during inflammation and other forms of mechanical stress of the myocardium including sepsis, heart failure, and respiratory failure (Hinkle and Cheever, 2018). This patient had a NSTEMI.

CK-MB	30-135	N/A	N/A	
Total CK	22-198	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	2-3	N/A	N/A	
PT	10-12	N/A	N/A	
PTT	30-45	N/A	N/A	
D-Dimer	< 0.05	4.68	1.58	An increase in d-dimmer can indicate an arterial or venous thrombosis, deep vein thrombosis, thrombolytic or fibrinolytic therapy (Van Leeuwen & Bladh, 2021).
BNP	<125	N/A	N/A	
HDL	>60	N/A	N/A	
LDL	< 130	446	N/A	LDL is the primary transporter of cholesterol and triglycerides into the cell. One harmful effect of LDL is the deposition of these substances in the walls of arterial vessels (Hinkle & Cheever, 2018). That is why it is considered the "bad" cholesterol because it can build up. This shows the patient has very high levels.
Cholesterol	< 200	N/A	N/A	
Triglycerides	< 150	275	N/A	Triglyceride levels are increased after meals and with stress (Hinkle & Cheever, 2018). The patient also has a history of hyperlipidemia.
Hgb A1c	< 5.7	N/A	N/A	
TSH	0.5-5.0	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	Light Yellow Clear	Colorless Clear	
pH	5.0-8.0	5.0	7.0	
Specific Gravity	1.005-1.034	1.019	1.020	
Glucose	Negative	Normal	Normal	
Protein	Negative	Negative	Negative	
Ketones	Negative	Negative	Negative	
WBC	<=5	1	<1	
RBC	0-3	18	2	High RBC in the urine can indicate the patient has an infection or irritation of the tissue in his urinary tract (Hinkle & Cheever, 2018).
Leukoesterase	Negative	Negative	Negative	

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	7.32	7.53	The pH being low on the admission value means the pH of the blood is acidic, and on today value it is high so that means it is alkalosis. The pH can be elevated due to hyperventilation (Hinkle & Cheever, 2018).
PaO2	10.3-23.2	50.1-70	90	High levels of PaO2 can be caused by hyperventilation (Hinkle & Cheever, 2018).
PaCO2	35-45	43.8	38.7	
HCO3	22-26	20.4	32.8	On admission the patient ABG should the patient was metabolic acidosis and on today's value it shows the patient is metabolic alkalosis. Metabolic alkalosis can occur with long term diuretic therapy

				which the patient is taking furosemide (Hinkle & Cheever, 2018).
SaO2	95-100	81.8-94.2	98.5	The patient SaO2 was decreased on admission due to hypoxia (Hinkle & Cheever, 2018).

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	Negative	N/A	
Blood Culture	Negative	Negative	N/A	
Sputum Culture	Negative	Negative	N/A	The findings said negative on the chart but then it said click results and the results said many pseudomonas aeruginosa.
Stool Culture	Negative	N/A	N/A	

Lab Correlations Reference (1) (APA):

Hinkle, J.L., & Cheever, K. H. (2018). *Brunner & suddarth's textbook of medical-surgical Nursing* (14t:h ed.). Wolters Kluwer Health Lippincott Williams & Wilkins

Van Leeuwen, A. M., & Bladh, M. L. (2021). *Davis's comprehensive manual of laboratory and diagnostic tests with nursing implications* (9 th ed.). F.A. Davis.

Diagnostic Imaging

All Other Diagnostic Tests (5 points):

An EKG was performed on 2/5/2022. The findings included sinus tachycardia and an anterior infarct.

A chest x-ray was performed on 2/5/2022. The findings concluded extensive diffuse bilateral airspace opacites consistent with pneumonia. The impression was bilateral pneumonia.

A CT pulmonary angiogram was performed on 2/6/2022. The impression was bilateral pulmonary infiltrates raise differential consideration of infectious/inflammatory such as viral pneumonia. No gross embolic finding in main pulmonary artery.

A chest x-ray was performed 2/6/2022-2/22/2022. The findings of each result of the chest x-rays concluded the position of the ET tube and the position above the carina and monitoring for worsening or improvement in the bilateral lung infiltrates. All of the chest-x ray found no pneumothorax or pleural effusion.

A US venous duplex lower extremity bilateral ultrasound was performed on 2/6/2022 and 2/16/2022. The findings showed no evidence of a DVT, normal flow and compressibility.

On 2/7/2022 and 2/16/2022 a venous duplex scan was performed on the upper bilateral extremities. The findings concluded no evidence of a DVT.

On 2/8/2022 an echocardiogram was performed. The findings included an ejection fraction rate of 50-55%. Right atrium dilated, right ventricle dilated, and trace amount tricuspid regurgitation.

A CT of abdomen and pelvis was performed on 2/16/2022 and the findings showed no acute intraabdominal process.

A chest CT w/ contrast was performed on 2/16/2022 was performed. The findings showed slight improvement to extensive bilateral opacites and no pulmonary embolism or pneumothorax.

On 2/18/2022 a CT of the neck soft tissue with and without contrast. The findings showed a large hematoma or complex fluid filling upper airway and the tracheostomy position appropriately.

On 2/20/2022 a CT of the head/brain without contrast was performed. The findings concluded no acute intracranial abnormality.

On 2/22/2022 a US venous duplex ultrasound on upper extremities was performed and the findings included no evidence of a DVT, but did find a short-segment basilic vein thrombosis.

Diagnostic Test Correlation (5 points):

An EKG is performed to evaluate the electrical impulses generated by the heart during the cardiac cycle (Van Leeuwen & Bladh, 2021). The patient's EKG was performed upon his entrance into the emergency room.

A chest x-ray will assist in the evaluation of cardiac, respiratory, and skeletal structures of the lung cavity (Van Leeuwen & Bladh, 2021). The chest x-ray on 2/5/2022 was performed because the patient tested positive for COVID-19 and hypoxia. The rest of the chest-x rays the patient received was because of the patient being intubated and checking the ET tube placement.

A CT pulmonary angiogram is now used routinely to diagnose a pulmonary embolism (Hinkle & Cheever, 2018). The CT pulmonary angiogram was performed because the patient was experiencing shortness of breath, and also to rule out a pulmonary embolism.

A duplex ultrasound uses grayscale imaging of the tissue, organs, and blood vessels. Assess blood flow, evaluated flow of the distal vessels, and locate the disease (Hinkle & Cheever, 2018). The venous duplex ultrasound performed on 2/6/2022 and 2/7/2022 was because the patient's d-dimmer was elevated, they were diagnosed with COVID, and hypoxia. 2/16/2022 venous duplex ultrasound was to rule out a DVT because the patient has COVID and is hypoxic. The venous duplex ultrasound performed on 2/22/2022 was because of the patient right arm being swollen.

An echocardiogram is a noninvasive ultrasound test that measures ejection fraction, examines the size, shape, and motion of cardiac structures (Hinkle & Cheever, 2018). The patient echocardiogram was performed because he was COVID positive and had high troponin levels.

A computer tomography (CT) is an imaging method. The images produced provide a cross sectional view and can distinguish between fine tissue and density (Hinkle & Cheever, 2018). The CT of the abdomen and pelvis was performed because of unclear etiology, septic shock, looking for an intraabdominal soured of infection like an abscess. The CT of the chest again was for septic shock and finding the cause of infection. The CT of the neck was performed because the patient neck was swollen.

The CT of the brain/head visualizes and assesses internal organs/structures of the head and brain (Van Leeuwen & Bladh, 2021). The CT of the brain/head was performed because this patient had a NSTEMI.

Diagnostic Test Reference (1) (APA):

Hinkle, J.L., & Cheever, K. H. (2018). *Brunner & suddarth's textbook of medical-surgical Nursing* (14t:h ed.). Wolters Kluwer Health Lippincott Williams & Wilkins

Van Leeuwen, A. M., & Bladh, M. L. (2021). *Davis's comprehensive manual of laboratory and diagnostic tests with nursing implications* (9 th ed.). F.A. Davis.

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

Home Medications (5 required)

Brand/Generic	Amlodipine Norvasc	Aspirin Bayer	Atorvastatin Lipitor	Metoprolol Lopressor	Nitroglycerin/ Nitrostat
Dose	2.5 mg	81 mg	80 mg	50 mg	0.4mg
Frequency	Daily	Daily	Daily	Daily	PRN
Route	Oral	Oral	Oral	Oral	Sublingual
Classification	Calcium channel blocker/ antihypertensive	Salicylate/ NSAID	HMG-CoA reductase inhibitor/ Antihyperlipidemic	Beta 1-adrenergic blocker/ Antihypertensive	Nitrate/ Antianginal
Mechanism of Action	Amlodipine decreases intracellular calcium level, inhibiting smooth muscle cell contractions and relaxing coronary and	Inhibits platelet aggregation by interfering with production of thromboxan	Inhibits HMG-CoA reductase and cholesterol synthesis in the liver and increases the number of LDL receptor which reduces plasma cholesterol	Metoprolol reduces blood pressure by decreasing renal release of renin (Jones & Bartlett, 2020).	Nitroglycerin reduces preload and afterload, decreasing myocardial workload and oxygen demand. It

	vascular smooth muscles, decreasing peripheral vascular resistance, and reducing systolic and diastolic blood pressure (Jones & Bartlett, 2020).	e A2. Aspirin acts on the heat-regulating center in the hypothalamus and causes peripheral vasodilation, diaphoresis, and heat loss (Jones & Bartlett, 2020).	and lipoprotein levels (Jones & Bartlett, 2020).		will dilate coronary arteries, increasing blood flow to ischemic myocardial tissue and provides analgesic effects (Jones & Bartlett, 2020).
Reason Client Taking	Hypertension	Coronary Artery Disease	Hyperlipemia	Hypertension	Atypical Chest Pain
Contraindications (2)	1)Hypersensitivity to Amlodipine 2)Severe hypotension	1)Active Bleeding 2)Coagulation disorders	1)Active hepatic disease 2)Hypersensitivity to atorvastatin	1)Pulse less than 45 beats/ minute 2) Hypersensitivity to metoprolol	1) Hypersensitivity to nitrates. 2)Angle-closure glaucoma
Side Effects/Adverse Reactions (2)	1) Hypotension 2) Arrhythmias	1) Hepatoxicity 2) Prolonged bleeding time	1)Thrombocytopenia 2)Hypoglycemia	1)Bradycardia 2)Bronchospasm	1) Headache 2)Blurred vision
Nursing Considerations (2)	1)Monitor blood pressure while adjusting dosage, especially in patients with heart failure (Jones & Bartlett, 2020). 2)Assess patient for chest pain when starting or increasing the dose of amlodipine because worsening of angina or acute myocardial infarction can occur (Jones & Bartlett, 2020).	1)Use immediate-release aspirin when a rapid onset of action is required such as in the acute treatment of an MI (Jones & Bartlett, 2020). 2) Assess for tinnitus. Tinnitus is a reaction when aspirin exceeds	1)Monitor diabetic patients' blood glucose levels because atorvastatin can affect blood glucose control (Jones & Bartlett, 2020). 2) Patients should follow a cholesterol-lowering diet before and during therapy (Jones & Bartlett, 2020).	1) Monitor glucose levels in a patient with diabetes because metoprolol can mask evidence of hypoglycemia (Jones & Bartlett, 2020). 2) When the drug is discontinued, tapper the dose over one to two weeks and do not abruptly stop the dosage (Jones & Bartlett, 2020).	1)Place sublingual tablet under the patient's tongue and make sure it dissolves completely (Jones & Bartlett, 2020). 2) Place the patient in an upright sitting position, if possible, when administering sublingual powder. Do not rinse patient mouth

		maximum dosage (Jones & Bartlett, 2020).			or spit for five minutes (Jones & Bartlett, 2020).
Key Nursing Assessment(s)/Lab (s) Prior to Administration	The nurse should monitor blood pressure and assess for chest pain frequently. Patients with severe coronary artery disease or heart failure monitor for pulmonary edema and peripheral edema (Jones & Bartlett, 2020).	Assess renal and liver function test. Also assess the patient's platelet count, PT, and PTT times. (Jones & Bartlett, 2020).	Assess lipid levels two to four weeks after therapy starts to make certain lipid levels are in the desired range and the dose does not need adjusting —monitor liver function tests before medication therapy (Jones & Bartlett, 2020).	Assess the patient's blood pressure and pulse before administering the medication. Hold the dosage if the patient's pulse is less than 60 beats/minute (Jones & Bartlett, 2020).	The nurse should assess the patient pain before and after each tablet of nitroglycerin. Determining the pain, the patient is experiencing will help the nurse to know if the patient needs another tablet or not (Jones & Bartlett, 2020).
Client Teaching needs (2)	1) Educate the patient to take amlodipine with food to reduce GI upset. 2) Educate the patient to regular check/have their blood pressure checked to monitor for hypotension.	1) Educate the patient to monitor for signs and symptoms of bleeding such as bloody or tarry stools, coughing up blood, or coffee ground emesis. 2)Educate the patient to take aspirin with food or after meals and avoid taking on an empty stomach to reduce GI upset.	1)Educate the patient that atorvastatin does not replace a low cholesterol diet. 2)Educate the patient to avoid alcohol.	1) Educate the patient on how to take their blood pressure and pulse. Notify the provider if the pulse is less than 60 beats/ minute. 2)Educate the patient to take the medication at the same time every day.	1)Educate the patient on how to administer nitroglycerin. The patient can take up to 3 doses to relieve their pain 5 minutes apart. If pain still is present after the third doses and after 15 minutes go to the emergency room and do not take another dose. 2)Educate the patient to carry sublingual tablets in original brown bottle in a place that will not be affected by

					heat. Discard and replace sublingual tablets after 6 months.

Hospital Medications (5 required)

Brand/Generic	Enoxaparin Lovenox	Furosemide Lasix	Lansoprazole Prevacid	Piperacillin/ Tazobactam Zosyn	Cefepime
Dose	40 mg	40 mg	30 mg	4.5 g	2,000 mg
Frequency	Daily	Daily	Daily	Every 6 hours	Every 8 hours
Route	Sub-Q injection	IV push	Oral	Piggyback/IV injectable	Piggyback / IV injectable
Classification	Low-molecular-weight heparin/ Anticoagulant	Loop diuretic Antihypertensive, diuretic	Proton pump inhibitor/ Antiulcer	Penicillin's/ Antibiotic	Fourth-generation cephalosporin/ Antibiotic
Mechanism of Action	Potentiates the action of antithrombin III. Enoxaparin binds with and inactivate clotting factors. (Jones & Bartlett, 2020).	Inhibits sodium and chloride reabsorption in the proximal and distal tubules and the ascending loop of Henle (Jones & Bartlett, 2020).	Binds to and inactivates the proton pump in gastric parietal cells which will block the final step of gastric acid production (Jones & Bartlett, 2020).	Inhibits bacterial cell wall synthesis. Inhibits the effects on susceptible bacteria in the final stage of the cross-linking process by binding with and inactivating penicillin-binding proteins. This causes bacterial cell lysis and death (Jones & Bartlett, 2020).	Interferes with bacterial wall synthesis by stopping the final step in cross-linking of peptidoglycan. Without peptidoglycan bacterial cells will rupture and die (Jones & Bartlett, 2020).
Reason Client Taking	VTE prophylaxis	Edema, Fluid retention	Prophylaxis	Pneumonia	Pneumonia
Contraindications (2)	1)Active bleeding 2)History of heparin induced thrombocytopenia	1) Hypersensitivity to furosemide 2) Anuria	1) Hypersensitivity to Lansoprazole 2) Concurrent therapy with rilpivirine	1)Hypersensitivity to penicillin's 2) Infection caused by penicillinase-producing organism	1)Hypersensitivity to cefepime 2)Impaired renal function

			containing products		
Side Effects/Adverse Reactions (2)	1)Increased bleeding 2)Pruritus	1)Hypokalemia 2)Arrhythmias	1)Decreased hemoglobin 2)hemolytic anemia	1)Anaphylaxis 2)Laryngeal stridor	1)Thrombocytopenia 2) Unusual bleeding
Nursing Considerations (2)	1)Do not give IM injection only give subcutaneous in the abdomen two inches away from the umbilicus (Jones & Bartlett, 2020). 2)Rotate injection sites and do not expel air bubble in the syringe (Jones & Bartlett, 2020).	1)Understand that dosing is to be given in the morning once a day, so the patient's sleep will not be interrupted by the urge to urinate (Jones & Bartlett, 2020). 2) Monitor the patient for electrolyte imbalances (Jones & Bartlett, 2020).	1)If the medication is in capsule for the nurse can open the capsule and sprinkle granules one applesauce, pudding, or cottage cheese (Jones & Bartlett, 2020). 2) The nurse can put granules into 2 ounces of juice but the patient needs to drink immediately (Jones & Bartlett, 2020).	1)Monitor the patient for anaphylaxis. If an anaphylactic reaction occurs immediately notify the provider and provide immediate treatment such as airway management, epinephrine, oxygen, and corticosteroids (Jones & Bartlett, 2020). 2)Monitor patients for diarrhea which may be caused by pseudomembranous colitis caused by clostridium difficile (Jones & Bartlett, 2020).	1)Obtain culture and sensitivity test if ordered before giving medications (Jones & Bartlett, 2020). 2) Assess for signs of superinfection like cough, changes in sputum, diarrhea, fever, redness, rash, and swelling (Jones & Bartlett, 2020).
Key Nursing Assessment(s)/Lab(s) Prior to Administration	Assess patient for signs and symptoms of bleeding. Monitor the patient's PT, PTT, and INR times (Jones and Bartlett, 2020).	Assess the patient weight before and during furosemide therapy: Monitor blood pressure, BUN, creatinine, and electrolytes specifically potassium (Jones & Bartlett, 2020).	Monitor the patient for bone fractures, hypomagnesemia, and renal function test if the patient is taking lansoprazole for a long period of time (Jones & Bartlett, 2020).	Monitor renal and liver function test and CBC for long-term or high dose therapy (Jones & Bartlett, 2020).	Monitor BUN and serum creatine levels for early signs of nephrotoxicity. Also monitor intake and output because decreasing output can indicate nephrotoxicity (Jones & Bartlett, 2020).
Client Teaching needs (2)	1)Instruct the client to report any signs of bleeding 2)Educate the client on how to give an enoxaparin injection.	1)Educate the patient on the importance of weight, diet, and sodium control. 2) Educate the patient to eat foods high in potassium to avoid hypokalemia.	1)Educate the patient to take the medication exactly as prescribed usually before a meal. 2) Educate the patient that they can take antiacids with	1) Educate the patient to report any severe diarrhea that has lasted longer than three days. Even 2 months after stopping the therapy watery or bloody stool could occur. 2) Educate the patient over signs and symptoms of an	1) Educate the patient to immediately report severe diarrhea. Even if it occurs 2 or months after last taken dose. 2) Educate the patient and family to seek emergency care for any changes in mental

			lansoprazole	allergic reaction.	status, seizure, or difficulty speaking.

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:**	The patient is alert and responsive. The patient is oriented to person, place, time, and situation The patient did not appear in distress The patient's appearance was appropriate and adequality clothed.
INTEGUMENTARY: **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score: 9** **Drains present: Y☐ N ☒** **Type:**	The patient skin color is usual for ethnicity. The character of the skin is moist. The patient was diaphoresis. Visible sweat was noted on the patient's forehead. The temperature is warm. The patient's skin turgor was edematous. No rashes No bruises No wounds. The patient did have a blister on his right knee, and his coccyx was red and blanched. Braden Score: 9 No drains present
HEENT: **Head/Neck:** **Ears:** **Eyes:** **Nose:**	The patient's head is symmetrical. There is no deformities or hematomas. The patient neck was midline with no tracheal deviation. The patient had a tracheostomy. The patient ears are symmetrical. The patient ears showed no signs or redness or discharge, and a pearly grey tympanic membrane was seen.

Teeth:	The patient's eyes were symmetrical. The sclera of the patient eyes was white with no conjunctiva or drainage. The patient pupils' size was 5mm, and brisk reaction to light. The patient's nose is midline to the face. The patient's nose was patent. No polyps, turbinate, deviated septum was noted. The patient appeared to have all of his teeth. The patient's mucosa membrane looked a little dry due to the patient having his mouth open. The patient lips had dry skin all over them.
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:**	The heart rhythm is a normal sinus rhythm. The patient's heart sounds are S1 and S2 The bilateral radial pulses are 3+ normal. The bilateral dorsalis pedis pulses are 3 + normal Capillary refill in the upper and lower extremities was less than 3 seconds No neck vein distention Edema is present. Edema is located in both of the patient's hands and legs. The patient's right hand is more swollen than the left. The patient has +3 pitting edema in both legs.
RESPIRATORY: **Accessory muscle use: Y☐ N ☒** **Breath Sounds: Location, character** **ET Tube:** **Size of tube:** Tracheostomy 6 shiley **Placement (cm to lip):** N/A **Respiration rate:** 20 breaths per minute **FiO2:** 40% **Total volume (TV):** 390 **PEEP:** 8 **VAP prevention measures:**	No use of accessory muscle The patient's respiratory rate was 28 breaths per minute, so the patient is tachypneic. The respiratory pattern was regular. The patient's breath sounds were auscultated anterior and posterior. Coarse breath sounds were heard throughout all lobes. Lung aeration was equal. The patient did not have an ET tube, and the patient received their tracheostomy on 2/16/2022. The size of the tracheostomy is a six shiley. One major thing a nurse can do to prevent ventilator-acquired pneumonia (VAP) is to practice good hygiene. The nurse should brush the patient teeth every 12 hours and perform oral care every 2 hours. When the nurse suctions the patient ET tube or tracheostomy, she should use the line that is in the sterile wrapping.
GASTROINTESTINAL: **Diet at home:** **Current Diet** **Height:** **Weight:** **Auscultation Bowel sounds:** **Last BM:** **Palpation: Pain, Mass etc.:** **Inspection:** **Distention:** **Incisions:** **Scars:**	The patient's diet at home is regular. The patient had a PEG tube placed on 2/17/2022. The patient receives Glucerna tube feeds currently. Height: 173 cm Weight: 96.5 kg Active bowel sounds in all four quadrants Last BM: 2/22/2022 There were no masses felt upon palpitation. The patient was asked if he felt pain upon palpitation, and he shook his head no. No distention The patient had a PEG tube placed in the right upper quadrant

Drains: **Wounds:** **Ostomy: Y ☐ N ☒** **Nasogastric: Y ☐ N ☒** **Size:** **Feeding tubes/PEG tube Y ☒ N ☐** **Type: PEF tube**	No scars No drains No wounds No ostomy No nasogastric tube Yes, the patient had a PEG tube placed on 2/17/2022.
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:**	The patient's urine color was an amber color. The patient's urine was clear. The patient's urinary output was 990 mL Unable to assess pain with urination due to the patient having a catheter in place. The patient has an indwelling catheter. The size of the catheter is 16 French. One of the first ways to prevent catheter-associated urinary tract infections is for the nurses to perform/ensure sterile technique compliance during the catheter insertion. Another way is making sure catheter care is being performed daily. The nurse should ensure the bag is below the bladder so the urine is not going back up.
MUSCULOSKELETAL: **Neurovascular status:** **ROM:** **Supportive devices:** **Strength:** **ADL Assistance: Y☒ N ☐** **Fall Risk: Y ☐ N☐** **Fall Score: 55** **Activity/Mobility Status:** **Independent (up ad lib) ☐** **Needs assistance with equipment ☐** **Needs support to stand and walk☐**	The patient's nail beds color was appropriate for ethnicity and blanched when the nail bed was pressed on. The patient's skin is usual for ethnicity, dry and intact. The patient does not perform active range of motion. The patient does not use any supportive devices but does have SCDs on, and the nurse and I make sure the patients heal were floating. The patient is very weak. The patient was able to squeeze my hands but not hard, and he could barely wiggle his toes. The patient needs help with ADL like oral care, bathing, and getting dressed. Fall Score: 55 The patient is not up ad-lib and has a very low activity status due to being weak and being mechanically ventilated. The patient did not need support standing or walking during the shift because he stayed in bed. The patient needs help turning himself.
NEUROLOGICAL: **MAEW: Y ☐ N☒** **PERLA: Y ☐ N☐** **Strength Equal: Y ☐ N ☐ if no -** **Legs ☐ Arms ☐ Both ☐** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	The patient does not move all extremities well. The patient's pupils are equal round and reactive to light and accommodation. The patient's strength is equal in both arms and legs, but again the patient is very weak. The patient is oriented to person, time, place, and situation. The patient's cognition is normal. The patient cannot talk due to the tracheostomy cuff. The patient is awake and alert. The patient shook his head yes and no to all our questions.

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):**	The patient is married and lives at home with his wife. The patient wife does come and visit him at the hospital along with other family members as well.

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

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0745	93 bpm	123/62 mmHg	26 breaths per minute	38.3 C	97 %
1100	93 bpm	112/61 mmHg	28 breaths per minute	37.6 C	97%

Vital Sign Trends/Correlation: The patient respiratory rate is high, and the patient is tachypneic. The patient oxygen saturation is stable. The patient's heart rate is a normal rate and is stable. The patient blood pressure is stable. The patient is running a fever, the nurse and I put a cool rag over the patient's forehead because it was not time yet to give him medicine.

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
0745	Numeric	N/A	0/10	N/A	No interventions were performed

1100	Numeric	N/A	0/10	N/A	No interventions were performed

IV Assessment (2 Points)

IV Assessment	**Fluid Type/Rate or Saline Lock**
Size of IV: N/A **Location of IV:** N/A **Date on IV:** N/A **Patency of IV:** N/A **Signs of erythema, drainage, etc.:** N/A **IV dressing assessment:** N/A	N/A. The patient had no peripheral IV to assess.
Other Lines (PICC, Port, central line, etc.)	
Type: PICC line **Size:** 5 French **Location:** Right upper arm **Date of insertion:** 2/6/2022 **Patency:** The PICC line flushed well and good blood return. **Signs of erythema, drainage, etc.:** No signs of erythema, drainage, phlebitis, or infiltration **Dressing assessment:** The dressing is dry and intact. **Date on dressing:** 2/20/2022 **CUROS caps in place: Y ☒ N ☐** **CLABSI prevention measures:**	One primary prevention for preventing CLABSI is maintaining an aseptic technique when inserting the central line. The nurse needs to clean each hub before using it with an alcohol wipe for 15 seconds, flush with normal saline, and then place a CUROS cap on when central line if it is saline locked. The nurse should always wash her hands before handling the ports or the central line. The dressing of a central line should be changed every seven days. The nurse should use a sterile technique when changing the central line dressing.

Intake and Output (2 points)

Intake (in mL)	**Output (in mL)**
608 mL Glucerna tube feeds	990 mL Urine

Nursing Care

Summary of Care (2 points)

Overview of care: The nurse and I administered the patient morning medications and completed a head-to-toe assessment. Oral care and suctioning of the patient's tracheostomy was performed. The patient was running a fever, but we could not give him medication yet because it was not time for the next dose, so we put a cool rag on his forehead.

Procedures/testing done: A chest x-ray was performed on 2/22/2022. A venous duplex of the upper extremity was performed on 2/22/2022.

Complaints/Issues: The patient had no complaints. The patient was running a fever when the nurse and I performed our assessment and administered his medications.

Vital signs (stable/unstable): The patient's vital signs remained stable throughout the clinical time.

Tolerating diet, activity, etc.: The patient is tolerating his Glucerna tube feeding well. The patient is also tolerating being turned to a different position every two hours.

Physician notifications: The physician discontinued the medication cefepime, ordered a urinary analysis, and consulted infectious disease telemedicine. The physician started the antibiotic Zosyn.

Future plans for client: The patient will have a urinary analysis collected. The patient will receive the antibiotic Zosyn that was prescribed to him on 2/22/2022. The future plan for the patient is to get stronger and eventually wean him off of the ventilator.

Discharge Planning (2 points)

Discharge location: Once the patient is ready to be discharged, physical and occupational therapy will be consulted to determine if the patient needs to go to a skills nursing facility or can return back to his home.

Home health needs (if applicable): This will depend if the patient is being discharged to a skilled nursing facility or home. If the patient is discharged home, he would need home health.

Equipment needs (if applicable): At this time discussion of discharge is not in the patient's plan. When discharge is discussed, the patient may need oxygen and tracheostomy care items.

Follow up plan: When the patient does get discharged it is important for the patient to follow up with his primary care provider. The patient should follow up with their point of care provider in a week of being discharged.

Education needs: If the patient is discharged and still has his tracheostomy, I think it is important for the patient and family to receive education on how to care for the trach. It will also be important to educate the patient on how to help gain his strength back.

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

Nursing Diagnosis	**Rationale**	**Interventions (2 per dx)**	**Outcome Goal (1 per dx)**	**Evaluation**
• Include full nursing diagnosis with "related to" and "as evidenced by" components • Listed in order by priority – highest priority to lowest	• Explain why the nursing diagnosis was chosen			• How did the client/family respond to the nurse's actions? • Client response, status of goals and outcomes, modifications to plan.

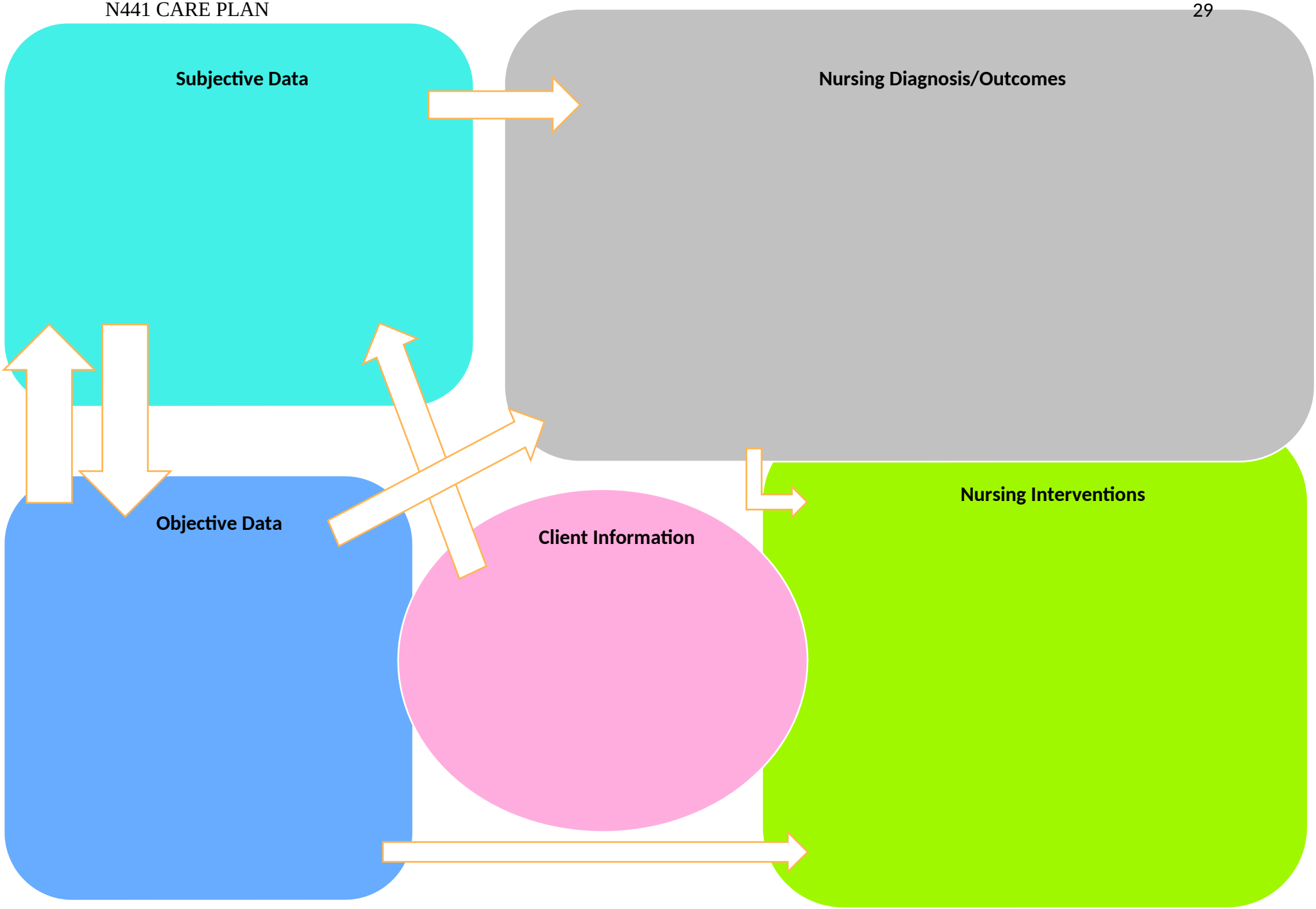
priority pertinent to this client				
1. Potential for Insufficient Airway Clearance related to pneumonia as evidenced by tracheobronchial secretions	The patient is at risk for insufficient airway clearance. The patient had a lot of secretions. The patient was coughing up secretions and sounded like gaging on the secretions. Due to the inflated cuff, the patient is not able to produce an effective cough.	**1.** Suction as prescribed and indicated **2.** Assist the patient in a semi-fowler position	**1.** Suctioning the patient will help remove the secretions and allow for better breathing. Placing the patient in A semi-fowler will facilitate easier breathing for the patient.	1)Goal met: The patient's tracheostomy was suctioned. The sputum was observed and documented. 2)Goal met: The patient was placed into semi-fowlers, And the head of the bed was at least 30 degrees.
2. Impaired gas exchange related to pneumonia as evidenced by tachypnea.	The patient has impaired gas exchange due to pneumonia. The patient is tachypneic with a respiratory rate of 28 and 26. The patient is mechanically ventilated and was experiencing hypoxia.	**1.** Assess the patient's respiration quality, rate, rhythm, depth, use of accessory muscles, and ease of breathing. **2.** Elevate the head of the bed, change position frequently, deep breathing, and coughing.	**1.** The patient will demonstrate improved ventilation and oxygenation, maximize oxygenation, and will maintain optimal gas exchange. Raising the head of the bed will help promote better chest expansion.	1)Goal Met: The patient respiratory rate, rhythm, depth, quality was assessed. The patient did not use accessory muscles and did not seem in any distress. 2)Goal Met: The patient's head of the bed was elevated. The patient was repositioning every 2 hours. The patient tried to cough but because of the inflated cuff, the cough was not effective. The nurse and I suctioned the client's tracheostomy to help remove

				secretions.
3. Risk for infection related to catheter insertion as evidenced by amber color urine in catheter canaster.	The patient has an indwelling catheter. That places the patient at risk for catheter associate urinary tract infection. The patient has been running a fever, his white blood cell count is elevated, and his urine was an amber color. These are all signs of an infection.	**1.** Perform catheter care everyday **2**. Keep drainage bag below bladder	**1.** The patient will not develop a catheter-associated urinary tract infection by performing catheter care every day and keeping the drainage bag below the bladder**.**	1)Goal Met: Catheter care was performed during the shift cleaning around the catheter opening. 2)Goal met: The bag was below the patient's bladder. This was observed every time an output measure was going to be taken.
4. Risk for venous thrombosis related to immobility as evidenced by swelling in the right hand and legs.	The patient is immobile due to being mechanically ventilated, coming off of sedation, and being very weak. The patient is at high risk due to immobility, and the patient has been at the hospital since 2/6/2022. The patient has been experiencing	**1.** Administer prescribed VTE prophylaxis **2.** Apply sequential compression device to the patient legs	**1.** The patient will not develop a venous thrombosis during his time at the hospital with the VTE prophylaxis and the SCDs.	1)Goal Met: Lovenox was administered to the patient for a VTE prophylaxis 2)Goal Met: The patient had SCDs on. The SCDs were removed to check the welling in the patient's legs and then were applied right back on.

	swelling in the legs and recently swelling in the right hand.			
5. Risk for impaired skin integrity related immobility as evidenced by reddened area over patient's coccyx.	The patient is not active at this moment due to being mechanically ventilated and recently removed from being sedated. The patient is unable to turn himself in bed. The patient is also at very high risk for impaired skin integrity because he has been inpatient at the hospital since 2/6/2022. The patient has a reddened area over his coccyx and a blister on his right knee.	**1.** Turn and reposition the patient every two hours. **2.** Monitor the area on the patient coccyx and blister on the knee for further worsening such as a start of skin loss or further worsening of skin loss.	**1.** The patient's area over the coccyx will not worsen due to being turned and repositioned every hour. The nurse will see improvement in the redness over the coccyx area. The patient will not develop a pressure ulcer.	1)Goal Met: The patient was turned and repositioned every two hours 2)Goal Met: When turning the patient, the area over the coccyx was observed for improvement or worsening. The blister on the right knee was not looked at due to a dressing covering it. The blister will be looked at when it is time for a dressing change.

Other References (APA):

Concept Map (20 Points):


Subjective Data
Nursing Diagnosis/Outcomes
Objective Data
Client Information
Nursing Interventions

Concept Map

Subjective Data

The patient states that they use alcohol one to two times per month. The patient states that they chew tobacco they do not smoke. The patient states they quit smoking in 2010 but then started back up on 4/21/2021. The patient stated they were not experiencing any pain or a fever.

Objective Data

Vitals

Respiratory Rate: 28 and 26 breaths per minute

Blood Pressure: 112/61 mmHg and 123/62 mmHg

Heart Rate: 93 beats per minute

Temperature: 37.6 C and 38.3 C

Oxygen saturation: 97%

Amber color urine in catheter canaster

Blister on Right knee and blanched red area over coccyx

Diaphoresis (sweat on the forehead)

Edema legs and right hand (3+ pitting edema in legs)

Client Information

A 64-year-old male was admitted to Sarah Bush Lincoln Hospital on 2/6/2022 for shortness of breath and COVID-19 positive. The patient's past medical history includes hyperlipidemia, hypertension, coronary artery disease, atypical chest pain, lumbar radiculopathy, myofascial pain. The patient lives at home independently with his wife.

Nursing Diagnosis/Outcomes

1. Potential for Insufficient Airway Clearance related to pneumonia as evidenced by tracheobronchial secretions

Goal: Suctioning the patient will help remove the secretions and better breathing. Placing the patient in a semi-fowler will facilitate easier breathing for the patient.

Goal met: The patient's tracheostomy was suctioned. The sputum was observed and documented. The patient was placed into semi-fowlers, and the head of the bed was at least 30 degrees.

2. Impaired gas exchange related to pneumonia as evidenced by tachypnea

Goal: The patient will demonstrate improved ventilation and oxygenation, maximize oxygenation, and will maintain optimal gas exchange. Raising the head of the bed will help promote better chest expansion.

Goal met: The patient respiratory rate, rhythm, depth, quality was assessed. The patient did not use accessory muscles and did not seem in any distress. The patient's head of the bed was elevated. The patient was repositioning every 2 hours. The patient tried to cough, but because of the inflated cuff, the cough was not effective. The nurse and I suctioned the client's tracheostomy to help remove secretions.

3. Risk for infection related to catheter insertion as evidenced by amber color urine in catheter canaster

Goal: With performing catheter care every day and keeping the drainage bag below the bladder, the patient will not develop a catheter-associated urinary tract infection.

Goal met: The bag was below the patient's bladder. This was observed every time an output measure was going to be taken. Catheter care was performed during the shift cleaning around the catheter opening.

4. Risk for venous thrombosis related to immobility as evidenced by swelling in the right hand and legs.

Goal: The patient will not develop a venous thrombosis during his time at the hospital with the VTE prophylaxis and the SCDs.

Goal met: Lovenox was administered to the patient for a VTE prophylaxis. The patient had SCDs on, and the SCDs were removed to check the welling in the patient's legs and then were applied right back on.

5. Risk for impaired skin integrity related immobility as evidenced by the reddened area over the patient's coccyx.

Goal: The patient's area over the coccyx will not worsen due to being turned and repositioned every hour. The nurse will see improvement in the redness over the coccyx area. The patient will not develop a pressure ulcer.

Goal met: The patient was turned and repositioned every two hours. The area over the coccyx was observed for improvement or worsening when turning the patient.

Nursing Interventions

1. Suction as prescribed and indicated

2. Assist the patient in a semi-fowler position

3. Assess the patient's respiration quality, rate, rhythm, depth, use of accessory muscles, and ease of breathing.

4. Elevate the head of the bed, change position frequently, deep breathing, and coughing.

5. Perform catheter care every day

6. Keep drainage bag below bladder

7. Administer prescribed VTE prophylaxis

8. Apply sequential compression device to the patient's legs

9. Turn and reposition the patient every two hours.

10. Monitor the area on the patient's coccyx and blister on the knee for further worsening, such as a start of skin loss or further worsening of skin loss.