N431 Care Plan #2

Lakeview College of Nursing

Casey Buchanan

Demographics (3 points)

Date of Admission 2/23/21	**Patient Initials** R.D.	**Age** 63	**Gender** Male
Race/Ethnicity Caucasian	**Occupation** Retired	**Marital Status** Single	**Allergies** NKDA
Code Status Full Code	**Height** 5’8”	**Weight** 115 lbs	

Medical History (5 Points)

Past Medical History: Chronic left ankle wound, open knee wound, schizophrenia, hypertension, gastroesophageal reflux disease (GERD), gastrointestinal (GI) bleed.

Past Surgical History: Colonoscopy 12/4/20.

Family History: Patient unable to provide reliable family history.

Social History (tobacco/alcohol/drugs): Alcohol abuse. Cigarette smoker, 45 pack year history.

Assistive Devices: None

Living Situation: Patient states he lives in an apartment however his chart states he is currently living at Gardenview nursing home.

Education Level: Patient completed high school.

Admission Assessment

Chief Complaint (2 points): Left leg pain.

History of present Illness (10 points): **Onset:** The patient was admitted on 2/23/21 with severe leg pain and mild diarrhea. The patient stated that his ankle would has been there for years and gets better and worse. He stated he doesn’t know how he hurt his knee, but it has had a wound for several months. He stated he “had diarrhea but doesn’t anymore.” **Location:** The client has an open wound with exposed bone and drainage on his left knee and left ankle. **Duration:** The

patient states he has had wounds around his ankle for years and a wound on his knee for several months. **Characteristics:** The patient stated that “it constantly hurts.” He rated his pain a seven out of ten. **Aggravating factors:** The patient stated, “rolling onto his left side and walking make it worse.” **Relieving factors:** The patient stated that napping and pain medications help his pain. **Treatment:** The patient went to Gardenview nursing home a couple of months ago in order to get appropriate treatments and help. The wound cleaning and dressing changes at the nursing home didn’t improve his wound.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): Open wound with drainage on left knee.

Secondary Diagnosis (if applicable): Gas gangrene, osteomyelitis, and chondromalacia of patella on left knee and ankle.

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

Gangrene begins with cell necrosis. Necrosis of cells occurs when there is an inadequate blood supply to the tissue, an infection, or a traumatic injury. In this patient’s case, he may have fallen due to intoxication and chronic wounds on this ankle, making it difficult to walk. He also has ischemia to his lower legs due to calcification of his iliac arteries and the popliteal artery, and trifurcation vessels. As cells continue to die due to a lack of blood flow and oxygen, the tissue becomes a suitable medium for bacteria to grow. This condition is called gangrene. Bacteria thrive and multiply quickly on ischemic and necrosed tissue. *Clostridium perfringens* is the most common type of bacteria that grows in gangrenous tissue (Capriotti & Frizzell, 2016). This bacteria emits a gas and odor known as gas gangrene (Capriotti & Frizzell, 2016).

Signs and symptoms of gangrene include skin discoloration, swelling, blistering, severe pain, and foul-smelling discharge (Mayo Clinic, 2021). Gas gangrene is more severe and may exhibit more

severe and severe symptoms. Low blood pressure, fever, rapid heart rate, shortness of breath, and confusion are common (Mayo Clinic, 2021). This patient presented with a large, non-healing, seeping wound with large amounts of drainage. The patient's vitals were stable throughout the day. He did have an increased neutrophil count, indicating an infection was present in his body. His alkaline phosphate was significantly elevated. The elevation is due to liver disease and is elevated in conditions affecting the bone, such as osteomyelitis, a bone infection.

Gas gangrene can be diagnosed with an x-ray. An x-ray can show air bubbles present in the joint. The air bubbles are gas being emitted from the bacteria. This patient's x-ray revealed air bubbles in the joint and the superior anterior aspect of the tibia. The x-ray also showed chondromalacia of the patella, an inflammation and softening of the cartilage in the patella. A culture and sensitivity test should also be performed to confirm the correct bacteria diagnosis. This is important when choosing the proper antibiotic to treat the infection. A blood culture should also be conducted. The culture will help determine the extent of the illness and if the patient is septic or becoming septic. The patient had not had a culture and sensitivity or a blood test.

Treatment of gas gangrene includes surgery to debride the area of dead, necrotic tissue. Debridement must be done to save the healthy tissue surrounding the wound. In some instances, the limb or affected area must be amputated. Antibiotic therapy will also be initiated to help combat bacterial infection. Other medications the patient may start taking to prevent ischemia and tissue necrosis in the future are blood pressure-reducing medications and cholesterol lowering medications. It was determined that the patient's leg could not be saved, and he is scheduled to have an above-the-knee amputation to remove the necrotic tissue. He is on a strong

antibiotic, Vancomycin. He is also expected to take a beta-blocker, carvedilol, and an antihyperlipidemic medication, atorvastatin, to lower his cholesterol levels.

The patient has several risk factors for developing gangrene. He has peripheral artery disease that narrows and hardens blood vessels, making it difficult for blood and nutrients to get to his distal extremities. He is also a smoker. People that smoke have a higher risk of developing gangrene (Mayo Clinic, 2021). He is also a chronic alcohol abuser, which leads to his malnutrition. Individuals that are malnourished have a difficult time fighting off infection.

Pathophysiology References (2) (APA):

Capriotti, T., Frizzell, J.P. (2016). *Pathophysiology: introductory concepts and clinical perspectives.* Philadelphia: F.A. Davis Company.

Mayo Clinic. (2021). *Gangrene*. https://www.mayoclinic.org/diseases-conditions/gangrene/symptoms-causes/syc-20352567.

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	**4.40-5.80 mcL**	3.65	3.45	Values consistent with anemia due to chronic alcoholism and malnutrion. (Capriotti & Frizzell, 2016).
Hgb	**12.0-15.8 g/dL**	9.7	9.2	Values consistent with anemia due to chronic alcoholism and malnutrion. (Capriotti & Frizzell, 2016).
Hct	**38.0-50.0%**	28.4	26.9	Values consistent with anemia due to chronic alcoholism and malnutrion. (Capriotti & Frizzell, 2016).
Platelets	**140-440 mcL**	465	422	Value consistent with infection.

				(Capriotti & Frizzell, 2016).
WBC	**4.0-12.0 mcL**	11.1	9.7	N/A
Neutrophils	**40.0-68.0%**	68.5	68.7	Values consistent with infection. (Capriotti & Frizzell, 2016).
Lymphocytes	**18.0-49.0%**	19.4	20.8	N/A
Monocytes	**3.0-12.0%**	11.1	9.0	N/A
Eosinophils	**0.0-8.0%**	**0.5**	**0.5**	**N/A**
Bands	**0.0-1.0%**	**N/A**	**N/A**	**N/A**

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

Lab	Normal Range	Admission Value	Today's Value	Reason For Abnormal
Na-	**135-145 mmol/L**	126	128	Values consistent with diarrhea. (Capriotti & Frizzell, 2016).
K+	**3.5-5.0 mmol/L**	3.9	4.0	N/A
Cl-	**98-107 mmol/L**	95	100	Value consistent with diarrhea.
CO2	**21-31 mmol/L**	24	23	N/A
Glucose	**70-110 mg/ dL**	104	100	N/A
BUN	**7-25 mg/dL**	16	23	N/A
Creatinine	**0.50-1.20 mg/dL**	0.48	0.35	Values consistent with malnutrition and diarrhea. (Capriotti & Frizzell, 2016).
Albumin	**3.5-3.7 g/dL**	2.9	N/A	Value consistent with malnutrition. (Capriotti & Frizzell, 2016).
Calcium	**8.8-10.2 mg/dL**	8.9	8.6	Value consistent with lack of calcium in the diet. (Capriotti & Frizzell, 2016).
Mag	**1.5-2.6 mg/ dL**	1.0	N/A	Value consistent with alcohol abuse. (Capriotti & Frizzell, 2016).
Phosphate	**2.5-4.5 mg/ dL**	N/A	N/A	N/A
Bilirubin	**0.2-0.8 mg/ dL**	1.0	N/A	Value consistent with alcohol abuse. (Capriotti & Frizzell, 2016).

Alk Phos	**38-126 U/L**	356	N/A	Value consistent with liver and bone disorders. (Capriotti & Frizzell, 2016).
AST	**10-40 u/L**	166	N/A	Value consistent with liver disease. (Capriotti & Frizzell, 2016).
ALT	**10-30 u/L**	157	N/A	Value consistent with liver disease. (Capriotti & Frizzell, 2016).
Amylase	**23-85 u/L**	N/A	N/A	N/A
Lipase	**12-70 u/L**	N/A	N/A	N/A
Lactic Acid	**0.5-1.0 mmol/L**	0.9	N/A	N/A
Troponin	**0-0.4**	N/A	N/A	N/A
CK-MB	**5-25**	N/A	N/A	N/A
Total CK	**22-128**	N/A	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	**0.8-1.4**	1.4	N/A	N/A
PT	**10.1-13.1 seconds**	17.1	N/A	Value consistent with liver disease.
PTT	**25-36 seconds**	36	N/A	N/A
D-Dimer	**<0.5**	N/A	N/A	N/A
BNP	**<100 mg/mL**	N/A	N/A	N/A
HDL	**>60 mg/dL**	N/A	N/A	N/A
LDL	**<100 mg/dL**	N/A	N/A	N/A
Cholesterol	**<200 mg/dL**	N/A	N/A	N/A
Triglycerides	**<150 mg/dL**	N/A	N/A	N/A

Hgb A1c	**<7%**	N/A	N/A	N/A
TSH	**0.4-4.0 mu/L**	N/A	N/A	N/A

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

Lab Test	Normal Range	Value on Admission	Today's Value	Reason for Abnormal
Color & Clarity	**Yellow, clear**	N/A	N/A	N/A
pH	**4.6-8.0**	N/A	N/A	N/A
Specific Gravity	**1.005-1.030**	N/A	N/A	N/A
Glucose	**Negative**	N/A	N/A	N/A
Protein	**Negative**	N/A	N/A	N/A
Ketones	**Negative**	N/A	N/A	N/A
WBC	**Negative/ 0-4**	N/A	N/A	N/A
RBC	**Negative/ 0-2**	N/A	N/A	N/A
Leukoesterase	**Negative**	N/A	N/A	N/A

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

Test	Normal Range	Value on Admission	Today's Value	Explanation of Findings
pH	**7.35-7.45**	N/A	N/A	N/A
PaO2	**75-100**	N/A	N/A	N/A
PaCO2	**38-42**	N/A	N/A	N/A

HCO3	**22-28**	N/A	N/A	N/A
SaO2	**95-100%**	99%	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	**Clean catch, no growth**	N/A	N/A	N/A
Blood Culture	**No growth after 3 days**	N/A	N/A	N/A
Sputum Culture	**Negative**	N/A	N/A	N/A
Stool Culture	**Appears soft, brown, and well-formed consistency**	N/A	N/A	N/A

Lab Correlations Reference (1) (APA):

Capriotti, T., Frizzell, J.P. (2016). *Pathophysiology: introductory concepts and clinical perspectives.* Philadelphia: F.A. Davis Company.

Diagnostic Imaging

All Other Diagnostic Tests (5 points):

X-Ray of Left Knee: The x-ray showed air bubbles in the anterior, superior aspect of the tibia and joint. It also showed chondromalacia of the patella, in which the inflammation is behind the kneecap and softening the cartilage (Allen, 2018). The image indicated extensive peripheral vascular disease of the iliac arteries with calcification.

COVID-19 screening: The patient was negative.

Echocardiogram: Echocardiogram was being performed, results not yet available.

Diagnostic Test Correlation (5 points):

The x-ray was performed in order to visualize the bone and vascular structures of the knee and leg. The appearance of gas bubbles or air in the joint indicates gas gangrene of the knee. Another important diagnosis the x-ray confirmed was the calcification of the major vessels in the leg. The vessels are calcified and aren't supplying the limb with essential blood, oxygen, and nutrients leading the physician to believe that the patient won't be able to heal the wounds.

An echocardiogram is a non-invasive procedure that uses sound waves, emitted through a machine and probe to visualize the structures of the heart (Mayo Clinic, 2018). This test is done to see if there are any abnormalities in the heart. This patient was having an echocardiogram in order to be cleared to have surgery.

Diagnostic Test Reference (1) (APA):

Allen, S. (2018). *Chondromalacia.* https://www.healthline.com/health/chondromalacia-patella.

Mayo Clinic. (2018). *Echocardiogram.* https://www.mayoclinic.org/tests-procedures/echocardiogram/about/pac-20393856.

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

Home Medications (5 required)

Brand/Generic	Aldactone/ spironolactone	Protonix/ pantoprazole	Rocaltrol/ calcitriol	Ozobax/ baclofen	Santyl/ collagenase
Dose	25 mg	40 mg	0.25 mcg	5 mg	250 units/g
Frequency	Once daily	Twice daily	Once daily	Once daily	Once daily
Route	Oral	Oral	Oral	Oral	Topical
Classification	Aldosterone	Antiulcer,	Antihypocalcem	Antispasmodic	

	antagonist, antihypertensive, diuretic	gastric acid proton pump inhibitor	ic	agent.	
Mechanism of Action	Competes with aldosterone for receptor sites. This prevents sodium and water reabsorption causing excretion.	Inhibits the secretion of gastric acid by interfering with the hydrogen-potassium-adenosine-triphosphatase enzyme system.	Binds to receptors on intestinal mucosa to increase calcium absorption from the intestine.	Inhibits the transmission of synaptic reflexes at the spinal cord.	Contains an enzyme that helps to remove dead skin tissue and aid in wound healing.
Reason Client Taking	To reduce edema.	To control GERD.	To treat hypocalcemia.	To treat muscle pain and spasms.	
Contraindications (2)	Acute renal insufficiency. Addison's disease.	Taking rilpivirine-containing products. Hypersensitivity to pantoprazole.	Hypercalcemia. Hypersensitivity to calcitriol	Hypersensitivy to baclofen. History of epilepsy or seizure disorder.	Hypersensitivity to collagenase. Pregnant or breastfeeding.
Side Effects/Adverse Reactions (2)	Vision changes. Encephalopathy.	Abdominal pain. Angioedema.	Pruritus. Rash.	Drowsiness. Insomnia.	Redness of skin. Itching.
Nursing Considerations (2)	Evaluate effectiveness of medication by noting presence and degree of edema. Evaluate client's serum potassium levels.	Monitor urine output due to possible acute interstitial nephritis. Monitor for bone fractures due to the medication increasing the risk of osteoporosis.	Monitor patient closely for vitamin D toxicity. Store drug at room temperature.	Keep medication stored at room temperature, away from moisture and heat.	Remove as much loose dead tissue as possible before applying ointment. Ointment shouldn't be applied to healthy skin and tissue.
Key Nursing Assessment(s)/ Lab(s) Prior to Administration	Vitals should be assessed prior to and following administration. If the blood pressure or pulse is too low, hold the medication and contact the provider. Serum potassium levels	Vitamin B12 levels should be checked often due to the medication causing the inability to absorb the mineral. INR and PT should be checked because this	Calcium levels should be checked prior to administration. Vitals should be checked before administration.	BUN and creatinine should be assessed before administration due to possible renal impairment. Vitals should be obtained before administering this	The wound and skin should be assessed prior to administration. Any signs of infection should be reported to the physician.

	should be monitored. This medication can cause hyperkalemia.	drug increases the risk for bleeding. Vital signs should be assessed.		medication.	
Client Teaching needs (2)	Instruct patient to take the medication with milk or a meal. Urge patient to avoid hazardous activities until effects are known.	Instruct patient to swallow the tablets whole. Don't crush or chew them. Instruct patient to notify the healthcare team if diarrhea is severe and lasts more than 24 hours.	Instruct patient to take a missed dose as soon as possible. Instruct patient not to take other forms of vitamin D while taking this medication.	Don't abruptly stop taking baclofen. Avoid hazardous activity when taking baclofen.	Instruct the client to contact the provider right away if signs of infection occur, such as nausea, vomiting, and feeling very ill. Store at room temperature, away from heat and moisture.

Hospital Medications (5 required)

Brand/ Generic	Coreg/ carvedilol	Prinivil/ lisinopril	Zyprexa/ olanzapine	Lipitor/ atorvastatin	Vancocin/ vancomycin hydrochloride
Dose	6.25 mg	5 mg	5 mg	40 mg	1250 mg in 250 ml 0.9% NaCl
Frequency	Once daily	Once daily	Once every night	Once every night	Every 8 hours
Route	Oral	Oral	Oral	Oral	Intravenous
Classification	Antihypertensive.	Antihypertensive, vasodilator	Antipsychotic	Antihyperlipidemic, HMG-CoA reductase inhibitor	Antibiotic
Mechanism of Action	Reduces blood pressure by reducing cardiac output and causes vasodilation of arteries.	Stops angiotensin I from converting to angiotensin II (vasoconstrictor). Stopping angiotensin II also decreases aldosterone. Decreasing aldosterone allows kidneys to excrete sodium and water which reduces blood pressure.	Antagonizes dopamine and serotonin receptors in the brain.	Reduces cholesterol by inhibiting HMG-CoA reductase and cholesterol synthesis in the liver. It also increases LDL receptors on the liver to increase uptake of LDL and then breaks it down.	Vancocin/ vancomycin hydrochloride
Reason Client	To treat hypertension.	To decrease blood pressure and improve heart	To treat schizophrenia.	To treat high cholesterol.	To treat a septic infection as well as a soft tissue

Taking		function.			infection of the leg.
Contraindications (2)	Severe bradycardia. Asthma or bronchospasm.	History of angioedema. Hypersensitivy to lisinopril.	Bone marrow depression. Cerebral arteriosclerosis.	Active hepatic disease. Hypersensitivity to atorvastatin.	Hypersensitivity to corn products when given with dextrose. Hypersensitivity to vancomycin.
Side Effects/Adverse Reactions (2)	Blurred vision. Dyspnea.	Anemia. Weigh loss or gain.	Akathisia. Pulmonary embolism.	Anemia. Orthostatic hypotension.	Neutropenia. Constipation.
Nursing Considerations (2)	Monitor blood glucose level because the medication can alter levels. The medication is not usually withheld prior to surgery.	Monitor blood pressure often and hold if excessive hypotensive. Should not be given if patient is hemodynamically unstable.	Notify provider if the patient develops urinary incontinence. Don't use in elderly patients with dementia-related psychosis due to increased risk of death.	Use medication cautiously in patients who abuse alcohol, as this increases the risk of liver dysfunction. Patients taking cyclosporine, gemfibrozil, ritonavir, or telaprevir shouldn't take atorvastatin due to increases risk of renal failure.	Infuse over at least one hour per gram. Check IV site for tenderness, pain, phlebitis, and necrosis.
Key Nursing Assessment(s)/Lab(s) Prior to Administration	Vitals must be taken prior to administration, especially blood pressure. If the patients' blood pressure is very low the medication should be held, and the provider notified.	Blood pressure and other vitals should be monitored before and after administration. Liver enzymes should be checked because lisinopril could cause a syndrome that can necrose the liver. Blood glucose levels should be checked routinely as the risk of hypoglycemia increases with the use of an ACE. Creatinine levels and renal function should be assessed. Potassium levels should be monitored as hyperkalemia can occur with the use of an ACE.	Vitals should be obtained before administration as the medication may cause hypotension. Blood glucose should be checked due to increased risk of hyperglycemia. This medication can also cause significant elevations in lipid levels; therefore, they should be continually monitored. The white blood cell count should be evaluated due to the medication possibly causing a drop in the count.	Liver function tests should be performed before administration. The physician should review the use of this medication for this patient, due to his chronic liver disease, elevated liver enzymes, and alcohol abuse. Vitals should be checked prior to administration of medication.	Renal function tests should be conducted before administration. Vital sign should be assessed before administration.

Client Teaching needs (2)	Educate patient that the medication may make them dizzy or light-headed and to take precautions. Emphasize the need to seek medical attention if the patient develops hives, itching, or swelling.	Patients should be advised to seek emergency treatment right away if they have difficulty breathing or swallowing. No salt substitutes due to risk of hyperkalemia.	Advise the patient to avoid alcohol and smoking while taking this drug. Urge patient and caregivers to report any signs of suicidal tendencies.	Instruct patient to take the medication at the same time every day to maintain effects. Emphasize the importance of a healthy diet to control hyperlipidemia.	Instruct patient to alert nurse if the IV becomes dislodged or is leaking. Instruct client to alert nurse if any adverse effects arise such as itching or sweating.

Medications Reference (1) (APA):

Drugs.com. (n.d.). https://www.drugs.com/.

Jones & Bartlett Learning. (2019). *2019 Nurse's drug handbook* (18th. Ed.). Burlington, MA.

Assessment

Physical Exam (18 points)

GENERAL (1 point): **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	 AAOx3 Oriented to person, place, and time. Appears distressed when moving left leg. Appears unkempt. Given bath and gown but continues to put on visibly soiled clothes.
INTEGUMENTARY (2 points): **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** **Drains present: Y☐ N ☒** **Type: N/A**	 Skin color is appropriate for age and race. Appears dull, and dry. Skin is warm and intact. Poor skin turgor. No rashes or bruises. Mepilex dressings placed on heels. Large open and draining left knee wound. Large wound on left ankle. Braden score: 15 No drains present.

HEENT (1 point): **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	 Normocephalic. Trachea midline. No lymphadenopathy. Hearing intact. Eyes clear, no discharge. Missing most teeth. No dentures or partials present. .
CARDIOVASCULAR (2 points): **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: N/A**	 S1, S2 auscultated. No S3, S4, or murmurs auscultated. No gallops or rubs. Cardiac rhythm: N/A Weakened peripheral pulses. No pedal pulses felt. Capillary refill <3 No neck distention. Severe edema in left lower leg and ankle. Slight edema in right lower leg.
RESPIRATORY (2 points): **Accessory muscle use: Y☐ N ☒** **Breath Sounds: Location, character**	 Clear lung sounds. No wheezes, or crackles auscultated. No shortness of breath. 99% O2 saturation on room air. No assisted oxygen devices used.
GASTROINTESTINAL (2 points): **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: N/A** **Feeding tubes/PEG tube Y ☐ N ☒** **Type: N/A**	 Patient appears malnourished. Wouldn't specify what he eats at home. He did mention that he likes to drink alcohol often. Patient currently is living in a nursing home and is allowed a full diet there. The patient is currently NPO due to upcoming amputation surgery. Height: 5'8". Weight 115 lbs. BMI: 17.5 Last BM 2/22/21 Bowel sounds auscultated in all four quadrants. Abdomen soft, non-tender. No distention, scars, drains, or wounds present.
GENITOURINARY (2 Points):	

Color: **Character:** **Quantity of urine:** **Pain with urination: Y ☐ N ☒** **Dialysis: Y ☐ N ☒** **Inspection of genitals:** **Catheter: Y ☐ N ☒** **Type: N/A** **Size: N/A**	Urine yellow. Clear. 800 ml output from 0700-1100 No pain or difficulty. No breakdown, lesions, or abnormalities in genital region.
MUSCULOSKELETAL (2 points): **Neurovascular status:** **ROM:** **Supportive devices:** **Strength:** **ADL Assistance: Y☐ N ☒** **Fall Risk: Y ☒ N☐** **Fall Score: 23** **Activity/Mobility Status:** **Independent (up ad lib) ☐** **Needs assistance with equipment ☐** **Needs support to stand and walk: X**	Intact. Poor range of motion in left leg. Adequate ROM in other three extremities. Requires assistance to get out of bed and walk. No walker or assistive device present but would be beneficial. Fall score 23 Unable to ambulate on his own.
NEUROLOGICAL (2 points): **MAEW: Y ☐ N☒** **PERLA: Y ☒ N☐** **Strength Equal: Y ☐ N ☒ if no -** **Legs ☒ Arms ☐ Both ☐** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	Unable to move left leg. All other extremities move appropriately. Pupils equal and responsive to light. Oriented to person, place, and time. Diagnosed with Schizophrenia. Confused about some topics. Patient states he lives in an apartment, but he currently lives in a nursing home. Clear speech. No sensory impairments. No loss of consciousness.
PSYCHOSOCIAL/CULTURAL (2 points): **Coping method(s):** **Developmental level:** **Religion & what it means to pt.:** **Personal/Family Data (Think about home environment, family structure, and available family support):**	Patient states that he uses alcohol as a coping method. He has friends but they also drink alcohol heavily. Patient is currently residing in a nursing home that may allow him to explore new coping techniques. Patient doesn't attend church. Patient stated he has one living brother, who is also his POA. However, he mentioned that the relationship is currently strained.

Vital Signs, 2 sets (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0730	82	149/79	16	98.0	99% on room air
Unable to take second set of vitals due to patient having echocardiogram.	N/A	N/A	N/A	N/A	N/A

Vital Sign Trends: The vital signs were stable throughout the morning. His systolic blood pressure is elevated at 149. This is not a major concern, as it is to be expected with arterial disease and presence of infection. He had excellent oxygen saturation on room air. The patient did report pain while moving and rolling onto his side. He is currently NPO and has no pain medication ordered. I helped him reposition himself in order to decrease pain and become more comfortable.

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
0730	Numeric 0-10	Left leg and ankle	7	Constant, throbbing	Repositioning
Second set of vitals unable to be taken due to patient having an	N/A	N/A	N/A	N/A	N/A

Echocardiogram done.					

IV Assessment (2 Points)

IV Assessment	Fluid Type/Rate or Saline Lock
Size of IV:	20 gauge
Location of IV:	Median cubital vein
Date on IV:	2/23/21
Patency of IV:	Patent, flushes easily
Signs of erythema, drainage, etc.:	No erythema or drainage
IV dressing assessment:	Dressing clean, dry, intact

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
0 Patient NPO	800 ml urine

Nursing Care

Summary of Care (2 points)

Overview of care: The patient is currently waiting for a left leg amputation. He is being kept nothing by mouth (NPO). He is rating his pain a 7/10 when moving or ambulating however pain medication wasn't ordered for him. His IV is saline locked and flushes easily. He was given a bath and fresh linen.

Procedures/testing done: The patient had a negative COVID-19 test. He also had an x-ray of his left leg showing a gas gangrene infection and calcification of vasculature in the affected leg. He was undergoing an echocardiogram as I was to leaving.

Complaints/Issues: The patient's main complaint was pain in the left leg when moving.

Vital signs (stable/unstable): The patient's vital signs were stable and within normal limits.

Tolerating diet, activity, etc.: Patient is NPO. He is tolerating it well. He did ask if he could eat but appeared to understand why he couldn't when told he is going to have surgery. He doesn't tolerate activity well due to the pain in his left knee.

Physician notifications: No notifications at this time.

Future plans for patient: The patient will have a left above the knee amputation. After the surgery I believe the plan is to return to Gardenview nursing home for rehabilitation and evaluation on if the patient can live alone.

Discharge Planning (2 points)

Discharge location: Gardenview nursing care.

Home health needs (if applicable): Currently unable to determine, as the patient will be in the nursing home for some time. Reevaluation of home health needs should be completed during rehab at the nursing home.

Equipment needs (if applicable): Patient might get fitted for a prosthetic leg. He may also need crutches or another type of device.

Follow up plan: The patient will follow-up with the surgeon after the amputation. The patient and nursing home staff will monitor the surgical site and continue administering the medication regimen.

Education needs: The patient will need to be educated on how to properly care for the incision and wound site. He should be provided education on rehabilitation as well as mental health resources following the surgery.

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

Nursing Diagnosis • Include full nursing diagnosis with "related to" and "as evidenced by" components	**Rational** • Explain why the nursing diagnosis was chosen	**Intervention (2 per dx)**	**Evaluation** • How did the patient/family respond to the nurse's actions? • Client response, status of goals and outcomes, modifications to plan.
1. Risk for injury related to impaired mobility as evidence by left leg amputation.	**The patient is at risk for falls due to left leg amputation and medication regimen.**	**1. Assist client with ambulation.** **2. Educate patient how to use assistive devices.**	**The patient is willing to allow staff to help him ambulate.** **The patient does listen to the nurses when instructed on how to lift himself up.**
2. Impaired skin integrity related to infection as evidence by open, draining wounds and very diminished pedal pulses.	**The patient's bilateral pedal pulses are unable to be palpated. The patient has a large open wound on his knee and ankle. While these wounds will be removed during the amputation surgery, he is at risk of the stump not healing as well as developing wounds on his other leg.**	**1. Assess the future stump site for infection and signs of poor healing.** **2. Use prescribed topical and antibiotic medications.**	**The patient is compliant with assessment of his skin and wounds.** **The patient understands that the medication will help his would heal.**
3. Risk for situational low self-esteem related to loss of leg as evidence by idea of bodily disfigurement.	**The patient might feel like he has lost a part of himself and independence after having an above the knee amputation.**	**1. Assess the patient's preparedness for the surgery.** **2. Help the patient cope with therapeutic communication.**	**The patient may be able to cope better to the situation if he fully understands why the procedure is necessary and what to expect after.** **Therapeutic**

			communication may help the patient to grieve and accept the loss of his leg better.
4. Risk for imbalanced nutrition related to alcoholism and insufficient dietary intake as evidence by low BMI.	**The patient is very malnourished. His main focus is on drinking alcohol and doesn't take note of nutrients his body needs.**	**1. Monitor the patients nutritional intake.** **2. Consult a dietician.**	**The client is currently NPO. During his stay at the nursing home for rehabilitation he will most likely be willing to eat a well-balanced diet. However, outside of a facility he may be tempted to put his main focus on consuming alcohol.** **A dietician will be useful in order to establish dietary needs and reenforce nutritional education. The patient will most likely be willing to meet with the dietician.**

Other References (APA):

Vera, M. (2020). *4 Amputation nursing care plans.* Nurse Labs. https://nurseslabs.com/4-amputation-nursing-care-plans/.

Vera, M. (2020). *8 Substance abuse nursing care plans.* Nurse Labs. https://nurseslabs.com/substance-abuse-nursing-diagnosis-care-plan/#imbalanced_nutrition_less_than_body_requirements.

Concept Map (20 Points):

Subjective Data

The patient complains of pain in his left knee and ankle. Patient states he has had chronic wounds in his ankle for years. He rates his pain at a 7/10 when he moves or rolls over onto his left knee. The patient admits to drinking heavily and has a 45 pack/year history of cigarette smoking.

Nursing Diagnosis/Outcomes

R[illegible] for injury related to impaired mobility as evidence by left leg amputation.
Outcome/Goal: Continue to maintain injury free status. The patient is willing to call for help when attempting to ambulate.

Impaired skin integrity related to infection as evidence by open, draining wounds and very diminished pedal pulses.
Outcome/Goal: Continue to monitor and treat skin with medications such as topical ointments and antibiotics. The patient is willing to continue to take and receive antibiotic therapy.

Risk for situational low self-esteem related to loss of leg as evidence by idea of bodily disfigurement.
Outcome/Goal: The patient understands the importance of the surgery and all of his questions are met before the operation.

Risk for imbalanced nutrition related to alcoholism and insufficient dietary intake as evidence by low BMI.
Outcome/Goal: The patient will detox from alcohol during his recovery at the nursing home and will eat a well-balanced diet. The patient will most likely eat appropriate meals during recovery but will need support to abstain from alcohol after treatment.

Objective Data

Height: 5'8" Weight: 115 lbs BMI: 17.5 BP: 149/79 Pulse: 82 RR: 16 Temp: 98.0 O2: 99% on room air.

Vitals stable. X-ray showed gas gangrene of left knee with osteomyelitis, chondromalacia of patella, air bubble in joint, and calcification of arteries.
The left leg is swollen, has open, draining, and seeping wounds.

Patient Information

63-year-old Caucasian male. Admitted on 2/23/21. Diagnosis: Gas gangrene of left knee.
Patient is a full code. No known allergies. History of GERD, HTN, and schizophrenia.

Nursing Interventions

Assist client with ambulation.

Educate patient how to use assistive devices.

Assess the future stump site for infection and signs of poor healing.

Use prescribed topical and antibiotic medications.

Assess the patient's preparedness for the surgery.

Help the patient cope with therapeutic communication.

Monitor the patient's nutritional intake.

Consult a dietician.