N321 Care Plan #2

Lakeview College of Nursing

Whitney Evans

Demographics (3 points)

Date of Admission 10/05/19	**Patient Initials** C. R.	**Age** 53	**Gender** Female
Race/Ethnicity Caucasian	**Occupation** Unemployed	**Marital Status** Widowed	**Allergies** Penicillin (mild)
Code Status Full Code	**Height** 164 cm	**Weight** 72.7 kg	

Medical History (5 Points)

Past Medical History: Type 2 Diabetes Mellitus, HTN, Hyponatremia, Thrombocytosis, Depression, Asthma, MI, TIA, Hyperlipidemia, Chronic angina

Past Surgical History: Cholecystectomy, Stent placement, Tubal ligation

Family History: Cardiovascular disease (father), Type 2 DM (father and brother), MI (father)

Social History (tobacco/alcohol/drugs): Former smoker – quit 3 years ago. No alcohol or drug use.

Assistive Devices: Glasses and walker. Client uses a gait belt in the hospital.

Living Situation: Lives with her son. Her husband recently passed away (approx. 2 weeks prior to admission).

Education Level: High school

Admission Assessment

Chief Complaint (2 points): “There is stuff coming out of my side”

History of present Illness (10 points): This 53 yo female presented to the Emergency Department with complaints of discharge “running down her side.” On 9/17/19, the patient had a transmyocardial revascularization completed at Barnes Jewish Hospital to correct her chronic angina. The client noticed pain and swelling starting on 10/3, and the drainage started on 10/5. Currently, client rates pain 8/10 under the left breast. Upon examination in the ED, purulent, foul

smelling discharge was draining under the left breast. The client has a history of Type II diabetes, hypertension, chronic angina, and a strong paternal history of cardiac disease. Client is afebrile in the ED and states no fevers at home either. She states she finished the antibiotics prescribed by the doctor in St. Louis. The client lives at home with her son, but mostly takes care of herself.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): Post-operative infection.

Secondary Diagnosis (if applicable): Acute stress.

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

The skin is the largest tissue of the body. When it is intact, it is a physical barrier and first-line defense to microorganisms. Normal flora lives on the skin and is usually not harmful. Once there has been a breach of tissue integrity, such as a surgical incision, the body activates the second line of defense: the inflammatory response. The inflammatory response results in observable characteristics, such as pain, heat, swelling, and redness (Hinkle, 2018). The body works to rid the infectious agent by causing vasodilation, increased vascular permeability, and white blood cell adherence to vessel walls. When a large number of white blood cells accumulate at the infection site, purulent exudate (pus) is present (McCance, 2014).

Although the impaired tissue integrity broke the body's first-line defense, this patient has comorbidities that depressed the second-line protection as well. The patient is currently experiencing an increase in psychological stress due to her husband recently passing away. Stress causes depression in the immune system's response by constricting blood vessels (McCance, 2014). For the immune system to work effectively, the blood vessels need to dilate, not constrict. Stress activates the sympathetic nervous system to release epinephrine. The result of epinephrine

is an increase in blood glucose, which also depresses the immune response (McCance, 2014). In addition to the body increasing blood glucose as a result of stress, the patient also has diabetes. Diabetes suppresses neutrophil function, including phagocytosis and lymphocyte proliferation. Patients with diabetes are at risk for dysfunctional healing due to glycosylated hemoglobin (Hinkle, 2018). When hemoglobin and glucose combine, the oxygen is not released as easily. The compromise in oxygen delivery may cause ischemia. Ischemic tissues are susceptible to infection.

Pathophysiology References (2) (APA):

Hinkle, J.L., & Cheever, K.H. (2018). *Brunner & Suddarth's Textbook of Medical-Surgical Nursing* (14th ed.). Philadelphia, PA: Wolters Kluwer Health Lippincott Williams and Wilkins.

McCance, K., & Huether, S. (2014). *Pathophysiology: The biological basis for disease in adults and children* (7th ed.). St. Louis, MO: Elsevier Mosby.

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	**4.2-5.4 mill/uL**	**3.68**	**3.53**	Decreased due to anemia
Hgb	**12-16 g/dL**	**11.3**	**10.8**	Decreased due to anemia
Hct	**37-47%**	**33.3**	**32.1**	Decreased due to anemia
Platelets	**150-400**	**467**	**430**	Increased due to anemia
WBC	**4.5-11**	**11.7**	**11.8**	Increased due to infection
Neutrophils	**45-79**	**50.1**	**63.9**	
Lymphocytes	**11.8-45.9**	**37.5**	**22.8**	

Monocytes	**4.4-12**	**10.5**	**11.5**	
Eosinophils	**0-6.3**	**1.4**	**1.2**	
Basophils	**0-1.0**	**0.5**	**0.7**	

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**	**132**	**138**	Hyponatremia is commonly seen with wound drainage
K+	**3.5-5.0**	**3.7**	**4.1**	
Cl-	**98-106**	**94**	**102**	Hypochloremia is often tied to hyponatremia
CO2	**21-31**	**29**	**27**	
Glucose	**70-100**	**222**	**126**	Uncontrolled DM
BUN	**7-25**	**15**	**19**	
Creatinine	**0.5-1.2**	**0.57**	**Not completed**	
Albumin	**3.4-5.4**	**3.9**	**3.4**	
Calcium	**8.8-10.5**	**10.0**	**8.8**	
Mag				
Phosphate				
Bilirubin	**0.1-1.0**	**1.8**	**1.2**	Increased bilirubin may be caused by dehydration, but may also be caused by biliary obstruction
Alk Phos	**35-105**	**254**	**245**	Increased levels are likely due to biliary obstruction
AST	**0-32**	**33**	**32**	Increased levels are likely due to biliary obstruction

ALT	**0-33**	**42**	**31**	Increased levels are likely due to biliary obstruction
Amylase				
Lipase				
Lactic Acid		**1.8**	**Not completed**	

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		**1.04**	**Not completed**	
PT		**13.8**	**Not completed**	
PTT		**30.2**	**Not completed**	
D-Dimer				
BNP				
HDL				
LDL				
Cholesterol				
Triglycerides				
Hgb A1c				
TSH				

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				
pH				
Specific Gravity				
Glucose				
Protein				
Ketones				
WBC				
RBC				
Leukoesterase				

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				
Blood Culture	**Negative**	**Neg., Neg.**	**Not completed**	
Sputum Culture				
Stool Culture				

Surgical anaerobic culture results: Gram (-) bacilli, gram (+) cocci

Surgical aerobic culture results: Gram (-) bacilli, gram (+) cocci

Wound culture (pre-surgery): Normal flora

Lab Correlations Reference (APA):

Henry, N. J. E., McMichael, M., Johnson, J., DiStasi, A., Ball, B. S., Holman, H. C., … Lemon, T. (2016). *Rn adult medical surgical nursing: review module.* Leawood, KS: Assessment

Technologies Institute.

Diagnostic Imaging

No Diagnostic Imaging Completed

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

Home Medications (5 required)

Brand/Generic	Lopressor (metoprolol)	Zestril (lisinopril)	Proventil (albuterol)	Gralise (gabapentin)	Lantus (insulin glargine)
Dose	25 mg	2.5 mg	2 puffs	300 mg	28 units
Frequency	BID	Once daily	Q4H PRN	TID	HS
Route	PO	PO	Inhaled aerosol	PO	SubQ Inj
Classification	Antianginal, anti-hypertensive	Anti-hypertensive, vasodilator	Broncho-dilator	Anti-convulsant	Anti-diabetic
Mechanism of Action	Inhibits beta 1 receptors, decreases cardiac excitability, CO, and oxygen demand. Relieves angina pain. Decreases BP by decreasing renal release of renin	Inhibits conversion of angiotensin I to angiotensin II. W/O angio II, aldosterone is not produced, decreases BP	Attaches to beta2 receptors to relax bronchial smooth muscles and inhibits histamine release	Inhibits rapid firing of neurons to reduce painful stimuli and relieve postherpetic neuralgia	Inhibits production of hepatic glucose and stimulates peripheral glucose uptake
Reason Client Taking	Angina	Hyper-tension	Asthma	Post-surgical pain relief	DM II
Contraindications (2)	Pulse less than 45 bpm Acute heart	Renal impairment, angioedema	Hypersensitivity to albuterol	Hypersensitivity Alcohol use	hypersensitivity

	failure	with other ACE inhibitors			
Side Effects/Adverse Reactions (2)	Headache Dry eyes and/or mouth Increased triglyceride levels	Orthostatic hypotension Cough	Anxiety Palpitations	Delusions Dizziness	Hypoglycemia Injection site redness
Nursing Considerations (2)	Monitor patient for worsening heart failure Do not give if heart rate is less than 45 bpm	Monitor BP often Monitor for anaphylaxis	Be aware of drug tolerance with long term use Use caution in clients with cardiac disorders, DM, or HTN	Administer initial dose at bedtime Brands of gabapentin are not interchangeable	Monitor glucose frequently

Hospital Medications (5 required)

Brand/Generic	Lipitor (atorvastatin)	Plavix (clopidogrel)	Pepcid (famotidine)	Rocephin (ceftriaxone)	Monoket (isosorbide mononitrate)
Dose	40 mg	75 mg	20 mg	1,000 mg	30 mg
Frequency	Once daily	Once daily	BID	Q 24 hours	Once daily In the AM
Route	PO	PO	PO	IV infusion	PO
Classification	Antihyper-lipidemic, HMG-CoA	Platelet aggregation inhibitor	Antiulcer, gastric acid secretion	Antibiotic	Antianginal, vasodilator

	reductase inhibitor		inhibitor		
Mechanism of Action	Inhibits HMG CoA reductase and cholesterol synthesis in the liver	Prevents fibrinogen from attaching to receptors	Reduced acid production in the stomach	Interferes with bacterial cell wall	Relaxes smooth muscle cells and improves cardiac output
Reason Client Taking	Hyper-lipidemia	Prevent MI	Reflux	Infection treatment	Prevent angina
Contraindications (2)	Hepatic disease Pregnancy	Active pathological bleeding Intracranial hemorrhage	alcohol use hypersensitivity	hypersensitivity Loop diuretic use	Concurrent use of phosphodiesterase inhibitors orthostatic hypotension
Side Effects/Adverse Reactions (2)	Myalgias Elevated liver enzymes	Bleeding Thrombocytopenic purpura	Dry mouth Diarrhea	C diff associated diarrhea Elevated liver enzymes	dizziness or headache orthostatic hypotension
Nursing Considerations (2)	Advise patient to not consume alcohol Liver tests should be monitored routinely	Use caution in patients with hepatic or renal impairment Obtain baseline CBC and monitor throughout therapy as ordered	Wait 30-60 minutes after taking famotidine before taking antacid Avoid alcohol and smoking because they cause an increase in acid production	Use cautiously in patients who are sensitive to penicillin Obtain blood culture and sensitivity before starting therapy	Monitor BP and heart rate frequently Do NOT stop taking drug abruptly

Medications Reference (APA):

Ambrose, P., Barros, M., Bednarczyk, E., Bello, C., Bonnema, S., … Williams, C. (2019).

Nurses drug handbook. (8th edition). Burlington, MA: Jones & Bartlett Learning.

Assessment

Physical Exam (18 points)

GENERAL (1 point): **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	AOx4, client is oriented to self and surroundings. Appears older than age. Client is lying in bed.
INTEGUMENTARY (2 points): **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** **Drains present: Y☐ N ☐** **Type:**	Skin is warm, pink and dry. Inframammary area is erythematous and incisions noted. No rashes, bruises, or other wounds noted. Braden score: 14 No drains present.

HEENT (1 point): **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	Eyes: PERRLA, EOM intact Ears: Denies hearing loss or discharge Nose:Denies discharge, nasal congestion, or nosebleeds Teeth: Poor dentition .
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:**	Regular rate and rhythm. No gallops, rubs, or clicks noted. Peripheral pulses noted bilaterally on upper and lower extremities. Cap refill <3 sec No noted neck vein distention No edema noted.
RESPIRATORY (2 points): **Accessory muscle use: Y☐ N ☐** **Breath Sounds: Location, character**	No use of accessory muscles. All lobes clear to auscultation, no crackles or wheezes noted.
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:** **Feeding tubes/PEG tube Y ☐ N ☐** **Type:**	Client consumes a regular diet at home. Current diet in hospital: consistent carbohydrate (1,500-1,700 calories) Height: 164 cm Weight: 72.7 kg Normal bowel sounds in RUQ and LUQ, absent bowels in LLQ and RLQ. Last BM: 10/5 No pain, masses or distention upon palpation. Stretch marks noted on abdomen. No ostomy, NG or feeding tubes noted

GENITOURINARY (2 Points): **Color:** **Character:** **Quantity of urine:** **Pain with urination: Y ☐ N ☐** **Dialysis: Y ☐ N ☐** **Inspection of genitals:** **Catheter: Y ☐ N ☐** **Type:** **Size:**	Denies incontinence, burning or increased sensation of urination. Urine clear and yellow. Approx 200 mL urine collected. No catheter in place
MUSCULOSKELETAL (2 points): **Neurovascular status:** **ROM:** **Supportive devices:** **Strength:** **ADL Assistance: Y☐ N ☐** **Fall Risk: Y ☐ N☐** **Fall Score:** **Activity/Mobility Status:** **Independent (up ad lib) ☐** **Needs assistance with equipment ☐** **Needs support to stand and walk☐**	⅘ strength bilaterally upper and lower extremities. Patient is weak due to recent surgery and pain medicines. Fall risk: 70 Up with one, walker and gait belt. Patient was able to walk the halls with minimal support.
NEUROLOGICAL (2 points): **MAEW: Y ☐ N☐** **PERLA: Y ☐ N☐** **Strength Equal: Y ☐ N ☐ if no -** **Legs ☐ Arms ☐ Both ☐** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	AOx4 Strength equal bilaterally upper and lower extremities. Able to move all extremities equally. PERRLA Speech is slow and affect is flat.
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 expressed writing letters as a coping strategy. Patient does believe in God, but does not belong to a church. Patient's husband recently passed away, but currently lives at home with one of her sons. Has other kids in the local area, but remaining family lives in Virginia.

Vital Signs, 2 sets (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen

0830	72	100/60	12	36.6	98
1030	76	106/68	14	36.4	99

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
0830	Numeric	Under left breast	8/10	Sharp, burning pain	Norco given
1000	Numeric	Under left breast	6-7/10	Burning pain	Repositioned pillows

IV Assessment (2 Points)

IV Assessment	Fluid Type/Rate or Saline Lock
Size of IV: 20 g **Location of IV:** Left AC **Date on IV:** 10/05 **Patency of IV:** Patent **Signs of erythema, drainage, etc.:** Dried blood around IV site, no signs of erythema or other drainage noted **IV dressing assessment:** Tegaderm in place	Saline lock
Size of IV: 20 g **Location of IV:** Right AC **Date on IV:** 10/05 **Patency of IV:** Patent **Signs of erythema, drainage, etc.:** No signs of erythema or drainage noted **IV dressing assessment:** Tegaderm in place	1,000 mL 0.9% saline @ 75 mL/hr

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
620	900

Nursing Care

Summary of Care (2 points)

Overview of care: Pt presents with post-op infection. Surgical debridement used to remove infection and necrotic tissue to help tissue perfusion. Client is stable and will continue pain management therapy.

Procedures/testing done: Lab tests including wound cultures

Complaints/Issues: Drainage and pain control

Vital signs (stable/unstable): Stable

Tolerating diet, activity, etc.: Client tolerates diet and was able to ambulate in the halls

Physician notifications: Physician not notified of any significant findings

Future plans for patient: Client will return home upon discharge, be sure to follow up with providers and keep wound uninfected.

Discharge Planning (2 points)

Discharge location: Discharge to home

Home health needs (if applicable): Home health nurse to repack wound

Equipment needs (if applicable): Wound care equipment, thermometer to measure temps at home

Follow up plan: Home health nurse to monitor wound progression

Education needs: Monitor for signs of infection early. Notify the provider if infection is suspected or if pain is not under control. Continue taking antibiotics until the course is completed, even if client is feeling better.

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. Impaired tissue integrity R/T surgery AEB surgical incision	The recent surgical incision caused the client to develop an infection and be admitted into the hospital	**1.** Re-pack wound using sterile technique, as ordered **2.** Administer antibiotics as prescribed	Administration of antibiotics has not improved the WBC count, but has decreased the presence of fevers. Though the re-packing causes pain, the client verbalizes understanding of why this task must be completed to prevent further infection and for inspection of the surgical site.
2. Acute pain R/T surgery AEB patient states pain is 8/10	The client is experiencing acute pain which may delay wound healing and create anxiety	**1.** Administer pain meds as prescribed **2.** Supply ice packs as prescribed	The pain meds and ice packs helped bring the pain to a tolerable level (patient stated pain was a 6-7/10 after the intervention)
3. Stress overload R/T many recent stressors AEB patient states "everything is so overwhelming"	In addition to the recent surgery, the client's husband has recently passed away. The added stress may cause delayed wound healing	**1.** Patient will write down positive messages to herself to reduce stress **2**. Patient will walk the halls to reduce stress levels	When discussing stress reduction, the patient said she used to write letters to "get things off her chest" so I supplied her with a pen and paper. We also went for a walk in the hall and talked about her life outside of the hospital. She stated she felt better after these actions were completed.

Other References (APA):

Concept Map (20 Points):

Due to formatting issues, concept map will be submitted separately

Nursing Interventions

Patient Information

Objective Data