N311 Care Plan #2

Lakeview College of Nursing

Nathaniel Shick

Demographics (5 points)

Date of Admission 11/04/2020	**Patient Initials** M.W.	**Age** 81	**Gender** Female
Race/Ethnicity Caucasian	**Occupation** Retired	**Marital Status** Married	**Allergies** Augmentin (Confusion), Clavulanic acid codeine (nausea/vomiting), hydrOXYzine (confusion), iodine (hives/rash), morphine sulfa drugs (rash) sulfones (rash), Nickel (Rash), Vistaril (confusion), Wool (Rash)
Code Status Full	**Height** 165cm	**Weight** 100.3kg	

Medical History (5 Points)

Past Medical History:

Advanced age, Arthritis, Asthma, Baker's cyst of knee, Bilateral cataracts, Bilateral sacroiliitis, Chronic venous insufficiency, Clostridium difficile, Depression, Fall risk, GERD (gastroesophageal reflux disease), Gout, History of breast cancer, Hypercholesterolemia, Hypertension, Hypertensive cardiovascular disease, Hypertriglyceridemia, Hypothyroidism, Lumbar facet arthropathy, Lumbar spinal stenosis, Murmur, Myofascial pain, Obesity due to excess calories, Peripheral edema, Preoperative cardiovascular examination, Sacroiliitis, Sleep apnea, Stage 3 chronic kidney disease, Thyroid disease

Past Surgical History:

Colon Resection Sigmoid (09/13/2018), Laminectomy Lumbar with Implant (Pedicle Screw) (07/05/2017), Appendectomy, Bilateral mastectomy, Cholecystectomy, Colectomy, Hysterectomy, Laminectomy, ORIF - Open reduction and internal fixation of fracture, Sinusotomy, Tonsillectomy

Family History:

Father: Other; Suicide attempt; Ulcer

Mother (Deceased): Hypertension; Stroke; Thyroid disorder

Grandmother (P): CA - Breast cancer

Grandfather (P): Cancer of prostate

Uncle: Diabetes mellitus; Heart attack; Tuberculosis

Sister: COPD; Diabetes mellitus

Grandchild: Bipolar disorder

Unknown: Breast cancer

Social History (tobacco/alcohol/drugs):

Denies use.

Admission Assessment

Chief Complaint (2 points):

SOB

History of present Illness (10 points):

A female pt who is 81 y/o was admitted with SOB. The pt was at an appointment at the cancer center when they noticed, what they believe to be, an inflamed heart and fluid around the heart. The pt stated that she was in no pain but that it was difficult to breathe. She claimed that the SOB had not started but some days ago and that it had been persistent. Sitting/standing upright relieves somewhat while lying down makes it a bit worse.

Primary Diagnosis

Primary Diagnosis on Admission (3 points):

Pericarditis

Secondary Diagnosis (if applicable):

Pericardium Effusion

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

Pericarditis is the inflammation of the serous membranes that surround the heart, namely the epicardium and the pericardium. The epicardium is the inner-most layer that is attached to the heart itself. The pericardium is the outer-most layer, this layer attaches to the sternum and other thoracic locations to hold the heart in its position. There is a space between these two serous membranes. This space is called the pericardial space and is filled with 30 to 50 mL of serous fluid to reduce friction between the two layers. However, when the pericardium becomes inflamed more fluid enters that space. This is due to the capillaries becoming highly permeable and allowing plasma proteins and fibrinogen to exit the bloodstream and enter the space. This extra fluid within the pericardial space is known as a pericardial effusion. A pericardial effusion, if it exceeds levels of 200 mL of fluid, can lead to cardiac tamponade. Cardiac tamponade is when fluid levels get so high that it begins to restrict the pumping of the heart making it incapable to fully fill and circulate blood.

Pericarditis is most commonly caused by Tuberculosis, viruses, radiation treatment of the chest, cardiac surgery, and connective tissue disease. Some examples of viruses that cause pericarditis are Coxsackie virus, influenza, Epstein-Barr virus, varicella, hepatis, mumps, and HIV. Metabolic disorders; renal failure; Sjogren’s syndrome; rheumatic fever; and autoimmune inflammatory diseases can also cause pericarditis. Finally, pericarditis can occur after a MI and is also seen with cancers of the lungs, breasts, and skin.

There are some signs and symptoms that can point pericarditis. Typically they will have an onset of angina (sharp, sudden, worse with deep breathing, coughing, and swallowing), fever, dyspnea, pericardial friction rub, and some ECG findings. If it has progressed to cardiac tamponade the Beck triad may be present. These symptoms include hypotension, jugular vein distension, and muffled heart sounds. Accompanied with cardiac tamponade may also include pulsus paradoxus which is a decrease in systolic pressure by 10 mmHg or more.

To diagnose pericarditis, you can check their ECG. With pericarditis their ST-segment will show elevations in multiple leads. An increased blood urea nitrogen and creatinine could be a sign. You can also have an Echocardiogram, CT scan, and cardiac MRI done to confirm the diagnosis.

Finally, to treat pericarditis depends on how you acquired the disease. If it were an infection you need antibiotics. You may need to undergo a surgery called a pericardiectomy to drain the pericardial space. Anti-inflammatories and heart failure medications can also assist in the treatment of pericarditis.

Pathophysiology References (2) (APA):

Capriotti, T. (2020). Arterial Disorders. In Davis Advantage for Pathophysiology: Introductory Concepts and Clinical Perspectives (2nd ed., pp. 391–393). F.A. Davis Company.

Laboratory Data (20 points)
If laboratory data is unavailable, values will be assigned by the clinical instructor

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 (10^6/mcL)	3.80-5.41	2.71	2.52	She has stage 3 CKD and has had cancer (possibly more to be diagnosed).
Hgb (g/dL)	11.3-15.2	8.6	7.8	She has stage 3 CKD and

				has had cancer (possibly more to be diagnosed).
Hct (%)	33.3-45.3	25.7	24.0	She has stage 3 CKD and has had cancer (possibly more to be diagnosed).
Platelets (K/mcL)	149-393	773	686	She has a history of cancer and may have lung cancer (undiagnosed yet).
WBC (K/mcL)	4.0-11.7	16.6	12.7	This could be due to her past chemo treatments.
Neutrophils (%)	45.3-79.0	82.4	81.2	She may be stressed and inflammation.
Lymphocytes (%)	11.8-45.9	7.1	7.4	Cancer and stage 3 CKD are most likely the culprits.
Monocytes (%)	4.4-12.0	9.3	10.2	N/A
Eosinophils (%)	0-6.3	0.3	0.4	N/A
Bands (%)	0-5.1	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- (mmol/L)	136-145	130	132	This could be attributed to the Lasix that they have her on.
K+ (mmol/L)	3.5-5.1	5.2	5.6	She has stage 3 CKD.
Cl- (mmol/L)	98-107	95	95	This could be attributed to her possible lung cancer.
CO2 (mmol/L)	21-31	23	24	N/A
Glucose (mg/dL)	74-109	123	142	The stress of being in the hospital could be the cause of the higher blood glucose levels.
BUN (mg/dL)	7-25	41	41	She has stage 3 CKD.
Creatinine (mg/dL)	0.70-1.30	1.51	1.52	She has stage 3 CKD.
Albumin (g/dL)	3.4-5.4	3.4	N/A	This can most likely be attributed to her inflammation of her heart.

Calcium (mg/dL)	8.6-10.3	8.5	8.0	She has stage 3 CKD.
Magnesium (mg/dL)	1.6-2.5	N/A	1.0	Lasix is most likely the reason for the low magnesium levels.
Phosphate (mg/dL)	2.5-4.5	N/A	N/A	N/A
Bilirubin (mg/dL)	0.3-1.0	0.6	N/A	N/A
Alk Phos (unit/L)	34-104	171	N/A	She has stage 3 CKD.

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	Pale yellow (or clear)-deep yellow	N/A	N/A	N/A
pH	5-8	N/A	N/A	N/A
Specific Gravity	1.005-1.034	N/A	N/A	N/A
Glucose	Normal	N/A	N/A	N/A
Protein	Negative	N/A	N/A	N/A
Ketones	Negative	N/A	N/A	N/A
WBC	Negative	N/A	N/A	N/A
RBC (HPF)	0-5	N/A	N/A	N/A
Leukoesterase (HPF)	0-5	N/A	N/A	N/A

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

Test	Normal Range	Value on Admission	Today's Value	Explanation of Findings
Urine Culture	Negative	N/A	N/A	N/A
Blood Culture	Negative	N/A	N/A	N/A
Sputum Culture	Negative	N/A	N/A	N/A
Stool Culture	Negative	N/A	N/A	N/A

Lab Correlations Reference (APA):

Sarah Bush Lincoln Health Reference Guide. (2020). Sarah Bush Lincoln: Cerner.

https://www.sarahbush.org/

Also had help from my nurse Sierra and one of her coworkers

Diagnostic Imaging

All Other Diagnostic Tests (10 points):

CT 11/03/20

Electrocardiogram EKG 11/04/20

Chest XR 11/04/20

Echo w/ contrast 11/05/20

Current Medications (10 points, 2 points per completed med)
5 different medications must be completed

Medications (5 required)

Brand/Generic	Lasix/ furosemide	Uro-Mag/ Mag Oxide	Ultram/ Tramadol	Zyloprim/ Allopurinol	Protonix/ Pantoprazole
Dose	40mg	400mg	50mg	100mg	
Frequency	BID	Daily	q.6.h.	Daily	

Route	IV Push	PO	PO	PO	
Classification	Loop diuretic; antihypertensive	Mineral	Opioid Agonist	Xanthine Oxidase Inhibitor	Proton pump inhibitor (PPI)
Mechanism of Action	Inhibits sodium and chloride reabsorption at the proximal and distal tubules as well as the ascending loop of Henle.	Magnesium is the second most abundant cation, and is an essential cation in over 300 enzymatic reactions, and has a role in neurochemical transmission and muscular excitability. It's precise mechanism of action is unknown. Magnesium prevents or controls convulsions by blocking transmission and decreasing the amount of acetylcholine liberated at the end-plate by the motor nerve impulse. Magnesium produces vasodilation	The precise mechanism of action is unknown; however, it appears its action is due to at least 2 complementary mechanisms, binding to mu opioid receptors and weak inhibition of norepinephrine and serotonin reuptake. Pharmacologic activity is attributed to both the parent and M1 metabolite; the M1 metabolite is up to 6 times more potent in producing analgesia and 200 times more potent in binding to the mu receptor than the parent drug. In vitro,	This drug and its active metabolite oxypurinol inhibit the xanthine oxidase enzyme that catalyzes the conversion of hypoxanthine to xanthine and xanthine to uric acid (urate). With xanthine and hypoxanthine more available in the purine metabolic cycle, a decrease in overall de novo purine formation occurs due to feedback mechanisms. These actions result in reductions	This drug inhibits gastric acid secretion through selective binding to and permanent inhibition of H+/K+ - ATPase, the "proton pump," on the secretory surface of parietal cells. The reduced gastric acidity provides a suitable environment for antibiotic treatment of Helicobacter pylori.

		in peripheral and coronary circulation. Laxative effects are due to the osmotic activity of unabsorbed salts in the gastrointestinal tract and stimulation of gastric motility.	this drug has been shown to inhibit reuptake of norepinephrine and serotonin.	in both serum and urinary uric acid levels.	
Reason Client Taking	Pericardium Effusion	Low mag levels	Pain	GOUT	GERD
Contraindications (2)	Allergic, Liver Disease	Allergic, Pregnancy	Allergic, Brain disorders	Allergic, Diabetes	Allergic, Lupus
Side Effects/Adverse Reactions (2)	Dizziness, Headache	Upset stomach, Diarrhea	Nausea, vomiting	Upset Stomach, Diarrhea	Headache, Diarrhea

Medications Reference (APA):

Sarah Bush Lincoln Health Reference Guide. (2020). Sarah Bush Lincoln: Cerner.

https://www.sarahbush.org/

Assessment

Physical Exam (18 points)

GENERAL: **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	**Alertness:** A/Ox4 **Distress:** Slight visible distress, claimed to be nauseated. **Appearance:** Looks well-kept and clean
INTEGUMENTARY: **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** **Drains present: Y☐ N ☒** **Type:** N/A	**Skin:** Usual color for race, warm, dry, loose, both lower extremities wounded. **Braden Scale:** 16 **Fall risk:** 60
HEENT: **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	**Head and Neck:** Symmetrical **Ears:** TM Pearly Grey, slight hard of hearing **Eyes:** PERLA **Nose:** Patent
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:** Both lower extremities	**Sound and Rhythm:** Normal **Cap refill:** All >2 sec **Pulses:** 3+
RESPIRATORY: **Accessory muscle use: Y☐ N ☒** **Breath Sounds: Location, character**	**Breath:** Normal sounds, clear, equal, regular
GASTROINTESTINAL: **Diet at home:** Regular **Current Diet:** Regular **Height:** 165cm **Weight:** 100.3kg **Auscultation Bowel sounds:** Active **Last BM:** 11/04/2020	

Palpation: Pain, Mass etc.: Nothing noted **Inspection:** Nothing noted **Distention:** **Incisions:** **Scars:** **Drains:** **Wounds:** **Ostomy: Y ☐ N ☒** **Nasogastric: Y ☐ N ☒** **Size:** N/A **Feeding tubes/PEG tube Y ☐ N ☒** **Type:** N/A	
GENITOURINARY: **Color:** Yellow **Character:** Slightly hazy **Quantity of urine:** 300ml **Pain with urination: Y ☐ N ☒** **Dialysis: Y ☐ N ☒** **Inspection of genitals:** **Catheter: Y ☒ N ☒** **Type:** N/A **Size:** N/A	
MUSCULOSKELETAL: **Neurovascular status:** Cap refill >2 **ROM:** **Supportive devices:** Wheelchair/cane **Strength:** **ADL Assistance: Y☒ N ☐** **Fall Risk: Y ☒ N☐** **Fall Score:** 60 **Activity/Mobility Status:** Bedrest **Independent (up ad lib)** ☐ **Needs assistance with equipment** ☐ **Needs support to stand and walk**☐	**ROM:** Arms bilaterally active (4), Legs bilaterally did not want to move
NEUROLOGICAL: **MAEW: Y ☐ N☒** **PERLA: Y ☒ N☐** **Strength Equal: Y ☒ N ☐ if no -** **Legs ☐ Arms ☐ Both ☒** **Orientation:** A/Ox4 **Mental Status:** Normal **Speech:** Clear **Sensory:** Good **LOC:** Alert	**Strength:** Arms bilaterally 4, legs bilaterally 0

PSYCHOSOCIAL/CULTURAL: **Coping method(s):** **Developmental level:** High school **Religion & what it means to pt.:** Nothing **Personal/Family Data (Think about home environment, family structure, and available family support):** Lives in a long-term care facility.	

Vital Signs, 1 set (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0815	92 bpm	123/52 mmHg	18 rpm	36.5 C	98%

Pain Assessment, 1 set (5 points)

Time	Scale	Location	Severity	Characteristics	Interventions
0815	Numeric	N/A	0	N/A	N/A

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
At the time 0ml	300ml

Nursing Diagnosis (15 points)
Must be NANDA approved nursing diagnosis

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 decreased cardiac tissue perfusion related to a pericardium effusion as evidenced by the patient stating, "I am short of breath".	This diagnosis was chosen because the pt while at the cancer center they found pericarditis and fluid surrounding the heart.	**1.** Decrease the amount of liquid in the body overall. To do this we had started her on Lasix. **2.** Another intervention here would be to reduce inflammation. So, starting her on anti-inflammatories would help.	No problems noticed from pt or family and she is taking them as directed. Unsure how she is reacting to treatment (not there long enough to notice if the meds are working).
2. Risk for impaired skin integrity related to impaired movement and being bedridden as evidenced by both lower extremities being broken.	This diagnosis was chosen because the pt is at a risk to pressure ulcers due to the inability to be mobile.	**1.** Every 2 hours she needs to be readjusted to keep her body moving and for the nurse to inspect concerned areas for moisture build up. **2.** Switch out the mattress for an air mattress which will reduce the amount pressure applied to the body.	Pt has been compliant and okay with the readjustments and inspection done by the nurse every two hours. No skin breakdown was noticed during physical exam so interventions seem to be working.

Other References (APA):

None

Concept Map (20 Points):

Subjective Data

Pt claims that she was experiencing SOB. Claims to have no pain however.

Nursing Diagnosis/Outcomes

Risk for decreased cardiac tissue perfusion related to a pericardium effusion as evidenced by the patient stating, "I am short of breath".
Risk for impaired skin integrity related to impaired movement and being bedridden as evidenced by both lower extremities being broken.

She is currently on both Lasix and anti-inflammatories, unsure at this time as to how well it is working.
At this moment there are no signs of skin breakdown, and although she is bedridden she has a pretty good Braden score.

Objective Data

Her vital signs were all within normal range except her blood glucose and BP which may be altered due to her being stressed. She is also on O2 to keep her O2 stat within range.

Patient Information

She is an 81 y/o female that lives in a long-term care facility. She has a history of CKD and cancer which has abnormalized much of her labs.

Nursing Interventions

1. Decrease the amount of liquid in the body overall. To do this we had started her on Lasix.

2. Another intervention here would be to reduce inflammation. So, starting her on anti-inflammatories would help.

3. Every 2 hours she needs to be readjusted to keep her body moving and for the nurse to inspect concerned areas for moisture build up.

4. Switch out the mattress for an air mattress which will reduce the amount pressure applied to the body.