N431 Care Plan #2

Lakeview College of Nursing

Kristine Johnson

Demographics (3 points)

Date of Admission 2 Days ago	Patient Initials M.L.	Age 72 years old	Gender Female
Race/Ethnicity Hispanic	Occupation Retired	Marital Status Widowed	Allergies Bananas, Shellfish, Cyclobenzaprine
Code Status Full Code	Height 5'2"	Weight 106 lbs	

Medical History (5 Points)

Past Medical History: Hypertension, Atrial fibrillation, Hyperlipidemia, CHF

Past Surgical History: Cholecystectomy in 1995, Total Knee Replacement in 2009

Family History: Mother – diabetes, Brother – diabetes, Father – MI

Social History (tobacco/alcohol/drugs): never smoker, never drinker, never drug use

Assistive Devices: N/A

Living Situation: Oaks Manor Assisted Living Facility

Education Level: GED

Admission Assessment

Chief Complaint (2 points): Weight gain, swelling of the ankles

History of present Illness (10 points): Patient complains of a 12-pound weight gain over the last 4 days and an increase in peripheral edema of the bilateral ankles and pedal areas. Patient states she has been monitoring her weight every morning and has noticed an increase in her weight each day. Patient states her ankle edema worsens with ambulation and improves with rest and elevation.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): CHF exacerbation

Secondary Diagnosis (if applicable): N/A

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

The client was primarily diagnosed with congestive heart failure with exacerbation, which is heart failure that is associated with fluid retention (Capriotti, 2016). This condition occurs when the heart is not pumping effectively, causing the arteries of the heart to narrow or high blood pressure (Mayo Clinic, 2017). Signs and symptoms associated with CHF include; shortness of breath, fatigue, swelling in lower extremities, rapid or irregular heartbeat, reduced ability to exercise, persistent cough or wheezing, increase urination at night, ascites, rapid weight gain, lack of appetite, nausea, difficulty concentrating, sudden severe shortness of breath, and chest pain if a heart attack occurs (Mayo Clinic, 2017). The expected vital signs would include high blood pressure, possible tachycardia or arrhythmia, and likely low oxygen saturation due to coughing or wheezing. The client's vital signs were relativity normal because she takes metoprolol for A fib, and her oxygen saturation was normal because she is on the 2L nasal cannula. The client came in expressing a weight gain of 12 pounds in 4 days and swelling in the ankles bilaterally, which is consistent with the edema and rapid weight gain due to fluid retention. Diagnostic testing for this condition would be blood tests (CK, Troponin, CKMB), chest x-ray, ECG, Echocardiogram, stress test, cardiac CT, MRI, Coronary angiogram, and myocardial biopsy (Mayo Clinic, 2017). This client had an ECG and chest x-ray did, which showed findings of heart enlargement and pulmonary vascular congestion, and the ECG showed A-fib with a rate of 88 bpm. Treatments depend on the severity because it can be treated with

medications and with surgery. The medicines used for treatment include ACE inhibitors, angiotensin II receptor blockers, beta-blockers, diuretics, aldosterone antagonists, inotropes, and digoxin (Mayo Clinic, 2017). The client was given a diuretic twice a day as part of her treatment for fluid retention, and she was already on a beta-blocker and ACE inhibitor at home. She was also on a diuretic at home; however, that was only once daily, and she was still retaining fluid. Surgical options for treatment could include coronary "bypass surgery, heart valve repair or replacement, implantable cardioverter-defibrillator, and heart transplant" (Mayo Clinic, 2017).

Pathophysiology References (2) (APA):

Capriotti, T., & Frizzell, J. P. (2016). *Pathophysiology: Introductory Concepts and Clinical Prespectives*. F.A. Davis Company.

Mayo Clinic. (2017, December 23). *Heart Failure*. Retrieved March 30, 2020, from https://www.mayoclinic.org/diseases-conditions/heart-failure/symptoms-causes/syc-20373142

Laboratory Data (15 points)

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

Lab	Normal Range	Admission Value	Today's Value	Reason for Abnormal Value
RBC	**3.50-5.20**	**N/A**	**N/A**	
Hgb	**11.0-16.0**	**N/A**	**13.6**	
Hct	**34-47**	**N/A**	**N/A**	
Platelets	**140-400**	**N/A**	**N/A**	
WBC	**4.00-11.00**	**N/A**	**9.4**	
Neutrophils	**1.60-7.70**	**N/A**	**N/A**	
Lymphocytes	**1.00-4.90**	**N/A**	**N/A**	
Monocytes	**0.00-1.10**	**N/A**	**N/A**	

Eosinophils	**0.00-0.50**	**N/A**	**N/A**	
Bands	**45-74%**	**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**	**N/A**	**138**	
K+	**3.5-5.0**	**N/A**	**3.1**	**This can be due to taking a diuretic without taking a potassium supplement**
Cl-	**98-107**	**N/A**	**N/A**	
CO2	**21.0-32.0**	**N/A**	**N/A**	
Glucose	**60-99**	**N/A**	**94**	
BUN	**7-18**	**N/A**	**24**	**Possible kidney damage from CHF because kidneys are not filtering it out of the blood stream**
Creatinine	**0.55-1.02**	**N/A**	**2.8**	**Due to impaired kidney function caused by CHF**
Albumin	**3.4-5.4**	**N/A**	**N/A**	
Calcium	**8.5-10.1**	**N/A**	**N/A**	
Mag	**1.6-2.6**	**N/A**	**N/A**	
Phosphate	**2.4-4.5**	**N/A**	**N/A**	
Bilirubin	**0.2-1.2**	**N/A**	**N/A**	
Alk Phos	**20-140**	**N/A**	**N/A**	
AST	**10-40**	**N/A**	**N/A**	

ALT	**7-56**	**N/A**	**N/A**	
Amylase	**0-137**	**N/A**	**N/A**	
Lipase	**12-70**	**N/A**	**N/A**	
Lactic Acid	**0.5-1**	**N/A**	**N/A**	
Troponin	**0.00-0.05 ng/mL**	**N/A**	**N/A**	
CK-MB	**5-25**	**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	**0.8-1.1**	**N/A**	**N/A**	
PT	**11-13.5 sec**	**N/A**	**N/A**	
PTT	**30-40 sec**	**N/A**	**N/A**	
D-Dimer	**Negative**	**N/A**	**N/A**	
BNP	**<100**	**N/A**	**4,923**	**Results from the heart not being able to pump properly indicating heart failure.**
HDL	**40-56**	**N/A**	**N/A**	
LDL	**100-129**	**N/A**	**N/A**	
Cholesterol	**<100**	**N/A**	**N/A**	
Triglycerides	**<150**	**N/A**	**N/A**	
Hgb A1c	**5.7-6.4**	**N/A**	**N/A**	
TSH	**0.358-3.740 mcIU/mL**	**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	N/A	N/A	
pH	4.5-8.0	N/A	N/A	
Specific Gravity	1.002-1.030	N/A	N/A	
Glucose	Negative	N/A	N/A	
Protein	Negative	N/A	N/A	
Ketones	Negative	N/A	N/A	
WBC	Negative	N/A	N/A	
RBC	Negative	N/A	N/A	
Leukoesterase	Negative	N/A	N/A	

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

Test	Normal Range	Value on Admission	Today's Value	Explanation of Findings
pH	7.35-7.45	N/A	N/A	
PaO2	80-100	N/A	N/A	
PaCO2	35-45	N/A	N/A	
HCO3	22-28	N/A	N/A	
SaO2	94-100%	N/A	N/A	

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

Test	Normal Range	Value on Admission	Today's Value	Explanation of Findings
Urine Culture	NEGATIVE	N/A	N/A	

Blood Culture	**NEGATIVE**	**N/A**	**N/A**	
Sputum Culture	**NEGATIVE**	**N/A**	**N/A**	
Stool Culture	**NEGATIVE**	**N/A**	**N/A**	

Lab Correlations Reference (APA):

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

Diagnostic Imaging

All Other Diagnostic Tests (5 points): Chest x-ray, EKG

Diagnostic Test Correlation (5 points): Chest X-ray = findings consistent with an enlarged heart and pulmonary vascular congestion
EKG = shows A fib at a rate of 88 bpm

Diagnostic Test Reference (APA):

Mayo Clinic. (2017, December 23). *Heart Failure*. Retrieved March 30, 2020, from https://www.mayoclinic.org/diseases-conditions/heart-failure/symptoms-causes/syc-20373142

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

Home Medications (5 required)

Brand/Generic	Lisinopril (Prinivil)	Amiodarone (Cordarone)	Aspirin (Bayer aspirin)	Metoprolol (Lopressor)	Furosemide (Lasix)
Dose	40 mg	200 mg	81 mg	50 mg	40 mg
Frequency	Daily	Daily	Daily	BID	daily
Route	PO	PO	PO	PO	PO

Classification	Angiotensin-converting enzyme inhibitor	antiarrhythmic	antiplatelets	Beta blocker	Loop diuretic
Mechanism of Action	Inhibits angiotensin converting enzyme interfering with conversion of angiotensin I to angiotensin II	Prolongs action potential phase 3 (class III antiarrhythmic)	Non-selectively and irreversibly inhibits cyclooxygenase, reducing prostaglandin and thromboxane A2 synthesis, producing analgesic, anti-inflammatory, and antipyretic effects and reducing platelet aggregation	Selectively antagonizes beta-1 adrenergic receptors	Inhibits loop of Henle and proximal and distal convoluted tubule sodium and chloride resorption
Reason Client Taking	Hypertension	Treat arrhythmia	Thin the blood	Treat tachycardia	Decrease fluid retention
Contraindications (2)	Hypersensitivity ACE inhibitor angioedema history	Hypersensitivity Cardiogenic shock	Hypersensitivity Aspirin triad	Hypersensitivity Sinus bradycardia	Hypersensitivity anuria
Side Effects/Adverse Reactions (2)	Dizziness Hypotension	Corneal deposits Malaise/ fatigue	Dyspepsia Nausea	Fatigue dizziness	Urinary frequency dizziness
Nursing Considerations (2)	Monitor BUN/Cr at baseline Monitor BP	Monitor BP Check electrolytes	Toxic levels >300 mcg/mL Timing: 1-3hrs after	BP and HR if too low hold the mediation (<60)	Monitor electrolytes Give in the AM

			dose		
Key Nursing Assessment(s)/Lab(s) Prior to Administration	BUN/Cr BP Electrolytes	ECG BP Chest x-ray	PT INR Cr at baseline	BP HR	BUN/Cr Serum CO2 CBC
Client Teaching needs (2)	Check BP prior to dose Avoid during pregnancy	Monitor BP A possible side effect is dizziness so take caution.	No don't exceed 300 mcg/ml And take with food	Teach to monitor HR Avoid alcohol use as much as possible	Take every AM to minimize falls at night Take supplements as prescribed

Hospital Medications (5 required)

Brand/Generic	Furosemide (Lasix)	Potassium Chloride (K-Dur)	Acetaminophen (Tylenol)	Docusate (Colace)	Ondansetron (Zofran)
Dose	40 mg	40 mg	650mg	100 mg	4mg
Frequency	BID	once	Q6h PRN	BID	Q8h PRN
Route	IV	PO	PO	PO	IV
Classification	Loop diuretic	Electrolyte	analgesic	Constipation/ stool softener	Antiemetic
Mechanism of Action	Inhibits loop of Henle and proximal and distal convoluted tubule sodium and chloride resorption	Replaces potassium	Analgesic mechanism of action unknown, antipyretic effect via direct action on the hypothalamic heat-regulating center	Facilitates mixture of stool fat and water	Selectively antagonizes serotonin 5-HT3 receptors
Reason Client Taking	Decrease fluid retention	Low potassium due to diuretic	Pain control	Avoid straining	Nausea
Contraindications (2)	Hypersensitivity anuria	Hypersensitivity Hyperkalemia	Hypersensitivity Hepatic impairment	Hypersensitivity Fecal impaction	Hypersensitivity Congenital long GT

					syndrome
Side Effects/Adverse Reactions (2)	Urinary frequency dizziness	Nausea Vomiting	Nausea Vomiting	Diarrhea Abdominal cramps	Headache Constipation
Nursing Considerations (2)	Monitor electrolytes Give in the AM	Monitor CMP Monitor fluid balance	Assess pain level Assess oral temperature	Assess for signs and symptoms of side effects Monitor output/ last BM	Monitor with CHF Monitor with bradyarrhythmia's
Key Nursing Assessment(s)/Lab(s) Prior to Administration	BUN/Cr Serum CO2 CBC	Cr at baseline ECG Electrolytes Acid-base balance	Cr. at baseline Check if hepatic impairment present	No routine tests recommended	ECG if electrolytes abnormal
Client Teaching needs (2)	Take every AM and early evening to minimize falls at night Take supplements as prescribed	Take as prescribed while taking diuretic Nerve issues call doctor.	Do not exceed 4g in a day Available over the counter	Take as prescribed Report any prolonged diarrhea	Take at the onset of nausea Max dose is 16mg/dose

Medications Reference (APA):

Jones & Bartlett Learning. (2019) *2019 Nurse's Drug Handbook, eighth edition.* Burlington, MA, Jones & Bartlett Learning

Assessment

Physical Exam (18 points)

GENERAL (1 point): **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	Alert and oriented x4 Welled dressed Appears well groomed No apparent distress
INTEGUMENTARY (2 points): **Skin color:**	Skin color moist and pink, warm, and moderate tenting for skin turgor

Character: **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** **Drains present: Y☐ N ☐** **Type:**	No rashes, bruises, wounds, or drains Braden Score: 18
HEENT (1 point): **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	 PERLA Ears: moist and pink Teeth: white, clean, no significant odor Nose: moist and pink Head and neck midline
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:**	3+ pitting edema to both feet, clear S1 and S2, normal sinus rhythm, cap refill < 3secs, no neck vein distention, Peripheral pulses +2, no neck vein distention, no murmurs
RESPIRATORY (2 points): **Accessory muscle use: Y☐ N ☐** **Breath Sounds: Location, character**	crackles in the bases of the lungs bilaterally, No accessory muscle use
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 ☐**	Normoactive bowel sounds in all quadrants Regular diet Weight: 48.2kg Height: 5’2” Last BM unknown No pain during palpations No distention, incisions, scars, drains, or wounds No ostomy, NG, or feeding tubes/PEG tube

Size: **Feeding tubes/PEG tube Y ☐ N ☐** **Type:**	
GENITOURINARY (2 Points): **Color:** **Character:** **Quantity of urine:** **Pain with urination: Y ☐ N ☐** **Dialysis: Y ☐ N ☐** **Inspection of genitals:** **Catheter: Y ☐ N ☐** **Type:** **Size:**	No pain or burning when voiding No dialysis No Catheter Urine yellow and clear Output of 1750 mL
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☐**	Full ROM No supportive devices Independent – Stand by assist with ADL No numbness or tingling Strength equal bilaterally in arms and legs Skin pink, warm, pulses +2, full sensation and motor function. Fall Score:10
NEUROLOGICAL (2 points): **MAEW: Y ☐ N☐** **PERLA: Y ☐ N☐** **Strength Equal: Y ☐ N ☐ if no -** **Legs ☐ Arms ☐ Both ☐** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	Orientation X4 Yes MAEW Yes, PERLA Yes, strength equal Alert Clear speech no slurred speech Felt sensation in extremities Full level of consciousness; 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):**	Hispanic Retired Widowed Full Code

Vital Signs, 2 sets (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0700	**88**	**152/68**	**24**	**36.5c**	**98% 2L of O2 via nasal cannula**
1100	**68**	**138/62**	**24**	**36.8c**	**97% 2L of O2 via nasal cannula**

Vital Sign Trends: Vital Signs are showing a decrease in the heart rate and blood pressure which can be due to the diuretic decreasing the fluid volume.

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
0700	**numeric**	**none**	**0**	**None**	**None**
1100	**numeric**	**Head**	**1**	**headache**	**Tylenol administration**

IV Assessment (2 Points)

IV Assessment	Fluid Type/Rate or Saline Lock
Size of IV: **Location of IV:** **Date on IV:** **Patency of IV:**	20G left AC inserted on today → no complications, patent, dressing clean/dry/intact

Signs of erythema, drainage, etc.: **IV dressing assessment:**	

Intake and Output (2 points)

Intake (in mL)	**Output (in mL)**
Tea PO 240 mL with breakfast Apple juice 120 mL with breakfast	Urine 1750 mL total voided in 4 hours Stool x2

Nursing Care

Summary of Care (2 points)

Overview of care: Clients medication was changed with use of the diuretic from once a day to twice due to fluid retention.

Procedures/testing done: ECG, Chext X-ray, CBC

Complaints/Issues: N/A

Vital signs (stable/unstable): stable

Tolerating diet, activity, etc.: regular

Physician notifications: N/A

Future plans for patient: Will follow up with PCP in 1 week following discharge.

Discharge Planning (2 points)

Discharge location: Patient will return back to her assisted living facility upon discharge

Home health needs (if applicable): Patient is also requesting a one-time visit from a Care Coach.

Equipment needs (if applicable): N/A

Follow up plan: Will follow up with PCP in 1 week following discharge.

Education needs: N/A

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. Fluid overload related to fluid retention as evidence by crackles in the lungs and edema.	The fluid retention is causing the crackles in the lungs and edema which contributed to weight gain.	1. At frequent intervals assess of intake and output 2. Assess daily weight; record and report steady losses or gains	Patient complied with allowing care aids to record voided urine before flushing and alerting them when she voids with no one there. The client also allowed the nurse to weigh her before breakfast every morning. Family also helped with reminding the client before breakfast.
2. Decreased gas exchange related to fluid in the lungs as evidence by crackles in the bases bilaterally.	The crackles in the lungs is fluid that could prevent gas exchange in the bases of the lung decreasing oxygen intake.	1. Assess all lung fields for breath sounds 2. Monitor oximetry and ABG values and report significant findings	Client asked why the oximetry monitor was necessary and the nurse explained the importance of knowing the level of oxygen in the blood stream and the condition of the lungs. The client complied with wearing the oximetry monitor.
3. Fatigue with decreased exercise tolerance related to	She may be more fatigue because if resting more and walking less causing more	1.Assess the patients' physiologic responses to activity and report	The client asked for a notebook to write down the steps and record the heart rates they manually took themselves and

edema when walking as evidence by needing to rest to improve it.	stress on the body when she does ambulate.	significant findings 2 teach the patient to self-measurement of HR for assessing exercise tolerance.	compared them with the nurse.
4. Need for health teaching related to medications as evidence by fluid retention.	Client takes diuretic however is still experiencing fluid retention at home so there is possible non-medication compliance.	1. Assess patient's health care literacy 2. teach the purpose of diuretics	The client did not understand what difference when they took the medication made. The nurse explained that the diuretic if taken at night will cause frequent visits to the bathroom at night which could potentially cause a fall. Taken it during the day in the AM will eliminate that issue.

Other References (APA):

Swearingen, P., (2019) *All-in-One Nursing Care Planning Resource*. Fifth edition. St. Louis, MI, Elsevier

Concept Map (20 Points):

N431 CARE PLAN