N311 Care Plan 3

Bethany Waugh

Lakeview College of Nursing

N311: Foundations of Professional Practice

Kristal Henry

10/31/2024

Demographics (5 points)

Date of Admission	Client Initials	Age	Gender
10/27/2024	W. W.	96	Female
Race/Ethnicity	**Occupation**	**Marital Status**	**Allergies**
White/Caucasian	Retired secretary & sales	Widowed	Ciprofloxacin, lisinopril, sulfa antibiotics
Code Status	**Height**	**Weight**	
No CPR/ Selective Services	5'2"	75.7 kg	

Medical History (5 Points)

Past Medical History: atrial fibrillation, diabetes mellitus (type 2), hypertension, hypothyroidism, measles, mumps, varicella

Past Surgical History: hysterectomy, cystoscopy, hernia repair, tubal ligation, total thyroidectomy, bladder surgery, appendectomy, varicose vein surgery x 3, cataract surgery

Family History: mother deceased at 50 due to myocardial infarction, father deceased at 96, brother dead at 100, 1 daughter deceased of ovarian cancer

Social History (tobacco/alcohol/drugs including frequency, quantity and duration of use): never smoked, never used smokeless tobacco, does not drink, does not use drugs

Admission Assessment

Chief Complaint (2 points): shortness of breath

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

Patient presents on 10/27 experiencing shortness of breath, hypoxia, cough, constipation, fatigue and lower leg edema that began on 10/21 and has been progressively getting worse until the time of admission. Patient reports pain as 0/10 but says that the shortness of breath was intense and "scared them half to death". Shortness of breath and cough were eased by relaxation and breathalyzing treatments given at home on 10/26, but the relief did not last long as the

symptoms were agitated by simply walking around her home for daily activities. Patient reports that sometimes walking from the kitchen to the living room makes her feel a need to “stop and take a deep breath”. Patient was experiencing gallbladder pain on 10/20 and sought treatment in Bloomington where a drain was placed, but fell out two days later. Patient’s son thinks that “could’ve been the start of all of this”.

Primary Diagnosis

Primary Diagnosis on Admission (3 points): congestive heart failure

Secondary Diagnosis (if applicable): right lower lobe pneumonia, normocytic anemia

Pathophysiology

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

Congestive heart failure is one of the most frequent causes for hospitalization in the world; it is estimated to affect 6.5 million people in the United States and 26 million people word-wide (Capriotti, 2020). Congestive heart failure causes fluid to build up in the body, and it can be acute (developing rapidly and coming on suddenly) or chronic (a condition where the heart progressively weakens over time) (Capriotti,2020). Congestive heart failure causes fluid accumulation either through systolic or diastolic heart failure.

In systolic heart failure, the left ventricle becomes weakened and cannot effectively pump enough blood into the aorta (Capriotti,2020). As a result of this, blood (and pressure) builds up in the left atrium (which rests above the left ventricle) and eventually goes on to affect the pulmonary veins and arteries causing pulmonary edema (Capriotti,2020). A rise in pressure in the pulmonary veins and arteries will eventually lead to damage in the right side of the heart. In diastolic heart failure the left ventricle becomes stiffened which prohibits it from properly relaxing or filling with blood and therefore inhibits its ability to efficiently pump enough blood

to the body tissues to meet their needs (Capriotti,2020). A weakened or stiffened left ventricle will result in a lower cardiac output and therefore a lower blood pressure; this decrease in blood pressure will be sensed by the kidneys who in turn activate the renin-angiotensin-aldosterone system (RAAS) (Capriotti, 2020). When the RAAS is activated, it sets off a string of events that result in increased sodium and water reabsorption in an attempt to raise the blood pressure, but, with heart failure, the result is a steep increase in fluid retention throughout the body that causes edema (Capriotti,2020).

Common symptoms of congestive heart failure include shortness of breath, chest pain, hypoxia, fluid retention, weight gain because of fluid retention, cough, fatigue, swelling, edema, exercise intolerance, clubbing of the nail beds, diminished pulses, and cyanosis. Congestive heart failure is broken down into four stages. Stage A refers to patients who are at high risk of heart failure but have yet to develop any structural damage or heart diseases (Caprotti,2020). In stage B the risks have progressed to heart disease, but the patient has not yet shown any signs or symptoms of heart failure (Capriotti,2020). Stage C describes the stage where the patient is exhibiting signs of heart failure that are associated with underlying structural heart disease, and stage D is the final stage where a patient is exhibiting maximal signs of heart failure at rest despite every medical effort being made to intervene in the disease process (Capriotti,2020).

There are many ways to diagnose congestive heart failure, but the most often utilized are serum electrolytes, chest x-rays, electrocardiograms, and echocardiograms (Capriotti,2020). Serum electrolytes tests evaluate the level of different electrolytes in the body to monitor for imbalances commonly seen with the fluid retention that escorts congestive heart failure, chest x-rays reveal enlargements of the heart or dilation of blood vessels in the lungs, electrocardiograms use electrical signals to determine how regularly and often the heart beats, and echocardiograms

are a type of sonogram that reveal the movement and structures of the heart (Capriotti,2020). Another widely used test is the cardiac troponin test. Cardiac troponin tests are most often used to diagnose myocardial infarctions but may be used to diagnose any type of cardiac muscle damage (Cleveland Clinic Staff,2022). Cardiac troponin levels are tremendously specific to myocardial cell injury, which makes them a wonderful indicator for myocardial cell damage caused by congestive heart failure (Pagana,2023). There are two types of troponins that are easy to detect after heart muscle damage: Troponin I (unique to heart muscles) and Troponin T (occurs in other types of muscle in small amounts but also has a different structure than Troponin I) (Cleveland Clinic Staff,2022). Cardiac troponin levels will become elevated 2-3 hours after myocardial muscle damage and remain elevated for between several days to over a week but will not be altered following any other type of muscle damage (Pagana,2023).

Pathophysiology References (2) (APA):

Capriotti, T. (2020). *Pathophysiology: Introductory Concepts and Clinical Perspectives.* F.A. Davis.

Cleveland Clinic Staff. (2022, March 17th). *Troponin Test.* *https://my.clevelandclinic.org/health/diagnostics/22770-troponin-test*

Pagana, K. D., Pagana, T. J., & Pagana, A. (2023). *Mosby's diagnostic and laboratory test reference* (6th ed.). Elsevier.

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	3.80-5.30 10(6)mcL	3.01 10(6)mcL	2.59 10(6)mcL	Fluid retention causing hemodilution (Pagana, 2023).
Hgb	12.0-15.8 g/dL	9.1 g/dL	8.3 g/dL	Fluid retention causing hemodilution, decreased cardiac output, hypoxia has caused damage to the kidneys (Pagana, 2023).
Hct	36.0-47.0%	26.7%	23.5%	Fluid retention causing hemodilution (Pagana, 2023).
Platelets	140-440 10(3)mcL	213 mcL	187 mcL	N/A
WBC	4.00-12.00 10(3)mcL	8.30 10(3)mcL	6.70 10(3)mcL	N/A
Neutrophils	47.0%-73.0%	76.4%	70.7%	More neutrophils are produced due to inflammation/damage in the heart (Pagana, 2023).
Lymphocytes	18.0-42.0%	11.6%	14.8%	Systemic inflammation increases lymphocyte production (Pagana, 2023).
Monocytes	4.0-12.0%	9.3%	11.3%	N/A
Eosinophils	0.0-5.0%	1.9%	2.4%	N/A
Bands	N/A	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-	136-145 mmol/L	145 mmol/L	145 mmol/L	N/A
K+	3.5-5.1 mmol/L	3.9 mmol/L	4.1 mmol/L	N/A
Cl-	98-107 mmol/L	107 mmol/L	105 mmol/L	N/A

CO2	22-30 mmol/L	28 mmol/L	31 mmol/L	Right lower lobe pneumonia inhibiting gas exchange (Pagana, 2023).
Glucose	70-99 mg/dL	125 mg/dL	72 mg/dL	Diabetes mellitus (Pagana, 2023).
BUN	10-20 mg/dL	21 mg/dL	20 mg/dL	Reduced renal blood flow caused by congestive heart failure (Pagana, 2023).
Creatinine	0.60-1.00 mg/dL	1.30 mg/dL	1.20 mg/dL	Ischemic cardiac congestion caused by congestive heart failure (Pagana, 2023).
Albumin	3.5-5.0 g/dL	3.1 g/dL	3.0 g/dL	Decreased blood flow to the liver caused by decreased cardiac output, nutrition deficiency (Pagana, 2023).
Calcium	8.7-10.5 mg/dL	8.8 mg/dL	8.5 mg/dL	Reduced renal blood flow, nutrition deficiency (Pagana, 2023).
Mag	1.6-2.6 mg/dL	2.1 mg/dL	2.1 mg/dL	N/A
Phosphate		N/A	N/A	N/A
Bilirubin	0.2-1.2 mg/dL	0.6 mg/dL	0.5 mg/dL	N/A
Alk Phos	40-150 U/L	75 U/L	69 U/L	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	Yellow/ Clear	N/A	N/A
pH	5.0-9.0	5.5	N/A	N/A
Specific Gravity	1.003-1.030	1.017	N/A	N/A
Glucose	Negative	Negative	N/A	N/A
Protein	Negative	1+	N/A	Kidney damage (Pagana, 2023).
Ketones	Negative	Negative	N/A	N/A
WBC	0-5/hpf Negative	0-5/hpf Negative	N/A	N/A

RBC	0-2/hpf Negative	0-2/hpf Negative	N/A	N/A
Leukoesterase	Negative	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	In process	In process	N/A
Sputum Culture	Negative	N/A	N/A	N/A
Stool Culture	Negative	N/A	N/A	N/A

Lab Correlations Reference (1) (APA):

Pagana, K. D., Pagana, T. J., & Pagana, A. (2023). *Mosby's diagnostic and laboratory test reference* (6th ed.). Elsevier.

Diagnostic Imaging

All Other Diagnostic Tests (10 points):

An x-ray of the chest performed for shortness of breath revealed dilated blood vessels due to fluid retention throughout the lungs, the roots of the left lung showed increased radiolucency suspected of being from poor air exchange, an area of increased density on the lower lobe of the right lungs, and linear transversed shadows on the lower right lung. The x-ray findings were used to diagnose the patient with right lower lobe pneumonia. The heart is enlarged as well as the distal aortic arch and the pulmonary segment, resulting in decreased cardiac output.

X-ray of abdomen obtained in the supine position for intestinal discomfort: Fecal impaction of the ascending colon was noted. The patient received an enema 10/27 at 1549 to relieve this.

Diagnostic Imaging Reference (1) (APA):

John Hopkins Medicine. (2024, March 4th). *Chest X-Ray*. www.hopkinsmedicine.org. https://www.hopkinsmedicine.org/health/treatment-tests-and-therapies/chest-xray

Pagana, K. D., Pagana, T. J., & Pagana, A. (2023). *Mosby's diagnostic and laboratory test reference* (6th ed.). Elsevier.

Assessment

Physical Exam (18 points) – HIGHLIGHT ALL PERTINENT ABNORMAL FINDINGS

General, Psychosocial/Cultural, and ONE focused assessment specific to the client is required.

The student and instructor may complete these assessments together.

GENERAL: **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	Patient is alert and responsive, oriented x person, place, situation, and time. Appears well groomed and adequately dressed with no visible signs of distress.
INTEGUMENTARY: **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** **Drains present: Y☐ N ☒** **Type:**	Upper abdomen and extremities skin color and turgor appropriate, dry, warm, no visible rashes, bruises, or wounds. No edema noted. IV site in the right hand. Lower extremities noted to be dry, red ,warm, and edematous with 3+ (moderate) pitting noted. Braden Score:18

HEENT: **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	Head and neck are symmetrical, trachea is midline without deviation, thyroid has been removed. Bilateral carotid pulses are palpable and +2. No lymphadenopathy in the head or neck is noted. Bilateral sclera white, bilateral cornea clear, bilateral conjunctiva pink, no visible drainage from eyes. Bilateral lids are moist and pink without lesions or discharge noted. PERRLA bilaterally. EOM's intact bilaterally. Bilateral auricles, no visible or palpable deformities, lumps or lesions. Hearing is intact but requests you speak slowly. Septum is midline, turbinates are moist and pink bilaterally, no visible bleeding or polyps. Bilateral frontal sinuses are nontender to palpation. Nasal cannula present (I forgot to check how many liters of oxygen the patient was receiving but will take care to do so in the future). Dentition is grey and shows signs of decay. Oral mucosa is pink and moist with no visible sores or lesions. Uvula is midline, soft palate rises and falls symmetrically, hard palate intact.
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:**	S1 and S2 are present although faint. No gallops, rubs, or murmurs noted. PMI palpable at 5th intercostal space at MCL. Normal rate and rhythm. Peripheral pulses are thready but present bilaterally in upper and lower extremities. Capillary refill is less than three seconds in all four extremities. Lower extremities show moderate pitting edema, redness, swelling, and dryness.
RESPIRATORY: **Accessory muscle use: Y☒ N ☐**	Respirations are regular but labored, accessory muscle use noted in upper abdomen. Crackles noted in the left and right lower lung lobes when listened to

Breath Sounds: Location, character	posteriorly. Patient reports shortness of breath that becomes aggravated walking short distances (such as walking about the house). Uses breathalyzing treatments at home.
GASTROINTESTINAL: **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:**	Bowel sounds are present and active in all four quadrants. Patient is eating a regular diet. Height: 5'2" Weight: 75.7 kg Patient believes their last bowel movement was yesterday (10/27), expelled gas this afternoon (10/28) but failed to produce a bowel movement when attempted. Abdomen appears nondistended and soft upon palpation. No pain or masses noted.
GENITOURINARY: **Color:** **Character:** **Quantity of urine:** **Pain with urination: Y ☐ N ☒**	Urine appears clear and yellow. Eliminated 60 ml of urine at 1525 on 10/28. Patient reports no pain with urination but states that they cannot eliminate lying down and feels an urgent need to "get up and go" come on suddenly. Uses bedside commode with assistance and wears a depends to help with "accidents" and keep skin dry.

Dialysis: Y ☐ N ☒ **Inspection of genitals:** **Catheter: Y ☐ N ☒** **Type:** **Size:**	
MUSCULOSKELETAL: **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☒**	Patient moves all extremities well but is experiencing weakness and fatigue with trouble swinging lower extremities onto the bed from the floor alone. Needs assistance with ADL's like toileting and showering, but determined to do as much as they can independently and remain independent. High fall risk. Fall Risk Score:44 Patient uses a front wheeled walker to move about the house and needs assistance transitioning to standing position from supine position.
NEUROLOGICAL: **MAEW: Y ☒ N☐** **PERLA: Y ☒ N☐** **Strength Equal: Y ☒ N ☐ if no - Legs ☐ Arms ☐ Both ☐** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	Oriented to person, place, time, and situation. Awake and alert, follows commands easily, long- and short-term memory intact. Moves all extremities well Speech is clear and volume is appropriate. Arm strength is equal bilaterally. Leg strength is diminished but equal bilaterally.
PSYCHOSOCIAL/CULTURAL: **Coping method(s):**	Patient is well educated on all diagnoses and is coping well. Visits with family and television are helping them stay positive through their current

Developmental level: **Religion & what it means to pt.:** **Personal/Family Data (Think about home environment, family structure, and available family support):**	stent of hospitalization. Developmental level is high, and patient remains able to communicate clearly on their own and make their own decisions. Patient identifies as a Protestant and says that faith provides them with a sense of calm and hope. Family is very involved with patient care. 2 sons, and 2 living daughters. They all try to get together about every other week with frequent gatherings of smaller groups multiple times a week. Patient is living in an assisted living facility but works hard to maintain independence.

Vital Signs, 1 set (5 points) – HIGHLIGHT ALL ABNORMAL VITAL SIGNS

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
1515	59 B/P/M	157/57 mm/Hg	15 B/P/M	97℉	97% Nasal Cannula

Pain Assessment, 1 set (5 points)

Time	Scale	Location	Severity	Characteristics	Interventions
1600	1-10	N/A	0/10	N/A	N/A

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
½ of breakfast, 1/3 of dinner, 4 oz water, 6 oz coca cola	60 ml of urine

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

Nursing Diagnosis • Include full nursing diagnosis with "related to" and "as evidenced by" components • Listed in order by priority – highest priority to lowest priority pertinent to this client	**Rationale** • Explain why the nursing diagnosis was chosen	**Interventions (2 per dx)**	**Outcome Goal (1 per dx)**	**Evaluation** • How did the client/family respond to the nurse's actions? • Client response, status of goals and outcomes, modifications to plan.
1. Decreased activity tolerance related to exertional discomfort as evidenced by the patient becoming short of breath when walking short distances around their home or hospital room (Phelps, 2023).	The patient is having trouble maintaining a steady respiration rate when walking around their home or hospital room. Quickly becomes exhausted when performing ADL's or using a bedside commode.	**1.**Encourage the patient to exert as much activity as they can tolerate every day to help them maintain independence when performing ADL's (Phelps, 2023). **2.** Monitor vital signs when activity level has been increased to ensure that the patient is performing exertion within safe limitations	**1.** Patient's vital signs remain in normal parameters following physical exertion within the next 24 hours. Patient remains excited to be involved in maintaining their independence and shows progress before their discharge (Phelps, 2023).	Patient responds well to slow increases in daily exertion. Independence is maintained and skin breakdown from inactivity is avoided. Family is involved in maintaining independence while also helping to monitor the patient for signs of distress after exertion.

		and showing progress (Phelps, 2023).		
2. Excessive fluid volume related to decreased cardiac output as evidenced by pitting edema bilaterally in lower extremities, lab results of CBC, and crackles heard in the lungs (Phelps, 2023).	Patient is experiencing pitting edema, swelling, and tenderness in bilateral lower extremities.	**1**. Assess patient daily for worsening of present edema, edema presenting in previously unaffected areas, or ascites. Elevate edematous extremities (Phelps, 2023). **2.**Administer diuretics to decrease fluid retention and maintain a healthy fluid balance (Phelps, 2023).	**1.** Patient's edema will show significant improvement, respirations will become less labored, and lung sounds will be clearer within the next 24 hours (Phelps, 2023).	The patient is grateful to experience less labored respirations and edema. Family continues to help the patient record regular input and output as well as maintain a proper schedule of nutrition and hydration to maintain a healthy fluid and electrolyte balance.

Other References (APA):

Phelps, L.L. (2023) *Nursing Diagnosis Reference Manual.* Wolters Kluwer.

Concept Map (20 Points):

Subjective Data

The patient's chief complaint was shortness of breath that was worsened with exertion.

Nursing Diagnosis/Outcomes

1. Decreased activity tolerance related to exertional discomfort as evidenced by the patient becoming short of breath when walking short distances around their home or hospital room (3ft).
   Patient's vital signs remain in normal parameters following physical exertion within the next 24 hours. Patient remains excited to be involved in maintaining their independence and shows progress before their discharge
2. Excessive fluid volume related to decreased cardiac output as evidenced by pitting edema bilaterally in lower extremities, and crackles heard in the lungs.
   Patient's edema will show significant improvement, respirations will become less labored, and lung sounds will be clearer within the next 24 hours.

Objective Data

Temp: 97°F
B/P: 157/57 mm/Hg
R/R: 15 B/P/M
SpO2: 97%
RBC: 2.59 10(6)mcL
Hgb: 8.3 g/Dl
Hct: 23.5%
Lymphocytes: 14.8%
Creatinine: 1.20 mg/dL
Albumin: 3.0 g/dL
Triponin: 24 ng/L

Client Information

96-year-old female presents with shortness of breath, cough, generalized weakness and lower leg edema.
DOA: 10/27/2024
Initials: W. W.
Height: 5'2"
Weight: 75.7 kg
Marital Status: Widowed
Ethnicity: White/Caucasian
Occupation: Retired secretary and sales
Allergies: ciprofloxacin, lisinopril, sulfa antibiotics
Code Status: No CPR/ Selective treatment

Nursing Interventions

Encourage the patient to exert as much activity as they can tolerate every day to help them maintain independence when performing ADL's.

Monitor vital signs when activity level has been increased to ensure that the patient is performing exertion within safe limitations and showing progress.

. Assess patient daily for worsening of present edema, edema presenting in previously unaffected areas, or ascites. Elevate edematous extremities.

Administer diuretics to decrease fluid retention and maintain a healthy fluid balance.