Medications

Furosemide - 40mg (4mL) IV BID with meals
- Reason:

Carvedilol - 6.25mg x 1 tabs P.O BID with meals
- Reason:

Potassium chloride SA - 10mEq x 1 tabs P.O BID with meals
- Reason:

Aspirin Chewable - 81mg tab P.O. daily
- Reason:

Isosorbide Dinitrate - 30mg x 3 tabs BID after meals
- Reason:

Allopurinol - 100mg x 1 tab daily
- Reason:

Ferrous Sulfate - 325mg x 1 tab oral BID
- Reason:

Finasteride - 5mg x 1 tab Daily
- Reason:

Pantoprazole - 40mg x 1 tab Daily
- Reason:

Enoxaparin - 30mg (0.3mL) Sub Q Daily
- Reason:

Bacitracin Ointment - Apply to open areas topical BID
- Reason:

Metolazone - 5mg x 1 tab Daily
- Reason:

Calcitriol - 0.25mg x 1 tab Daily.
- Reason:

Medical History

Previous Medical History:
Congestive Heart Failure, Stroke, Diabetes Mellitus, Hypertension, Myocardial Infarction, COPD on Exacerbation, Gout, Benign prostate hypertrophy, generalized arthritis.

Prior Hospitalizations:
Hospitalized on July 17 for the same chief complaint.

Previous Surgical History:
Pacemaker insertion - x2, endoscopy - Colon, Cholecystectomy - exploratory of abdomen, Heart catheterization, Abdominal Surgery - exploratory - laparotomy - lysis of adhesion.

Social History:
- **Tobacoo:** No never
- **Alcohol:** No
- **Drugs:** None
- **Sexual Activity:** Not currently

Demographic Data

Date of Admission: 08-28-22
Admission Diagnosis/Chief Complaint: Acute on Chronic Combined Systolic/Diastolic Congestive Heart Failure
Age: 84
Gender: Male
Race/Ethnicity: Caucasian
Allergies: Penicillin V
Code Status: FULL CODE
Height in cm: 178cm
Weight in kg: 93kg
Psychosocial Developmental Stage: Ego Integrity vs. Despair
Cognitive Developmental Stage: Patient is able to read and write with fully formed sentence structure. Patient is fully capable of making informed decisions.
Braden Score: 16
Morse Fall Score: 85 (High Risk) [Hospitals documents score of 10]
Infection Control Precautions: None

Admission History

O: First week of August
L: Abdominal
D: More than 2 weeks
C: Bloating, cramping, and abdominal pain
A: None
R: None
T: Been hospitalized since

Chief Complaint: Blocked Bowel
S/S chief complaint: Pressure, pain, bloating, alot of bowel movement which led to abdominal surgery.

Lab Values/Diagnostics

Glucose: 183 mg/dL
- **Normal Value: 70 - 100 mg/dL**

BUN: 68 mg/dL
- **Normal Value: 8 - 25mg/dL**

Creatinine: 2.18 mg/dL
- **Normal Value: 0.6 - 1.3 mg/dL**

BUN/Creatinine Ratio: 31 ratio
- **Normal Value:**

Calcium: 8.7 mg/dL
- **Normal Value: 8.6 - 10.2 mg/dL**

Chloride: 108 mmol/L
- **Normal Value: 98 - 107 mmol/L**

RBC: 3.30 10(6)/mcL
- **Normal Value: 4.5 - 6 10(6)/mcL**

HGB: 10.2 g/dL
- **Normal Value: 14 - 16 g/dL**

HCT: 31.9%
- **Normal Value: 35% - 47%**

MCV: 96.7 FL
- **Normal Value:**

RBW: 17.9%
- **Normal Value:**

Neutrophils: 77.3%
- **Normal Value: 45 - 75%**

Lymphocytes: 13.8%
- **Normal Value: 20 - 40%**

Basophils: 12%
- **Normal Value: 3%**

Absolute Lymphocytes: 0.80 10(3)/mcL
- **Normal Value:**

ALT: 3 U/L
- **Normal Value: 10 - 40 U/L**

AST: 10 U/L
- **Normal Value: 10-30 U/L**

PTH Intact: 118
- **Normal Value:**

Pathophysiology

Disease process:

Acute heart failure occurs from rapid, sudden development of heart failure that is often caused by substantial ventricular muscle injury as in massive MI. Sudden, severe shock is often referred to as cardiogenic shock; it occurs when there is a significant loss of the ventricle's ability to pump blood adequately to maintain optimal blood pressure within the body. It often occurs because of extensive acute MI. Chronic heart failure is a more common disorder, where the heart gradually suffers weakening over a long period. A weakened heart may exhibit dysfunction during systole, diastole, or both. In systolic heart failure, the weakened left ventricle has difficulty ejecting blood out of the chamber. The left ventricle is a poor forward-pump, which, in turn, causes inadequate ventricular emptying. Stroke volume and cardiac output, both functions of forward heart-pumping action, are diminished. The LVEF, the amount of blood pumped out of the left ventricle, is less than 50% of the total left ventricular blood volume. Systolic heart failure is often referred to as HFrEF. Blood accumulates in the weakened left ventricle, elevating pressure within the chamber; this causes a backup of hydrostatic pressure into the left atrium above it. The backward hydrostatic pressure in the left atrium causes further backup of pressure into the pulmonary veins and, ultimately, pulmonary capillaries. This excess hydrostatic pressure in the pulmonary capillaries causes pulmonary edema. Diastolic heart failure, the ventricle has difficulty relaxing, is less elastic, and cannot expand fully. The stiff ventricle cannot fill with blood adequately and therefore pumps out insufficient blood volume for the needs of the body's tissues.

S/S of disease:

Pulmonary crackles, pulmonary edema can present with pink frothy sputum and coarse crackles, ascites, hepatomegaly and splenomegaly may not be present, pulses are usually diminished, third and fourth heart sound may be heard through the stethoscope, resting tachycardia is often present in moderate or severe heart failure, inspiratory crackles can be heard over the lung bases bilaterally, bilateral pleural effusion may develop as a result of high pulmonary venous pressure, and edema in the lower extremities.

Method of Diagnosis:
- To establish a diagnosis of heart failure, at least one of the major criteria and two of the minor criteria should be present from the Framingham Criteria for Diagnosis of Heart Failure.
- Paroxysmal nocturnal dyspnea, Weight loss of 4.5 kg or more over 5 days of treatment for heart failure, jugular vein distension, pulmonary crackles, cardiomegaly, auscultation of S3 heart sound, increased CVP (greater than 16 cm H2O), positive hepatojugular reflux.

Treatment of disease:
- Lifestyle modifications: low-fat diet, smoking cessation, and increasing physical activity.
- Pharmacological agents: beta blockers and ACE inhibitors
- Intracardiac interventions: pacemakers, that greatly improve the life of a patient with heart failure.

Active Orders

- **Diet:** CHO - High Calorie
- **IP Consult for Nephrology:** Consult for renal failure
- **Therapy:** OT Evaluation/Treatment, Physical Therapy Evaluation/Treatment - Generalized weakness
- **Respiratory**: Pulse Ox Spot
- **Other Orders:**
  - Fluid restriction - 2L/24hrs
  - Blood Sugar - 70 mg/dL - use low sugar options for diabetics mellitus
  - Maintain peripheral IV
  - I/O track voids and stools every 8hrs
  - Notify vital signs - Heart rate <50 or >120 - respiratory rate <10 or > 30 - temp >101.5F - urinary output < 240mL/8Hr, Sys B/P < 85 or >180, Dsy B/P < 50 or > 105 - Pulse Ox <90 - or worsening of pain
  - Wound dressings - 2x daily BLE and apply bacitracin to open areas
  - Wound/Ostomy - Consult for BLE weeping and blisters.

Physical Exam/Assessment

General:

- Patient is alert and oriented X3 to person, place, and time. No distress appearance at the moment and was resting/ laying in bed with HOB elevated at 40 degrees. Patient is alert and responsive to verbal and painful stimuli.

Integument:

- Skin color was a tan olive along with normal wrinkles. Skin was also dry and warm to the touch. Rashes are present in the front forearms bilaterally (about 3 inches width with some purple tint). Bruising were also present in front forearms bilaterally. (about 4 inches in width with pale yellow purple tint). Turgor was slow at retractability with tenting present. Open Wound is present on rt skin of lower extremity, clear liquid secretions from open wound, wound has a pink color in the middle and the edges are slightly red color.

HEENT:

- Skull and face are symmetrical has a normal mole behind the ear (it is round, raised, even borders, and brown), Trachea is midline with no deviations and Upon palpation trachea movement is present when patient swallows. Carotid artery is palpable and is +2 left and right. all lymph nodes are nonpalpable. Eyelids have no visible discoloration, lesions, or swelling bilaterally. Sclera is white and clear bilaterally. Conjunctiva is pink and moist bilaterally. Pupils (PERRLA) are round and equal, reactive to light, and are able to accommodate bilaterally. 6 Extraocular movements are present in both eyes with no deviations bilaterally. No present ear tenderness upon palpation bilaterally with no visible drainage or discoloration bilaterally. No visible impaction in ears bilaterally. Nose septum is midline. Turbinates are moist and pink in nose bilaterally and have no visible signs of bleeding. Frontal sinuses are nontender to palpation bilaterally. Uvula is midline bilaterally. Soft palate and hard palate are present. Swallow reflex is present with a soft palate able to move upward. Buccal mucosa is moist. Teeth are present and are a yellow tint has spaces between the top front and bottom front section of teeth. An unknown black spot is present in the right top side inner molars of teeth (physician is notified of the finding).

Cardiovascular:

- Sinus Rhythm is present along with S1 and S2 sound present. No signs of S3, S4, or murmurs. Heart rhythm is regular. upper peripheral pulses were +3 and lower peripheral pulses were +2 bilaterally. Mitral valve is palpable with a grade of +2. No signs of neck vein distention. Cap refill is less than 5 secs. Edema is present in both lower legs bilaterally +2 (From the middle of calf muscles to the ankles).

Respiratory:

- Normal rate and regular pattern of respirations. Respirations are symmetrical and non-labored. Lung sounds clear throughout anterior/posterior bilaterally but had slight crackle/congestion sounds in the lower lobes bilaterally. No wheezes or rhonchi noted. No use of accessory muscle or signs of breathing distress. Lung aeration is equal bilaterally.

Genitourinary

- Urine is yellow with slight foam and clear distinction. Urine voided was about 325mL and patient denies pain with urination. Genitals are clean. Patient is not on dialysis. Foley catheter is present 16 french. CAUTI Precautions included aseptic technique, hand hygiene, and routine genital hygiene check.

Gastrointestinal:

- No signs of distention upon inspection. Incision scar is present on left lower quadrant and left upper quadrant with redness and scabby. Bowel sounds were audible within normal limits in all 4 quadrants. No pain, mass, or tenderness upon palpation in all 4 quadrants. No present ostomy or nasogastric tube. Last bowel movement was the day before at 8pm. Current diet at home/facility is mechanical soft. Height is 5'20" (177.8cm) and weight is 205 lbs (93kg).

Musculoskeletal

- Neurovascular is intact. Patient is able to perform All ROM actively in the upper extremities but lower extremities is done passively. Muscle strength is 5/5 bilaterally in right upper/lower extremity. Muscle strength is 2/5 in left side of upper and lower extremity. Client is dependent with 2 person assistance of walking or support devices. Fall Risk score is 10 (high fall risk).

Neurological

- MAEW is intact and PERRLA is equal, round and reactive. Mental status is normal with behavior appropriate to their responses. speech and sensory is normal. LOC is 15 with patient alert and awake to question and answers appropriately.

Most recent VS (include date/time and highlight if abnormal):

- **09/01/22 @1030am**
  - **Blood Pressure:** 115/57
  - **Temperature**: 97.5F
  - **HR**: 78
  - **Respiratory Rate:** 74
  - **O2**: 99%

Pain and pain scale used:

- **0/10 - verbalized/number scale**

Nursing Diagnosis 1	Nursing Diagnosis 2	Nursing Diagnosis 3
Rationale	**Rationale**	**Rationale**
Interventions **Intervention 1:** **Intervention 2:**	**Interventions** **Intervention 1:** **Intervention 2:**	**Interventions** **Intervention 1:** **Intervention 2:**
Evaluation of Interventions	**Evaluation of Interventions**	**Evaluation of Interventions**

References (3) (APA):