N321 Care Plan #1

Lakeview College of Nursing

Hannah Bierman

Demographics (3 points)

Date of Admission 10/27/2020	Patient Initials M. B.	Age 95 years old	Gender Female
Race/Ethnicity Caucasian	Occupation Retired	Marital Status Widowed	Allergies NKA
Code Status DNR	Height 165.1 cm	Weight 92 kg	

Medical History (5 Points)

Past Medical History: Acute urinary retention, chronic diastolic CHF, Emphysema/COPD, Fracture left ankle, hyperlipidemia, hypertension, lung nodule, Insomnia, Iron deficiency anemia, mitral stenosis, Left below the knee amputation.

Past Surgical History: Angiogram, aspiration pneumonia, cast/splint care, biventricular pacemaker implantation.

Family History: N/A

Social History (tobacco/alcohol/drugs): N/A

Assistive Devices: Wheelchair

Living Situation: Odd Fellows

Education Level: 8th Grade

Admission Assessment

Chief Complaint (2 points): Gross Hematuria, Left ankle fracture which lead to a left leg amputation below the knee.

History of present Illness (10 points): This 95 year old female patient came to the hospital with progressive left ankle open wound with purulent drainage and progressive cellulitis of the left leg. The patients orthopedic history is significant for left ankle fracture which was initially treated with an ex-fix. The patient went definitive ORIF back in 6/10/2020 at OSF.

The patient states that over the last month or so she has had progressive redness and some purulent drainage from both medial and lateral incisions. The patients hardware was exposed which caused the patient to be admitted to the ICU and was receive Rocephin and vancomycin for treatment. The patient's urine was looked and and view that a growing mix of flora was present. Troponin was evaluated for her mild CHF and a cardiology consultation is pending.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): Gross hematuria, and Left ankle fracture that causes amputation below the knee.

Secondary Diagnosis (if applicable): Hospital acquired pneumonia.

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

Pneumonia is caused by the inhalation of droplets containing bacteria or other pathogens (Capriotti & Frizzell, 2016). The droplets travel into the upper airways and gain entry into the lung tissue (Capriotti & Frizzell, 2016). Pathogens stick to the respiratory epithelium and stimulate an inflammatory reaction (Capriotti & Frizzell, 2016). Vasodilation can occur, causing attraction to the neutrophils out of the capillaries and into the air spaces (Capriotti & Frizzell, 2016). There is excessive stimulation of respiratory goblet cells that secrete mucus (Capriotti & Frizzell, 2016). The alveoli attempt to open and close against the purulent exudate (Capriotti & Frizzell, 2016). The sounds heard with the stethoscope over the alveoli open against the exudative fluid and crackles (Capriotti & Frizzell, 2016). Many layers of edema and infectious exudate at the capillary-alveoli interface hinder optimal gas exchange (Capriotti & Frizzell,

2016). The patient can become hypoxic and hypercapnic, with an obstructed exchange of O2 and CO2 at the pulmonary capillaries (Capriotti & Frizzell, 2016).

A fracture is a break in the flow of a bone (Swearingen & D, 2019). It can occur when stress is placed on the bone that exceeds its biological loading capacity (Swearingen & D, 2019). At the lateral malleolus in the ankle region, the fibula is thinly covered by subcutaneous tissue (Swearingen & D, 2019).

Hematuria often occurs as a result of structural alteration, such as the patient ankle fracture that turned into a left leg amputation below the knee (Saleem & Karim Hamawy, 2019). The integrity of the glomerular basement membrane may be damaged to immunological or inflammatory processes (Saleem & Karim Hamawy, 2019). Some drug's calculi and chemicals may cause erosion of the urinary tract's mucosal surface, leading to hematuria (Saleem & Karim Hamawy, 2019).

Pathophysiology References (2) (APA):

Saleem, M. O., & Karim Hamawy. (2019). *Hematuria*. Nih.Gov; StatPearls Publishing. https://www.ncbi.nlm.nih.gov/books/NBK534213/

Capriotti, T. & Frizzell, J.P. (2016). *Pathophysiology: Introductory concepts and clinical perspectives*. (1st ed.). Philadelphia, PA: F.A. Davis Company.

Swearingen, P. L., & D, J. (2019) *All-in-one nursing care planning resource: medical-surgical, pediatric, maternity, and psychiatric-mental health*. Elsevier.

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**	**3.44**	**N/A**	**A low RBC is a sign of illness and the patient has gross hematuria and Hospital acquired pneumonia (Mayo clinic, 2019)**

Hgb	4.0-6.0	9.5	N/A	A high hemoglobin is common when the body required more oxygen and the patient requires more oxygen because of her hospital acquired pneumonia (Mayo Clinic, 2019)
Hct	37-47	30.0	N/A	The patient has a history of being anemic.
Platelets	140-440	242	N/A	
WBC	4.0-20.0	11.5	N/A	
Neutrophils	36-88	65.4	N/A	
Lymphocytes	24.0-44.0	15.9	N/A	
Monocytes	0.0-8.0	10.3	N/A	Infection causes one's monocytes to be high and the patient has hospital acquired pneumonia (Pietrangelo, 2019).
Eosinophils	0.0-4.0	7.2	N/A	The patient must be allergic to something when the test was drawn.
Bands	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	139	N/A	
K+	3.5-5.1	3.8	N/A	
Cl-	98-107	98	N/A	
CO2	21-31	35	N/A	The patient is on a Venti and BiPAP to help her breath because of her hospital acquired pneumonia.
Glucose	74-109	171	N/A	The client is taking beta blockers.

BUN	7-25	14	N/A	
Creatinine	0.7-1.30	0.69	N/A	
Albumin		N/A	N/A	
Calcium	8.6-10.3	7.6	N/A	
Mag		N/A	N/A	
Phosphate		N/A	N/A	
Bilirubin		N/A	N/A	
Alk Phos		N/A	N/A	
AST		N/A	N/A	
ALT		N/A	N/A	
Amylase		N/A	N/A	
Lipase		N/A	N/A	
Lactic Acid		N/A	N/A	

Other Tests <mark>Highlight All Abnormal Labs</mark>—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		N/A	N/A	
PT		N/A	N/A	
PTT		N/A	N/A	
D-Dimer		N/A	N/A	
BNP		N/A	N/A	

HDL		N/A	N/A	
LDL		N/A	N/A	
Cholesterol		N/A	N/A	
Triglycerides		N/A	N/A	
Hgb A1c		N/A	N/A	
TSH		N/A	N/A	

Urinalysis <mark>Highlight All Abnormal Labs</mark>—**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		N/A	N/A	
pH		N/A	N/A	
Specific Gravity		N/A	N/A	
Glucose		N/A	N/A	
Protein		N/A	N/A	
Ketones		N/A	N/A	
WBC		N/A	N/A	
RBC		N/A	N/A	
Leukoesterase		N/A	N/A	

Cultures <mark>Highlight All Abnormal Labs</mark>—**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		N/A	N/A
Blood Culture		N/A	N/A
Sputum Culture		N/A	N/A
Stool Culture		N/A	N/A

Lab Correlations Reference (APA):

Sarah Bush Lincoln Health Center. (2020). *Reference range (lab values).* Mattoon IL.

Mayo Clinic. (2018). *Low hemoglobin count Causes*. Mayo Clinic.
https://www.mayoclinic.org/symptoms/low-hemoglobin/basics/causes/sym-20050760

Mayo Clinic. (2019). *High hemoglobin count Causes*. Mayo Clinic. https://www.mayoclinic.org/symptoms/high-hemoglobin-count/basics/causes/sym-20050862

Shiel, W. C. (2019, November 19). *Hematocrit*. MedicineNet; MedicineNet.
https://www.medicinenet.com/hematocrit/article.htm

Pietrangelo, A. (2019*). Monocytes High: What Does It Mean If Monocytes Are Elevated?* Healthline. https://www.healthline.com/health/monocytes-high#causes-of-high-levels

Diagnostic Imaging

All Other Diagnostic Tests (5 points):

CT Abdomen and Pelvis: Bilateral mild hydronephrosis and moderately distended urinary bladder with extensive hyperdense material in the dependent portion of the urinary bladder, likely consistent with blood products or possibly neoplasm.

XR Chest: Mild consolidation in the Left mid lung, compatible with pneumonia, Possible small bilateral pleural effusions.

XR Ankle Complete: Interval removal of orthopedic hardware, with diffuse soft tissue swelling and polyarticular degenerative change. No obvious evidence of osteomyelitis.

Diagnostic Test Correlation (5 points): The patient got a chest x-ray because of her hospital acquired pneumonia. The patient also got a CT of the abdomen and pelvis to confirm she has gross hematuria. The patient also got a complete XR of the ankle which showed a diffuse of soft tissue swelling and polyarticular degenerative changes.

Diagnostic Test Reference (APA):

Sarah Bush Lincoln Health Center. (2020). *Diagnostic Tests.* **Mattoon IL.**

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

Home Medications (5 required)

Brand/ Generic	Ascorbic Acid/ Apo-c	Levothyroxine/ Eltroxin	Metoprolol/ Toprol	Acetaminophen / Abenol	Docusate/ Doxidan
Dose	**500mg**	**50 mcg**	**100 mg**	**650mg**	**100mg**
Frequency	**Daily**	**Daily**	**Daily**	**PRN**	**BID, PRN**
Route	**PO**	**PO**	**PO**	**PO**	**PO**
Classification	**Vitamin**	**Synthetic thyroxine**	**Beta1-adrenergic blocker**	**Nonsalicylate**	**Surfactant**

Mechanism of Action	It is necessary for collagen formation and tissue repair.	Replaces endogenous thyroid hormone to control the DNA transcription and protein synthesis.	Inhibits stimulation of the beta1 receptor sites, which results in gin a decrease cardia output and excitability.	Inhibits the enzyme cyclooxygenase, by blocking pain impulses from generating in the peripheral nervous system.	Softens stool by decreasing surface tensi[on] between oil and water in feces.
Reason Client Taking	Prevent Vitamin C deficiency	Hypothyroidism	She has a history of MI	Left leg amputation	Being on Bed rest
Contraindications (2)	1.Tartrazine hypersensitivity 2.Pressure in ampules	1.Acute MI 2.uncorrected adrenal insufficiency	1. Acute heart failure 2.Pulse less than 45 beats/minute	1. Severe hepatic impairment 2.Severe active liver disease	1. Fecal impaction 2. Nausea, vomiting, or other symptoms of appendicitis.
Side Effects/Adverse Reactions (2)	1.Insomnia 2.Sickle cell crisis	1.Heart failure 2. Seizures	1.Arrythmias 2.Bronchospasm	1. Hypotension 2. Stridor	1. Syncope 2. Palpitations
Nursing Considerations (2)	1.Assess for signs of Vitamin C deficiency before and during therapy. 2.May cause a decrease in serum bilirubin and an increase in urine oxalate, and cysteine levels.	1.Levothyroxine therapy is not to be used for treatment of obesity or for weight loss. 2.Monitor PT of patient who is receiving anticoagulants. The dose may require adjustment.	1. Before starting therapy for Heart failure, expect to give an ACE inhibitor, digoxin, and a diuretic to stabilize the patient. 2. If the patient with heart failure develops symptomatic	1. Store suppositories under 26.6 degree Celsius 2. Use cautiously in patients with hepatic impairment or active hepatic disease, alcoholism, chronic malnutrition, sever hypovolemia, or severe renal impairment.	1. Assess for laxative abuse syndrome, especially in women wit[h] anorexia nervosa, depression, or personalit[y] disorder. 2. Expect excessive or long-term use of docusa[te] to cause dependence on laxatives for bowel movements.

			bradycardia, expect to decrease the metoprolol dosage.		

(2020 Nurse's Drug handbook, 2020)

Hospital Medications (5 required)

Brand/Generic	Amlodipine / Norvasc	Cholecalciferol / Vitamin D3	Cyanocobalamin / Nascobal	Furosemide / Lasix	Ferrous Sulfate/ Feosol
Dose	5mg	1,000 units	1000mcg	4mL	325mg
Frequency	Daily	Daily	Daily	Daily	TID
Route	PO	PO	PO	IV push	PO
Classification	Calcium channel blocker	Vitamin	Antianemics	Loop diuretic	Hematin ic
Mechanism of Action	Binds to dihydropyridine and nondihydripride cell membranes receptor sites to inhibit the influx of extracellular calcium ions slowed.	Requires activation in the liver and kidneys to create the active form of vitamin D3.	It is a necessary coenzyme for metabolic processes. Required for cell reproduction and hematopoiesis.	Inhibits sodium and water reabsorption in the loop of Henle and increases urine formation.	Acts to normalize RBC production by binding with hemoglobin or by being oxidized and stored as hemosiderin.
Reason Client Taking	Hypertension	Anemia	Anemia	Acute urinary retention	anemia
Contraindications (2)	1.Cardiogenic shock 2.Aortic stenosis	1.Vitamin D toxicity 2.Malabsoprtion problems	1. Hypersensitivity 2. Uremia	1.Anuria 2. Hypersensitivity to furosemide	1.Hemochromatosis 2. Hemosi

				or its components	derosis
Side Effects/Adverse Reactions (2)	1.Pancreatitis 2.Dyspnea	1.Hypercalcemia 2.Increase liver enzymes	1.Thrombocytosis 2. Heart failure	1.Thromboembolism 2.Hyperglcemia	1.Hemolysis 2.angioedema
Nursing Considerations (2)	1.Use cautiously in patients with heart block, HF, impaired renal function, hepatic disorder, or severe aortic stenosis. 2. Monitor Blood pressure while adjusting dosage, especially in patients with HF or sever aortic stenosis because symptomatic hypotension may occur.	1. Assess for symptoms of vitamin deficiency prior to and periodically during therapy 2.Assess patient for bone pain and weakness prior to and during therapy.	1. Asses patient for sings of Vitamin B12 deficiency before and periodically during therapy. 2. Monitor Folic acid, Vitamin B12, and iron levels, hemoglobin, hematocrit, and reticulocyte count before treatment, and 1 month after the start of therapy.	1.Expect patient to have periodic hearing tests during prolonged or high dose I.V. therapy. 2. Monitor blood pressure and hepatic acid and renal function as well as BUN, blood glucose, and serum creatinine, electrolyte, and uric acid levels, as appropriate.	1.Give iron tablets and capsules with a full glass of juice or water. Do not crush enteric coated tablets or open capsules. 2.Protect liquid form from freezing.

(2020 Nurse's Drug handbook, 2020)

Medications Reference (APA):

2020 Nurse's drug handbook. (2020). Jones & Bartlett Learning.

Bulsara, K. G., & Manouchkathe Cassagnol. (2019, October 13). Amlodipine. Nih.Gov; StatPearls Publishing. https://www.ncbi.nlm.nih.gov/books/NBK519508/

Assessment

Physical Exam (18 points)

GENERAL (1 point): **Alertness: A&O x3** **Orientation:** **Distress:** **Overall appearance: Good**	**The patient has trouble breathing**
INTEGUMENTARY (2 points): **Skin color: Normal for race** **Character: Fair** **Temperature: Warm** **Turgor: Good for age, loose** **Rashes: N/A** **Bruises: N/A** **Wounds: N/A** **Braden Score: 15** **Drains present: Y☐ N ☒** **Type:**	
HEENT (1 point): **Head/Neck: Good** **Ears: Good not breakdown or drainage** **Eyes: Good Pupils were reactive** **Nose: Good had a strip to protect nose while or the venti and BiPAP** **Teeth**: Dentures	.
CARDIOVASCULAR (2 points): **Heart sounds: Heard S1, S2, and S3 sounds** **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable): N/A** **Peripheral Pulses: Good felt all pulses** **Capillary refill: Good less than 3 seconds** **Neck Vein Distention: Y ☐ N ☒** **Edema Y ☐ N ☒** **Location of Edema:**	.
RESPIRATORY (2 points): **Accessory muscle use: Y☐ N ☒** **Breath Sounds: Location, character**	**Heard wheezing, railing, and a rub**
GASTROINTESTINAL (2 points): **Diet at home: Regular** **Current Diet** **Height: 165.1 cm** **Weight: 92 kg**	.

Auscultation Bowel sounds: Good active in all 4 quadrants.
Last BM: now 0816
Palpation: Pain, Mass etc.:
Inspection: Good no masses present.
   Distention: The stop felt hard when pushing down on it
   Incisions: N/A
   Scars: no scars present
   Drains: N/A
   Wounds: N/A
Ostomy: Y ☐   N ☒
Nasogastric: Y ☐   N ☒
  Size:
Feeding tubes/PEG tube   Y ☐   N ☒
  Type:	

GENITOURINARY (2 Points):
Color: Yellow
Character: Good for age
Quantity of urine: Good
Pain with urination: Y ☐   N ☒
Dialysis: Y ☐   N ☒
Inspection of genitals: Good for age
Catheter: Y ☒   N ☐
  Type: Foley
  Size:N/A	

MUSCULOSKELETAL (2 points): **Neurovascular status: Good A&O x2** **ROM:** **Supportive devices: Wheelchair** **Strength: Good can role to each side good** **ADL Assistance: Y☒ N ☐** **Fall Risk: Y ☒ N☐** **Fall Score: 80** **Activity/Mobility Status:** **Independent (up ad lib) ☐** **Needs assistance with equipment ☒** **Needs support to stand and walk ☒**	**All extremities equal but left leg amputation. The patient does well move around in bed.**
NEUROLOGICAL (2 points): **MAEW: Y ☒ N☐** **PERLA: Y ☒ N☐** **Strength Equal: Y ☐ N ☒ if no - Left leg amputation Legs ☒ Arms ☐ Both ☐**	.

Orientation: A&O x3 **Mental Status: Good new where she was at and her name.** **Speech: Good** **Sensory: Good** **LOC: Good can answer questions when asked.**	
PSYCHOSOCIAL/CULTURAL (2 points): **Coping method(s):** **Developmental level: Normal for age.** **Religion & what it means to pt.: N/A** **Personal/Family Data (Think about home environment, family structure, and available family support): N/A**	Going to nursing home (Odd Fellows). The patient is hard to breath and states that she just wants to die.

Vital Signs, 2 sets (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0900	**81**	**167/78**	**26**	**37**	**89**
1036	**94**	**167/78**	**28**	**37**	**89**

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
0900	**0**	**N/A**	**N/A**	**N/A**	**N/A**
1036	**0**	**N/A**	**N/A**	**N/A**	**N/A**

IV Assessment (2 Points)

IV Assessment	Fluid Type/Rate or Saline Lock
Size of IV: 20 lumen **Location of IV: Left arm** **Date on IV: 9/28** **Patency of IV: Flush easily** **Signs of erythema, drainage, etc.: No leakage**	75 rate- racefen/ Ancef

IV dressing assessment: Good well intact	

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
1322.67	2225

Nursing Care

Summary of Care (2 points)

  Overview of care: The patient was A&O x2 and was able to verbalize her needs. The patient was seen by Dr. Stevens during shift. The patient was having trouble breathing while I was taking care of her. She was on and off a BiPAP when I was taking care of her. The patient was having troubles breathing and had gotten hospital acquired pneumonia.

  Procedures/testing done: The patient had no procedure or test done when I was taking care of her.

  Complaints/Issues: The patient is having trouble breathing

  Vital signs (stable/unstable): The patients stable vital signs were her pulse and temperature. The patient's abnormal vital signs were her blood pressure, which was too high, her respiratory rate which was also high, and her oxygen which was low.

  Tolerating diet, activity, etc.: Yes, the patient does very well with physical therapy in bed.

  Physician notifications: N/A

  Future plans for patient: N/A

Discharge Planning (2 points)

  Discharge location: Odd Fellow

Home health needs (if applicable): N/A

Equipment needs (if applicable): Wheelchair

Follow up plan: pcp within the week

Education needs: How to get in and out of her wheelchair. Also, she needs to be taught about pressure ulcers since she is going to be in a wheelchair or a bed most of the time.

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. **Risk for falls related to fracture/ amputation of left leg.**	The patient has a fracture that caused for an amputation.	**1.** Assess tissue pressures in all compartments as prescribed if intercompartmental pressure devices is available. **2.**Assess the patients pain at regular intervals as defined by the health care provider or agency policy.	**To make sure that the client does not fall or injury their self. To make sure that the client can ambulate from the bed to her wheelchair.**
2. **Acute pain related to leg amputation.**	**The patient had her leg amputated from the knee down.**	**1. Administer anticoagulants cautiously if the patient is receiving epidural analgesia.**	**To assess the patients, pain and to try to relieve that so she can do physical therapy and overall get better.**

		2. Assess the patient's pain using an appropriate pain intensity rating scale, such as the visual analog scale (VAS), Wong-Baker FACES pain rating scale.	
3. Potential for systemic and local infection	The patient came in with gross hematuria	1.Do not irrigate urethral catheters of patients with cystectomies. 2.Encourage at least 2-3 L/day.	To assess the catheter site daily and to make sure that it is being cleaned properly. Also, to make sure that she is drink enough water to help excrete any infections that she might have.

Other References (APA):

Swearingen, P. L., & D, J. (2019) *All-in-one nursing care planning resource: medical-surgical, pediatric, maternity, and psychiatric-mental health*. Elsevier.

Concept Map (20 Points):

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Subjective Data

The patient says that she wants to die because it is very hard for her to breath. She has a left leg amputation that was caused by a left ankle fracture. The patient uses a venti mask and a BiPAP, but she still seems to have troubles breathing.

Nursing Diagnosis/Outcomes

1. **Risk for falls related to fracture/ amputation of left leg.**
   Outcome: To make sure that she is using her assistive devices the right way and how to properly get into her wheelchair.
2. **Acute pain related to leg amputation.**
   a. **Outcome:** To help prevent any pain that the patient is feeling from her left leg amputation.
3. **Potential for systemic and local infection**
   a. **Outcome:** To make sure that the patient does not cause any other infection.

Objective Data

Abnormal labs: RBC were too low, Hgb was too high, Hct was too low, Monocytes was too high, Eosinophils too high, CO_2 was too high, Glucose was too high.
Vital signs: Blood pressure was 167/78 which is high, Respiratory rate was 26 which was too high, and her oxygen was 89 which is low.

Patient Information

A 90-year-old female with a history of Acute urinary retention, Diastolic CHF, Emphysema/COPD, Fracture left ankle, Hypertension, Gross Hematuria, Iron deficiency Anemia, mitral stenosis, Incidental lung nodule, and hyperlipidemia.

Nursing Interventions

1. Assess the for any weakness and range of motion to see if she has enough strength to be able to get herself into her wheelchair.
2. Offer the client beverage every few hours to make the client drink the 2-3L/day.
3. Assess the patient pain regular to make sure her amputation is not hurting her. But also assess her pain for breathing since she is having such a hard time breathing.

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