N311 Care Plan #

Lakeview College of Nursing

Name

Demographics (5 points)

Date of Admission 11/3/2020	**Patient Initials** C.F.W	**Age** 68 years old	**Gender** Male
Race/Ethnicity Caucasian	**Occupation** Retired	**Marital Status** Married	**Allergies** Ragweed
Code Status Full	**Height** 6'2"	**Weight** 223 lbs	

Medical History (5 Points)

Past Medical History: Atrial fibrillation, high cholesterol or triglycerides, sleep apnea, coronary heart disease, community acquired pneumonia, enlarged prostate with urinary obstruction (chronic), stroke, high blood pressure disorder, heart failure, arthritis, benign prostate hyperplasia, constipation, skin cancer, diverticulitis, frequent UTIs, gout, and hyperlipidemia.

Past Surgical History: Ankle surgery (2018), heart catheter (8/19/2020), colonoscopy (4/2016)

Family History: Pt's mother has history of heart disease. His father has history of hypertension. His sister has history of heart disease and hypertension. His brother has history of heart disease, hypertension, and heart attack.

Social History (tobacco/alcohol/drugs): Pt doesn't use tobacco products, or recreational drugs. He states that he does not consume alcoholic beverages anymore.

Admission Assessment

Chief Complaint (2 points): Shortness of breath.

History of present Illness (10 points): Pt is a 68-year-old male with complaint of shortness of breath, was admitted onto unit on 11/3/2020. He was diagnosed with hematuria and stated that him and his wife noticed blood in his urine on the morning of November 3rd. Pt states that he has a foley catheter inserted, and genitalia area is the primary location of care provided. He says that hematuria has been going on since he was admitted and hasn't stopped. He denied any pain in his

chest, abdomen, or related to his diagnosis. Pt did state that he and his wife noticed shortness of breath occurring with his hematuria and has been present since admission. He says that sitting in an upright position helps him breath more effectively. He states that he does not use any drugs to help him with discomfort or pain.

Primary Diagnosis

Primary Diagnosis on Admission (3 points): Gross Hematuria**.**

Secondary Diagnosis (if applicable): Shortness of breath.

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

Pathophysiology

Gross hematuria is characterized by the visible presence of blood in urine (Hematuria, 2016). It can be caused by many different conditions that typically injure, irritate, or obstruct the structural integrity of the urinary tract (Saleem & Hamawy, 2020). This includes the kidneys, ureters, bladder, and the urethra (Hematuria, 2016). Some conditions that cause gross hematuria include infection in the bladder, kidney, or prostate; trauma; strenuous exercise; viral illness; menstruation; prostatitis, urethritis, and cystitis just to name a few. Due to the many causes of hematuria, it is one of the most common reasons for outpatient and emergency department visits (Saleem & Hamawy, 2020).

Signs and Symptoms

Some manifestations of hematuria may have direct effects such as flank pain, lower abdominal pain, painful urination, flank mass, and change in urinary urgency or even frequency (Saleem & Hamawy, 2020). Other signs and symptoms may appear more vague such as leg swelling, weight loss, anorexia, and back pain (Saleem & Hamawy, 2020). Some people with

gross hematuria may not experience any signs or symptoms at all but the blood in their urine (Hematuria, 2016). Similarly, my patient was diagnosed with gross hematuria and did not have any signs and symptoms but except for the dark orange urine from the blood in his urine. My patient also had gross hematuria through benign prostatic hypertrophy (BPH), which is the enlargement of the prostate gland (Prostate Enlargement, 2014). This enlarged gland then obstructs the urethra, making it hard to urinate but also irritating the urinary tract (Hematuria, 2016).

Vital Signs and Lab Values

Due to the loss of blood, it can be expected to see hypotension or a decrease in blood pressure in those with hematuria. As the body tries to compensate for the low blood pressure, the heart will try to pump blood faster throughout the body, which may result in tachycardia. The loss of blood through the urine may mean decrease oxygenation throughout the body as the oxygen rich RBCs are lost in the bleeding. As oxygen is lost in the body, the oxygen levels may appear to be lower than usual. Lab values that reflect overall hemoglobin and hematocrit may appear lower than the normal range (Swearingen, 2019). This was the case with my patient, who had a relatively low oxygen level of 92%, and a low Hgb level, which caused his Hct levels to be low as well. He also experienced shortness of breath as evident by his shallow breathing cycles.

Diagnosis

Diagnosing hematuria will involve a medical history where a description of what medications the patient is taking is given along with a list of symptoms to the healthcare professional conducting the exam (Hematuria, 2016). Then a physical exam may be done. This exam involves the physical assessment of the patient for signs and symptoms of irritation or damage to the urinary organs (Hematuria, 2016). A digital rectal exam may then next be used for

men to check for any potential enlarged prostates that may be causing obstruction, while a pelvic exam is done for women where the vagina is checked to see if there are any potential problems that may be causing bleeding (Hematuria, 2016). A urinalysis may also be used to check more precisely for signs of hematuria by directly looking at the urine under a microscope (Hematuria, 2016).

Treatment

Hematuria has many causes and must be treated according to the underlying cause (Hematuria, 2016). Usually, if the cause of hematuria is not as severe, then the hematuria resolves its own (Hematuria, 2016). Antibiotics are used to treat hematuria caused by UTIs, while more severe causes such as hereditary diseases such as nephrotic syndrome, Alport's thin membrane disease, and polycystic kidney disease require more extensive and thorough screening as well as further evaluation from a healthcare specialist (Saleem & Hamawy, 2020). My patient may potentially have hematuria due to an enlarged prostate, due to a history of benign prostatic hyperplasia (BPH), but is still taking 1g of ceftriaxone every twenty four hours to try to get rid of any bacteria that may be causing the hematuria.

Pathophysiology References (2) (APA):

U.S. Department of Health and Human Services. (2014, September 1). *Prostate Enlargement (Benign Prostatic Hyperplasia)*. National Institute of Diabetes and Digestive and Kidney Diseases. https://www.niddk.nih.gov/health-information/urologic-diseases/prostate-problems/prostate-enlargement-benign-prostatic-hyperplasia.

U.S. Department of Health and Human Services. (2016, July 1). *Hematuria (Blood in the Urine)*. National Institute of Diabetes and Digestive and Kidney Diseases.

https://www.niddk.nih.gov/health-information/urologic-diseases/hematuria-blood-urine.

Saleem, M. O., & Hamawy, K. (2020, August 10). Hematuria. StatPearls [Internet]. https://www.ncbi.nlm.nih.gov/books/NBK534213/.

Swearingen, P. L., & Wright, J. D. (2019). *All-in-one nursing care planning resource medical-surgical, pediatric, maternity, and psychiatric-mental health* (5th 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	3.90 - 4.98	3.67	8.4	Pt was experiencing active loss of blood due to hematuria which may lead to low RBC levels. Pt has history of heart failure and sleep apnea, which may cause rise in RBC levels.
Hgb	12.0 - 15.5	9.6	9.2	Pt is experiencing active bleeding in urination (hematuria).
Hct	35 - 45	32.5	31.2	Pt's Hgb levels are low; Hct levels will reflect that. Pt is also experiencing hematuria.
Platelets	140 - 400	260	270	
WBC	4.0 - 9.0	7.9	8.4	
Neutrophils	40 - 70	79.4	78.1	Pt is taking allopurinol, which can increase WBCs. Pt also has history of gout, a metabolic disorder.
Lymphocytes	10 - 20	11.6	11.6	
Monocytes		8.9	8.2	
Eosinophils		2.0	0.9	
Bands				

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	135	137	
K+	3.5 - 5.1	3.5	4.3	
Cl-	98 - 107	93	94	Patient has history of heart failure which may affect chloride levels.
CO2	22 - 29	37.0	37.0	Pt has history of sleep apnea which is obstructive to breathing and may cause CO2 levels to build up.
Glucose	70 - 99	110	116	Pt has history of diabetes.
BUN	6 - 20	30	36	Pt has history of urinary obstruction due to an enlarged prostate. Pt may also potentially have some obstructions in the urinary bladder due to hematuria.
Creatinine	0.50 - 1.00	1.45	1.89	Pt has history of urinary obstruction due to an enlarged prostate. Pt may also potentially have some obstructions in the urinary bladder due to hematuria
Albumin	3.5 - 5.2	3.2	2.9	Pt has hematuria.
Calcium	8.4 - 10.5	9.2	8.8	
Mag	****value not provided****	****not collected****	****not collected****	
Phosphate	35 - 105	****not collected****	****not collected****	
Bilirubin	0.3 - 1.0	1.4	1.5	Pt is taking allopurinol.
Alk Phos	30 - 120	247	221	Pt is taking allopurinol.

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	Clear and amber yellow	Light orange and turbid	****not collected today****	
pH	4.6-8.0	5.0	****not collected today****	
Specific Gravity	1.005-1.030	1.007	****not collected today****	
Glucose	Normal	Normal	****not collected today****	
Protein	0-8 mg/dL	1+	****not collected today****	Pt has history of hypertension.
Ketones	Negative	Negative	****not collected today****	
WBC	****unable to obtain****	5 - 10	****not collected today****	
RBC	****unable to obtain****	750	****not collected today****	
Leukoesterase	Negative	2+	****not collected today****	Pt has history of frequent UTIs.

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	No growth	No growth	****not collected today****	
Blood Culture	No growth	No growth	****not collected**	

			today**	
Sputum Culture	Negative	****not collected today****	****not collected today****	
Stool Culture	Negative	****not collected today****	****not collected today****	

Lab Correlations Reference (APA):

Pagana, K., Pagana, T., & Pagana, T. *Mosby's diagnostic and laboratory test reference*.

https://medlineplus.gov/lab-tests/chloride-blood-test/

Diagnostic Imaging

All Other Diagnostic Tests (10 points):

X-Ray Posterioranterior (PA) Lateral Chest: Test results show overall stable chest with small and persistent right-side pleural effusion.

Computed Tomography Angiography (CTA) for Chest: Upon looking at the results for this pt, it was found that:

1) Pt has no signs of PE.
2) There's indication of probable heart failure.
3) Presence of mild ascites surrounding spleen and liver.

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

Medications (5 required)

Brand/ Generic	Allopurinol ZYLOPRIM	Carvedilol COREG	Furosemide LASIX	Ceftriaxone ROCEPHIN	Atorvastatin LIPITOR
Dose	300 mg	3.125 mg	80 mg	1g	40 mg

Frequency	bid	bid	tid	Q24h	Nightly at bedtime
Route	Oral	Oral	Oral	IV	Oral
Classification	Antigout	Antihypertensive; heart failure treatment adjunct	Antihypertensive; diuretic	Antibiotic	Antihyperlipidemic
Mechanism of Action	Stops production of uric acid by preventing xanthine oxidase from converting hypoxanthine and xanthine to uric acid.	Reduces cardiac output and controls tachycardia. Causes vasodilation and reduces peripheral vascular resistance.	Increases urination by inhibiting sodium and water reabsorption. This helps reduce intracellular and extracellular fluid volume and reduces blood pressure and cardiac output.	Kills bacteria by preventing cell wall synthesis by inhibiting formation of peptidoglycan strands. This ruptures the bacteria and kills it.	Reduces plasma cholesterol and lipoprotein levels by inhibiting HMG-CoA reductase and cholesterol synthesis in the liver and by increasing the number of LDL receptors on liver cells to enhance LDL uptake and breakdown.
Reason Client Taking	To treat gout	To control hypertension; to control heart functions	To reduce edema caused by heart failure and renal disease.	To treat potential UTIs	To control lipid levels; to reduce risk for hospitalization for congestive heart failure in patients with coronary heart disease.
Contraindications (2)	Hypersensitivity to allopurinol or to components of allopurinol; Renal	Asthma or other related bronchospastic conditions; severe bradycardia.	Anuria; hypersensitivity to furosemide or to its components.	Calcium-containing IV solutions; Hypersensitivity to ceftriaxone.	Active hepatic disease; hypersensitivity to atorvastatin or its components.

	disease or poor urate clearance.				
Side Effects/ Adverse Reactions (2)	Drowsiness; aplastic anemia	Hyperglycemia; dyspnea	Dizziness; arrhythmias	Abdominal cramps; acute renal failure	Arrythmias; hyperglycemia

Medications Reference (APA):

Allopurinol - FDA prescribing information, side effects and uses. Drugs.com. (2020, September 1). https://www.drugs.com/pro/allopurinol.html.

Jones, D. W. (2020). *Nurse's drug handbook*. (A. Barlett, Ed.) (19th ed.). Jones & Bartlett Learning.

Assessment

Physical Exam (18 points)

GENERAL: **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	Pt was alert and oriented to time, place, person, situation (x4). Responded appropriately to questions asked. Was very cooperative. Pt showed no signs of distress. Denied any discomfort or pain. Was well groomed.
INTEGUMENTARY: **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** **Drains present: Y☐ N ☒** **Type:**	Skin was pink, dry, intact and warm. Skin turgor was less than 2 seconds but was slow to return. There were no rashes, bruises, wounds, or drains noted upon assessment. Braden Score: 19 (mild risk). No drains present upon assessment.

HEENT: **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	Pt's head and neck appear symmetrical, straight, and in lined with each other. No missing patches of hair upon inspection. Ears are symmetrical and intact with no lesions or drainage. Eyes are slightly bulged, symmetrical and exhibit PERRLA. Sclera is white, and conjunctiva is pink, moist, and intact. Nose is midline, intact, and clear bilaterally with no polyps or turbinates. Oral mucosa is pink, moist, and intact with teeth intact with one missing in upper jaw. Tongue was pink and midline.
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 heard, faintly. S3 heard. S4, bruits, murmurs not heard. Cardiac rhythm was irregular. Peripheral pulses were palpable at radial, ulnar, brachial, dorsalis pedis, and posterior tibialis. Graded a +2 for peripheral pulses. Capillary refill was less than 3 seconds bilaterally. No neck vein distention or edema upon inspection.
RESPIRATORY: **Accessory muscle use: Y☐ N ☒** **Breath Sounds: Location, character**	Pt's lung sounds are clear. Respirations were 18 breaths per minute. Breath cycles were shallow and unlabored. No chest wall deformities noted upon inhalation and expiration. Pt's O2 levels sat was noted at 92%. Pt has productive cough. No accessory muscles used upon breathing.
GASTROINTESTINAL: **Diet at home:** **Current Diet** **Height:** **Weight:** **Auscultation Bowel sounds:** **Last BM:** **Palpation: Pain, Mass etc.:** **Inspection:** **Distention:** **Incisions:** **Scars:** **Drains:** **Wounds:**	Pt eats a general diet at home and in the hospital. Height: 6'2" Weight: 223 lbs Pt's abdomen was distended and round with protruding umbilicus. No incisions, scars, drains, wounds noted upon inspection. Bowel sounds are active in all four quadrants upon auscultation. No mass, tenderness or pain felt upon palpation. No ostomy, NG, or feeding tubes in place Pt did not report any discomfort. Stated that last

Ostomy: Y ☐ N ☒ **Nasogastric: Y ☐ N ☒** **Size:** **Feeding tubes/PEG tube Y ☐ N ☒** **Type:**	BM was "yesterday evening" (11/4/2020). Does not recall time.
GENITOURINARY: **Color:** **Character:** **Quantity of urine:** **Pain with urination: Y ☐ N ☒** **Dialysis: Y ☐ N ☒** **Inspection of genitals:** **Catheter: Y ☒ N ☐** **Type:** Foley **Size:** 16	Urine was collected and inspected to be opaque, and orange yellow at 0830 hrs and dark orange at 1130 hrs upon inspection. Collected 1250 cc of urine. No distention of the bladder upon inspection. Pt denies discomfort when voiding, or changes in patterns, frequency, urgency, or hesitancy. Genital was bloody upon inspection. Blood was dry and present.
MUSCULOSKELETAL: **Neurovascular status:** **ROM:** **Supportive devices:** **Strength:** **ADL Assistance: Y☐ N ☒** **Fall Risk: Y ☒ N☐** **Fall Score:** 9 **Activity/Mobility Status:** **Independent (up ad lib)** ☐ **Needs assistance with equipment** ☐ **Needs support to stand and walk**☐	Pt displayed no paralysis, paresthesia, pain, or pallor. Pulse was palpable in peripheral pulses (radial, ulnar, brachial, dorsalis pedis, and posterior tibial). Pt wears glasses and uses a gait belt and walker when walking. Does not have history of falls. Pt can sit on edge of bed and perform active ROM in upper and lower extremities bilaterally. He had adequate strength in lower and upper extremity bilaterally. Pt states that he doesn't need assistance to get up, but still uses a walker to walk and needs one personnel to standby for support. He ambulates to chair and back to the bed x3 a day. Pt is a fall risk. Fall score of 9.
NEUROLOGICAL: **MAEW: Y ☒ N☐** **PERLA: Y ☒ N☐** **Strength Equal: Y ☒ N ☐ if no -** **Legs ☐ Arms ☐ Both ☐** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	Pt moved upper and lower extremities well. PERRLA was noted in both eyes. Strength was equal. Pt was alert and oriented x4. His speech was clear and audible, with no slurs, or mumbling. He speaks English as his primary language and was able to respond appropriately to all questions. Sensory is intact and mental status is appropriate.

PSYCHOSOCIAL/CULTURAL: **Coping method(s):** **Developmental level:** **Religion & what it means to pt.:** **Personal/Family Data (Think about home environment, family structure, and available family support):**	Pt lives at home with wife and has three children living out of state. He is retired and is a Catholic. He tries to go to mass every Sunday and believes that religion is an important tool to guide one to live in life. Pt states that he is a "frequent flyer" and is admitted to the hospital multiple times.

Vital Signs, 1 set (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
1130	62	115/65	18	96.7	92%

Pain Assessment, 1 set (5 points)

Time	Scale	Location	Severity	Characteristics	Interventions
1130	*	*	**pt did not report discomfort at this time**	*	*

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
175 cc PO	1250 cc Void

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

Nursing Diagnosis	Rational	Intervention (2 per dx)	Evaluation
• Include full nursing	• Explain why the		• How did the

diagnosis with "related to" and "as evidenced by" components	nursing diagnosis was chosen		patient/family respond to the nurse's actions? • Client response, status of goals and outcomes, modifications to plan.
1. Impaired urinary elimination related to benign prostatic hypertrophy as evidenced by foley catheter.	Pt has a foley catheter inserted, which indicates problems in urinary elimination due to obstruction, or ineffective voiding. Pt has history of prostatic hypertrophy (BPH) which is the enlargement of the prostate. The enlarged prostate can obstruct voiding and make it difficult to void. Inserting a catheter will help bypass this obstruction and let urine flow through the catheter.	1. Encourage the pt to drink 2.5-3 L of fluid if not contraindicated. 2. Assess and inspect foley catheter tube for kinks; Uncoil and fix kinks to prevent blockage within the catheter.	**Goal Met:** Pt agreed and understood the importance of drinking adequate fluids to replenish lost fluids and to aid in voiding. **Goal Met:** Occasionally assessed and inspected the foley catheter for kinks and blockages. No kinks or blockages found.
2. Risk for bleeding related to benign prostatic hypertrophy as evidenced by hematuria	Pt has history of benign prostatic hypertrophy (BPH). BPH is known to cause hematuria, a condition characterized by red blood cells (RBC) in urine. Pt has been experiencing hematuria since admission and may be at risk for losing large amounts of RBC and bleeding or even bleeding out.	1. Assess vital signs once every hour for indications for profuse bleeding or hemorrhage. Report significant findings. 2. Monitor foley catheter bag and chart the appearance of urine in system once every hour to determine severity of hematuria and effectiveness of treatment.	**Goal Partially Met:** Vital signs were taken and looked at. Vital signs were not taken every hour and charted to provide consistent trend of vital signs. **Goal Not Met:** Foley bag and appearance were noted, but did not chart within Epic system.

Other References (APA):

Swearingen, P. L., & Wright, J. D. (2019). *All-in-one nursing care planning resource medical-surgical, pediatric, maternity, and psychiatric-mental health* (5th ed.). Elsevier

Concept Map (20 Points

Subjective Data

Patient stated that him and his wife noticed that his shortness of breath was there since his admission with his hematuria. He denied feelings of nausea, vomiting, chest and abdominal discomfort. Stated that he had an "enlarged prostate"

Nursing Diagnosis/Outcomes

Impaired urinary elimination related to benign prostatic hypertrophy as evidenced by foley catheter.
Goal Met: Pt agreed and understood the importance of drinking adequate fluids to replenish lost fluids and to aid in voiding.
Goal Met: Occasionally assessed and inspected the foley catheter for kinks and blockages. No kinks or blockages found.
Risk for bleeding related to benign prostatic hypertrophy as evidenced by hematuria
Goal Partially Met: Vital signs were taken and looked at. Vital signs were not taken every hour and charted to provide consistent trend of vital signs.
Goal Not Met: Foley bag and appearance were noted but did not chart within Epic system.

Objective Data

Vital Signs
Pulse: 62
BP: 115/65
Resp: 18
O2: 92%
Lab Values
Leukoesterase: 2+
Hgb: 9.6 and 9.2 (low)
Hct: 32.5 and 31.2 (low)
RBC: 3.67 (low)

Patient's foley catheter bag contained dark orange urine.

Patient Information

Patient is a 68-year-old male admitted onto floor with shortness of breath as chief complaint and diagnosed with hematuria. He has history of benign prostatic hyperplasia, lower urinary tract symptoms, frequent UTIs, heart failure, and atrial fibrillation.

Nursing Interventions

Encourage the pt to drink 2.5-3 L of fluid if not contraindicated.
Assess and inspect foley catheter tube for kinks; Uncoil and fix kinks to prevent blockage within the catheter.
Assess vital signs once every hour for indications for profuse bleeding or hemorrhage. Report significant findings.
Monitor foley catheter bag and chart the appearance of urine in system once every hour to determine severity of hematuria and effectiveness of treatment.