N311 Care Plan # 2

Lakeview College of Nursing

Emily Konrad

Demographics (5 points)

Date of Admission	Patient Initials	Age	Gender
9/14/2019	J.S.	91	Male
Race/Ethnicity	**Occupation**	**Marital Status**	**Allergies**
Caucasian	US Postal Service	Divorced	Sulfa antibiotics, Sulfones
Code Status	**Height**	**Weight**	
DNR	69 in.	245.5 lbs.	

Medical History (5 Points)

Past Medical History: Muscle weakness, other abnormalities of gait and mobility, unsteadiness on feet, UTI-unspecified location, congestive heart failure, COPD, type 2 diabetes mellitus with chronic kidney disease, BPH with lower urinary tract symptoms, hypothyroidism, hyperlipidemia, GERD, gout, macular degeneration

Past Surgical History: Hernia repair (2 surgeries), appendectomy, gall bladder, tonsillectomy, adenectomy, eardrum replacement, cataracts (bilateral), neck growth removal

Family History: Father: colon cancer, Mother: stroke, Brother: heart attack, Sister: iron deficiency

Social History (tobacco/alcohol/drugs): Denied any smoking, tobacco use, alcohol use, or drug use

Admission Assessment

Chief Complaint (2 points): "knee pain"

History of present Illness (10 points): The patient is complaining of "knee pain" that started about a month ago after a fall in the bathroom. The pain is in the lower to upper part of the right leg. It has persisted for a month now and it is throbbing pain with a pulse like sensation. Walking aggravates the pain. Patient started with Tylenol, however that did not relieve the pain. He is now applying a lidocaine patch which "helps a lot". He rates the pain a 4 on a 0-10 scale.

<center>**Primary Diagnosis**</center>

Primary Diagnosis on Admission (3 points): Urinary Tract Infection, site not specified

Secondary Diagnosis (if applicable): Unspecified Diastolic (Congestive) Heart Failure

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

UTI's are the cause for many visits to a primary care doctor. They occur more frequently in women than men. In men older than 60, BPH is a common cause of UTI in men (Capriotti & Frizell, 2019). Urinary tract obstruction, caused by an enlarged prostate gland, is another common cause of UTI's in older men (Capriotti & Frizell, 2019). Other major risk factors for men are dehydration, urinary catheterization, diabetes, bladder cancer, and some cancer treatments (Capriotti & Frizell, 2019). E. coli is an organism that is generally responsible for UTI's (Capriotti & Frizell, 2019). Other organisms that may cause a UTI are *Proteus, Pseudomonas, Streptococci, Enterococci, Staphylococcus,* and *Klebsiella* (Capriotti & Frizell, 2019).

Healthy urinary tracts are normally sterile and contain a normal flora in the opening of the urethra. Whenever there is an obstruction of outflow, the bladders resistance to bacteria is hindered (Capriotti & Frizell, 2019). When in the bladder, pathogenic bacteria stick to and resist the host defense of the bladder (Capriotti & Frizell, 2019). These bacteria have and outer layer that resists the acidity of the urine. They can also secrete cytotoxic necrotizing factor that aids their migration to the bladder (Capriotti & Frizell, 2019). It is important to frequently empty the bladder. The use of instruments like a catheter make the risk of bacterial entry into the bladder increase. Also, *Candida albicans* can cause a UTI. Common risk factors for a UTI caused by *Candida,* are diabetes mellitus, antibiotic use, and urinary catheters (Capriotti &

Frizell, 2019). If a male is diagnosed with a UTI, it is important to determine that cause of infection. The most common cause of a UTI in an older male is BPH (Capriotti & Frizell, 2019).

The most common signs of a UTI are frequency, pain during urination, urgency, and hematuria. These symptoms are caused by the inflammation of the urethra and bladder (Capriotti & Frizell, 2019). Severe infections may cause bladder spasms that can create a referred pain in the glans penis for men (Capriotti & Frizell, 2019).

To diagnose a UTI, a urinalysis and urine culture are used. In a urinalysis, a dipstick shows RBC's, leukocyte esterase, and nitrates (Capriotti & Frizell, 2019). A microscopic view of a urinalysis will show neutrophils, RBC, and bacteria (Capriotti & Frizell, 2019). Another method to diagnose a UTI is urine flow cytometry, which provides quicker results than a urine culture could (S, et al., 2019). With a urine culture, infection is noted with a bacteria count larger than 10^5/mL. Sometimes a bacteria count of 1,000/mL can cause a problematic infection (Capriotti & Frizell, 2019).

The most common treatment for a UTI is antibiotics. A culture and sensitivity can help to determine the correct antibiotic needed. Two of the most commonly prescribed antibiotics are nitrofurantoin and trimethoprim sulfamethoxazole (Capriotti & Frizell, 2019). A pain reliever prescribed for a UTI is called Pyridium. Increased hydration and cranberry juice may also be used to help prevent a UTI.

Pathophysiology References (2) (APA):

Capriotti, T. & Frizzell, J.P. (2016). *Pathophysiology: Introductory Concepts and Clinical Perspectives.* 1ˢᵗ ed. F.A. Davis Company: Philadelphia, PA. ISBN 9780803615717

S, S. K., S, R., A, S., L, A. B., H, W. E., E, A. K., … M, M. (2019). Diagnosis of urinary tract infections by urine flow cytometry: adjusted cut-off values in different clinical presentations. *Disease Markers*, *2019*, 1–10. doi: 10.1155/2019/5853486

Laboratory Data (20 points)
If laboratory data is unavailable, values will be assigned by the clinical instructor

CBC <mark>Highlight All Abnormal Labs</mark>—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 – 5.41 x10^6/moL	3.88 x 10^6/moL		
Hgb	11.3 – 15.2 g/dL	<mark>10.7 g/dL</mark>		Patients with renal problems have lower hemoglobin and hematocrit levels because of deficient erythropoietin (Capriotti & Frizell, 2019).
Hct	33.2 – 45.3%	<mark>31.8%</mark>		Patients with renal problems have lower hemoglobin and hematocrit levels because of deficient erythropoietin (Capriotti & Frizell, 2019).
Platelets	149 – 393 k/mcL	<mark>135 k/mcL</mark>		Acquired platelet dysfunction commonly occurs with renal problems (Capriotti & Frizell, 2019).
WBC	4.0 – 11.7 k/mcL	7.3 k/mcL		
Neutrophils		4.3 x 10^3/mcL		
Lymphocytes	11.8 – 45.9%	28.1%		
Monocytes	4.4 – 12.0%	6.7%		
Eosinophils	0.0 – 6.3%	6.1%		
Bands	45.3 – 79.0%	58.3%		

Chemistry <mark>Highlight All Abnormal Labs</mark>—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	138 mmol/L		
K+	3.5 - 5.1 mmol/L	3.5 mmol/L		
Cl-	98 – 107 mmol/L	99 mmol/L		
CO2	22 – 29 mmol/L	27 mmol/L		
Glucose	70 – 99 mg/dL	95 mg/dL		
BUN	6 – 20 mg/dL	16 mg/dL		
Creatinine	0.50 – 0.90 mg/dL	<mark>1.46 mg/dL</mark>		Accumulation of creatinine is indicated by an increase of filtering by the glomerulus in the kidney (Capriotti & Frizell, 2019).
Albumin	3.5 – 5.2 g/dL	3.0 g/dL		
Calcium	8.6 – 10.4 mg/dL	<mark>8.2 mg/dL</mark>		When the parthyroid gland doesn't produce enough PTH, the result can be low calcium levels (Capriotti & Frizell, 2019).
Mag	1.6 – 2.4 mg/dL	1.8 mg/dL		
Phosphate				
Bilirubin	0.0 – 1.2 mg/dL	0.4 mg/dL		
Alk Phos	35 – 105 IntlUnit/L	<mark>159 IntlUnit/L</mark>		Phosphate has a direct relationship with calcium. When calcium is low, phosphate levels are high (Capriotti & Frizell, 2019).

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 Admissio	Today's Value	Reason for Abnormal

		n		
Color & Clarity	Yellow/clear	<mark>straw</mark>		Abnormalities in urine color may suggest conditions such as infection (Capriotti & Frizell, 2019).
pH	5.0 – 8.0	5.0		
Specific Gravity	1.005 – 1.034	<mark>1.003</mark>		
Glucose	Normal	Normal		
Protein	Negative	Negative		
Ketones	Negative	Negative		
WBC	<=5/HPF	1/HPF		
RBC	0 – 3 HPF	<1/HPF		
Leukoesterase	Negative	Negative		

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	Negative	<mark>30,000 cfu/ml yeast</mark>		On a urine culture, infection of the urinary tract is indicated by the presence of bacteria (Capriotti & Frizell, 2019).F
Blood Culture				
Sputum Culture				
Stool Culture				

Lab Correlations Reference (APA):

Sarah Bush Lincoln Health Center (2019). *Reference Range*. (labvalues). Mattoon, IL

Capriotti, T. & Frizzell, J.P. (2016). *Pathophysiology: Introductory Concepts and Clinical*

Diagnostic Imaging

All Other Diagnostic Tests (10 points):

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

Medications (5 required)

Brand/Generic	furosemide/Lasix, Myrosemide, Novosemide, Uritol	allopurinol, Lopurin, Purinol,Zyloprim	levothyroxine sodium, Eltroxin, Levoxyl, Synthroid, Tirosint, Unithroid	metformin hydrochloride, Fortamet, Glucophage, Glumetza, Glycon, Riomet	tamsulosin hcl, Flomax
Dose	20 mg	200 mg	125 mcg	1000 mg	0.4 mg
Frequency	Once daily	Once daily	Once daily	Once daily	Once daily
Route	Oral	Oral	Oral	Oral	Oral
Classification	Antihypertensive, diuretic	Antigout	Thyroid hormone replacement	Antidiabetic	BPH treatment

Mechanism of Action	Prevents sodium and water reabsorption in the loop of Henle and increases urine formation. When the body's plasma volume decreases, aldosterone production increases, which promotes sodium reabsorption and the loss of potassium and hydrogen ions. Increases the excretion of calcium, magnesium, bicarbonate, ammonium, and phosphate. Reduces intracellular and extracellular fluid resulting in decreased blood pressure and cardiac output.	Inhibits uric acid production by inhibiting xanthine oxidase, the enzyme that converts hypoxanthine and xanthine to uric acid. Metabolized to oxipurinol which inhibits xanthine oxidase.	Replaces endogenous thyroid hormone, which ay exert its physiologic effects by controlling DNA transcription and protein synthesis. Increases expenditure, accelerated oxidation, regulates differentiation of stem cells, aids in myelination of nerves and synaptic processes, regulates growth, decreases blood cholesterol concentration, enhances carbohydrate and protein metabolism	Promotes storage of excess glucose as glycogen in the liver, which reduces glucose production. Improve glucose use by adipose tissue and skeletal muscle by increasing glucose transport across cell membranes. May increase the number of insulin receptors on cell membranes and make them more sensitive to insulin. Decreases blood total cholesterol and triglyceride levels.	Blocks alpha adrenergic receptors in the prostate. Inhibits smooth muscle contraction in the bladder neck and prostate, prostatic capsule, and prostatic urethra. Improves the rate of urine flow and reduces symptoms of BPH.
Reason Client Taking	Edema	Gout	Hypothyroidism	Diabetes Mellitus	BPH
Contraindications (2)	Anuria unresponsive to furosemide,	Hypersensitivity to allopurinol or	Acute MI, uncorrected adrenal	Advanced renal disease,	Hypersensitivity to tamulosin,

	hypersensitivity to sulfonamides	its components	insufficiency	metabolic acidosis	quinazolines, or their components
Side Effects/Adverse Reactions (2)	Dizziness, muscle spasm	Renal failure, chills	Heart failure, muscle weakness	Abdominal distention, headache	Angioedema, arrhythmia

Medications Reference (APA):

Jones & Bartlett Learning. (2019). *2019 Nurses drug handbook* (18th ed.). Burlington, MA.

Assessment

Physical Exam (18 points)

GENERAL: **Alertness:** ANO x 3 **Orientation:** **Distress:** **Overall appearance:** well dressed and clean	The patient was alert and oriented times 3. He could correctly answer his name, date, and location. Patient was well dressed and clean. No acute distress noted.
INTEGUMENTARY: **Skin color:** appropriate for ethnic background **Character:** thin/dry **Temperature:** warm **Turgor:** good **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** 20 **Drains present:** Y☐ N ☒ **Type:**	Skin color was appropriate for ethnic background. Skin character was thing/dry and warm to the touch. Patient had red marks on groin area, left side and back, bottom, and a scab on his right interior ankle. The patient also had brown patches bilaterally on lower legs. Braden score is 20.
HEENT: **Head/Neck:** normocephalic **Ears:** **Eyes:** PERRLA **Nose:** No deviated septum, polyp's turbinate's **Teeth:** No dentures, broken teeth	Head is normocephalic. Pupils are equal, round, reactive to light, and accommodate. There was no noted deviated septum, polyps, or turbinates. Moist mucous membranes, no noted exudate. Trachea is midline. No palpable lymph nodes. Patient does not wear dentures. Broken teeth noted on the bottom. .

CARDIOVASCULAR: **Heart sounds:** **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable):** regular **Peripheral Pulses:** strong **Capillary refill:** good **Neck Vein Distention:** Y ☐ N ☒ **Edema Y** ☒ **N** ☐ **Location of Edema:** swelling bilaterally on ankles, right leg has more swelling than left	Regular rate and rhythm. No noted murmurs, gallops, or rubs. Strong peripheral pulse and capillary refill less than 3 seconds. Edema noted bilaterally on ankles. Right ankle has more swelling than the left.
RESPIRATORY: **Accessory muscle use:** Y ☐ N ☒ **Breath Sounds: Location, character**	No accessory muscle use. Lungs clear to auscultation bilaterally. No noted wheezes, rhonchi, or crackles. Patient does use a CPAP machine.

GASTROINTESTINAL:
Diet at home:
Current Diet: LCS(Geriatric Diabetic) regular texture, regular consistency
Height: 69"
Weight: 245.5 lbs
Auscultation Bowel sounds: present
Last BM: 9:30 am
Palpation: Pain, Mass etc.:
Inspection:
   Distention: Some swelling
   Incisions:
   Scars: scar on right lower quadrant
   Drains:
   Wounds:
Ostomy: Y ☐ N ☒
Nasogastric: Y ☐ N ☒
   Size:
Feeding tubes/PEG tube Y ☐ N ☒
   Type:
	Patient is on a LCS (Geriatric Diabetic) regular texture, regular consistency diet. Patient is 69" and weighs 245.5 lbs. Bowel sounds were present in all four quadrants. His last bowel movement was at 9:30 am. There was some distention noted in the abdomen, but no pain upon palpation. The patient has a scar on his right lower quadrant.

GENITOURINARY:
Color:
Character:
Quantity of urine:
Pain with urination: Y ☒ N ☐
Dialysis: Y ☐ N ☒
Inspection of genitals:
Catheter: Y ☐ N ☒
   Type:
   Size:
	Patient stated pain with urination. No dialysis or catheter noted.

MUSCULOSKELETAL: **Neurovascular status:** active **ROM:** full range of motion **Supportive devices:** walker and wheelchair **Strength:** bilateral equal **ADL Assistance:** Y☒ N☐ **Fall Risk:** Y☒ N☐ **Fall Score: 65** **Activity/Mobility Status:** **Independent (up ad lib)** ☐ **Needs assistance with equipment** ☐ **Needs support to stand and walk** ☒	Active neurovascular status noted. ROM intact in the upper and lower extremities. 5/5 musculoskeletal strength in upper and lower extremities. ADL assistance noted for preparing food and bathing. Patient is a fall risk with a fall score of 65 noted. Patient uses a walker when standing and walking.
NEUROLOGICAL: **MAEW:** Y☒ N☐ **PERLA:** Y☒ N☐ **Strength Equal:** Y☒ N☐ if no - **Legs** ☐ **Arms** ☐ **Both** ☐ **Orientation:** ANO x 3 **Mental Status:** **Speech:** Clear **Sensory:** glasses **LOC:**	Patient moves all extremities well. Pupils are equal, round, reactive to light, and accommodate. Bilateral strength noted. ANO x 3 noted. Speech was clear. Patient wears glasses.
PSYCHOSOCIAL/CULTURAL: **Coping method(s):** **Developmental level:** **Religion & what it means to pt.:** Presbyterian for 91 years **Personal/Family Data (Think about home environment, family structure, and available family support):** daughter stays with him	Patient has been a Presbyterian for 91 years. His daughter stays with him. She has mild CP and needs a cane to walk, but helps him with ADL.

Vital Signs, 1 set (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
07:30	74	142/70	20	97.7 F	

Pain Assessment, 1 set (5 points)

Time	Scale	Location	Severity	Characteristics	Interventions

10:30	Number 0-10 scale	Left leg	4	Throbbing, pulse like	Tylenol, lidocaine patch

Intake and Output (2 points)

Intake (in mL)	Output (in mL)

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

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. Potential for falls due to weakness, impaired balance, and unsteady gait as evidence by fall risk score of 65.	Patient noted a previous fall and complains of pain in his lower leg causing weakness and balance issues. Fall risk score of 65.	**1.**Assess gait and monitor for weakness and difficulty with balance **2.**Incorporate a fall risk assessment tool into the patients plan of care, Include appropriate interventions specific to patient aids and technique and the appropriate amount of assistance.	Communication was provided to patient about increased risk of falls. Education about fall risk assessment and assistance was provided. Patient responded well to education.
2. Potential for local and systemic infection related to urinary tract infection as	Patient complains of pain when urinating and was admitted for a UTI	**1.** Monitor for indicators of infection including burning or pain with urination, cloudy or	Education was provided to the client about importance of reporting signs and symptoms of UTI. Client agreed to importance.

evidence by painful urination.		malodorous urine. **2.**Consult healthcare provider about obtaining culture specimens for urine during temperature spikes.	

Other References (APA):

Swearingen, P. L., Wright, J.D. (2019). *All-in-one nursing care planning resource: Medical-surgical, pediatric, maternity, psychiatric nursing care plans*. St. Louis, MO: Elsevier/Mosby.

Concept Map (20 Points

Subjective Data

"Knee pain"
"4/10"
"Throbbing, pulsing"
"Lower to upper right leg"
"aggravated by walking"
"lidocaine patch relieves pain"
"pain with urination"

Nursing Diagnosis/Outcomes

Potential for falls due to weakness, impaired balance, and unsteady gait as evidence by fall risk score of 65.
Outcome: Communication was provided to patient about increased risk of falls. Education about fall risk assessment and assistance was provided. Patient responded well to education.
Potential for local and systemic infection related to urinary tract infection as evidence by painful urination.
 Outcome: Education was provided to the client about importance of reporting signs and symptoms of UTI. Client agreed to importance.

Objective Data

Fall risk 65
Uses walker and glasses
Needs ADL
Strength is bilateral equal
ANO x 3
30,000 cfu/mL yeast in urine culture

Patient Information

91 years old
69 in. 245.5 lbs
Muscle weakness, other abnormalities of gait and mobility, unsteadiness on feet, UTI-unspecified location, congestive heart failure, COPD, type 2 diabetes mellitus with chronic kidney disease, BPH with lower urinary tract symptoms, hypothyroidism, hyperlipidemia, GERD, gout, macular degeneration

Nursing Interventions

1.Assess gait and monitor for weakness and difficulty with balance

2.Incorporate a fall risk assessment tool into the patients plan of care, Include appropriate interventions specific to patient aids and technique and the appropriate amount of assistance.

3.Monitor for indicators of infection including burning or pain with urination, cloudy or malodorous urine.

4.Consult healthcare provider about obtaining culture specimens for urine during temperature spikes.