

N311 Care Plan #2

Lakeview College of Nursing

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Demographics (5 points)

Date of Admission 10/18/20	Patient Initials J.H	Age 62	Gender Female
Race/Ethnicity Caucasian	Occupation Disability	Marital Status Married	Allergies Gluten Meal and Vancomycin Hcl
Code Status DNR	Height 5'2"	Weight 184 lbs	

Medical History (5 Points)

Past Medical History: Hypertension, diabetes, chronic neuropathy, DVT, cervical cancer, sepsis, insomnia, chronic neuropathy, incontinence of bowel and urine debility.

Past Surgical History: Left debridement decubitus excision closure 10/26/19, left leg debridement 10/29/19, foreign body removal 12/7/19, and cardiac catheterization 6/5/20, incision and drainage 6/5/20.

Family History: Mother: diabetes, father: no known problems

Social History (tobacco/alcohol/drugs): Pt reports she never smoked or used smokeless tobacco, never used drugs and occasionally drinks alcohol.

Admission Assessment

Chief Complaint (2 points): Pressure and pain when urinating

History of present Illness (10 points): Onset: On October 18th, a 62 y/o white, married, female was admitted to OSF hospital for dysuria. Location: Pt stated, "my husband just changed my catheter last week" and now she is experiencing "lower pelvic pain". Duration: Pt stated she started "having pain Saturday and it got worse" so she decided to come to the emergency department. Characteristics: Pt stated, "there was a lot of pain and pressure in my lower pelvic area and it burns when I do pee". Aggravating: trying to urinate exacerbates her pain. Relieving:

On arrival to the emergency room, pt had foley catheter changed. Treatment: Pt received IV fluids and immediately started feeling better.

Primary Diagnosis

Primary Diagnosis on Admission (3 points): Sepsis without acute organ dysfunction, urinary tract infection associated with indwelling catheter, and urinary retention.

Secondary Diagnosis (if applicable):

Pathophysiology of the Disease, APA format (20 points): Urinary tract infections occurs when bacteria or fungi such as *Escherichia coli*, *Proteus*, *Pseudomonas*, *Streptococci*, *Enterococci*, *Staphylococcus epidermidis*, *S. saprophyticus* and *Kiebsiella* enters the urethra and invades the bladder (Capriotti, 2020), in this case, via catherization. Stagnant and continued urine is a good medium for bacterial growth and allows bacteria to be cleared from the body, therefore any obstruction of urinary outflow decreases the bladder's resistance to bacterial infection (Capriotti, 2020). Also, many women are nonsecretors of immunoglobins A that are secreted by WBC's in the urinary tracts, which causes a decrease in their ability to combat bacterial invasions of the bladder (Capriotti, 2020). Bacteria can secrete hemolysins and cytotoxic necrotizing factor which can enhance their migration up to the bladder (Capriotti, 2020). Once invaded in the bladder, the uropathogenic bacteria can adhere, proliferate, and resist host defenses (Capriotti, 2020).

There are a number of factors that increase susceptibility of urinary tract infections associated with catheters such as the catheter may become contaminated upon insertion, the drainage bag may not be emptied enough, bacteria from a bowel movement may get on the catheter, and urine in the catheter bag may flow backward into the bladder are just some examples (Nail, 2017). The pt has a history of incontinent of urine and is bedbound, duration of

catherization is directly related to risk of developing a urinary tract infection, with the catheter in place, the daily risk of infection of developing a UTI ranges from 3% to 7% (Institute for Healthcare Improvement, 2020).

Common sign and symptoms urinary tract infection associated with catherization include: cloudy urine, blood in urine, strong urine odor, urine leakage around catheter, pain or burning on urination (dysuria), pressure, pain or discomfort in lower back or stomach, chills, fever, unexplained fatigue, and vomiting (Capricotti, 2020; Nail, 2017). Pt stated that she ““there was a lot of pain and pressure in my lower pelvic area and it burns when I do pee””.

Urinalysis and urine culture are used to diagnose UTI (Capriotti, 2020). Urinalysis can detect blood cells in urine, if present may signal infection (Nail, 2017). Urine culture identifies any bacteria or fungi in urine to determine on how to treat the infection (Nail, 2017). The pt had a urinalysis that showed value abnormalities suspecting infection such as WBC’s and leukocyte esterase.

UTI associated with catherization tends to be more resistant to treatment than other UTI and can be dangerous because they can lead to severe kidney infections UTIs (Nail, 2017). Oral antibiotics or depending on infection, intravenous antibiotics are given to kill off any harmful bacteria (Nail, 2017). Increasing fluids, hydration will accentuate the unidirectional clearance of bacteriuria is also part of the recommended treatment (Capriotti, 2020). Education around prevention is also an important aspect to consider, hand hygiene, cleaning the catheter and the skin around the catheter every day, keeping the drainage bag below bladder and emptying the bladder several times a day will help prevent UTI associate with catherization. The goal of these processes is to prevent UTIs associated with catherization, kidney infections, and alleviate acute pain as well a other symptoms associated to UTIs.

Pathophysiology References (2) (APA):

Capriotti, Theresa M. and Frizzell, Joan Parker, "Pathophysiology: Introductory Concepts and Clinical Perspectives" (2020).

Catheter-Associated Urinary Tract Infection: IHI. (n.d.). Retrieved October 25, 2020, from <http://www.ihl.org/Topics/CAUTI/Pages/default.aspx>

Nail, R. (2017, March 20). Catheter Associated UTI (CAUTI). Retrieved October 25, 2020, from <https://www.healthline.com/health/catheter-associated-uti>

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	4.10 – 5.70	4.46	3.11	RBC is lowered because of overhydration.
Hgb	8.0 – 12.0	9.1	6.6	Hgb is lowered because pt is taking pencillin antibiotics.
Hct	37.0 – 51.0%	31.2	21.5	Hct is lowered because pt is taking penicillin antibiotics.
Platelets	140 – 400	430	280	Platelets are elevated because of infection.
WBC	4.00 – 11.00	8.40	7.70	
Neutrophils		83.4	79.7	
Lymphocytes		9.1	10.2	
Monocytes		5.6	6.7	
Eosinophils		1.4	2.4	
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-	136 - 145	133	135	Na is lowered because there is a malabsorption of Na excretion.
K+	3.5 – 5.1	3.1	4.0	K is lowered because pt is a diabetic and had insulin.
Cl-	98 - 107	103	106	
CO2	21.0 – 32.0	22	23	
Glucose	60 - 99	306	290	Glucose is elevated because pt is a diabetic.
BUN	7 - 18	8	5	
Creatinine	0.70 – 1.30	0.36	0.34	Creatinine is lowered because pt has chronic neuropathy.
Albumin	3.4 – 5.0	2.5	2.4	Albumin is lowered because of acute infection.
Calcium	8.5 – 10.1	9.1	9.2	
Mag	1.6 – 2.6		1.6	
Phosphate				
Bilirubin		0.3	0.2	
Alk Phos		85	88	

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		Cloudy Yellow	*unable to obtain	
pH	5.0 – 9.0	5.0	*	

Specific Gravity	1.003–1.030	1.020	*	
Glucose	Negative	3+	*	Glucose is abnormal because pt is diabetic.
Protein	Negative	2+	*	Protein is abnormal because pt is a diabetic.
Ketones	Negative	2+	*	Keotones are abnormal because pt is a diabetic and is an indication of poorly controlled diabetes.
WBC	Negative 0-5/hpf	3+	*	WBCs are abnormal because of bacterial infection in the urinary tract.
RBC	Negative 0-2/hpf	3-5	*	RBC's are abnormal because of traumatic bladder catherization.
Leukoesterase	Negative	3+	*	Leukoesterase are present because of UTI.

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 cultures completed	
Blood Culture			*	
Sputum Culture			*	
Stool Culture			*	

Lab Correlations Reference (APA):

Pagana, K. D., Pagana, T. J., & Pagana, T. N. (2019). Mosby's diagnostic and laboratory test reference. St. Louis, MO: Elsevier.

Diagnostic Imaging

All Other Diagnostic Tests (10 points):

X-ray: There are 3 ankle views bilateral for routine diabetic ulcerations that are pending results and 3 foot views bilateral for diabetic foot ulcerations that are also pending results.

Current Medications (10 points, 2 points per completed med)

5 different medications must be completed

Medications (5 required)

Brand/Generic	Crestor/ Rosuva statin calcium	Zosyn/ Piperacilin- tazobactam	Toprol-XL/ Metoprolol succinate	Humalog/ Lispro insulin	Neurontin/ Gabapentin
Dose	20mg	3.375g in Sodium Chloride 0.9% 100mL IUPB	25mg	100 unit mL injections 3-15 units	1,200mg
Frequency	1x day	Every 6 hrs	1x day	3x w/ meals	2x daily
Route	PO	Intravenous	PO	Injection	PO
Classification	Antilipemic	Penicillin antibiotics	Antianginal, antihypertensiv e	Rapid-acting insulin	Anticonvulsant
Mechanism of Action	Inhibits lipid levels by increasing the number of hepatic LDL receptors on the cell surface to increase uptake and catabolism of LDL.	Inhibits biosynthesis of cell wall mucopeptide synthesis by binding to 1 or more of the penicillin-binding proteins and is effective during active- multiplication stage.	Inhibits stimulation of beta1-receptor sites, located mainly in the heart, resulting in decreased cardiac, excitability, cardiac output, and myocardial oxygen demand.	Promotes the storage and inhibits the breakdown of glucose by facilitating the uptake of glucose and muscle tissue, regulates fat metabolism by enhancing fat storage and regulates protein metabolism by increasing protein synthesis.	Prevents exaggerated responses to painful stimuli related to normally innocuous stimulus to account for its effectiveness in relieving postherpetic neuralgia and restless leg syndrome.

Reason Client Taking	To prevent primary cardiovascular disease.	To treat skin structure infections.	To manage hypertension.	Treatment of diabetes.	To treat restless leg syndrome.
Contraindications (2)	Active liver disease, hypersensitivity to rosuvastatin or its components or unexplained elevations of serum transaminase levels.	Critical illness, dialysis, renal failure, renal impairment, hypokalemia, sodium restriction.	Acute heart failure; cardiogenic shock; hypersensitivity to metoprolol, its components.	Renal failure, renal impairment, thyroid disease	Hypersensitivity to gabapentin or its components.
Side Effects/Adverse Reactions (2)	Hypertension, UTI	Hemolytic anemia, renal failure	Insomnia, arterial insufficiency	Dyspnea, hypertension	Seizures, coagulation defect

Medications Reference (APA):

J., B. (2020). *2020 Nurse's drug handbook* (19th ed.). Burlington, MA, MA: Jones & Bartlett Learning.

PDR Search. (2020). Retrieved October 23, 2020, from

<https://www.pdr.net/drug-summary/Humalog-insulin-lispro-291.3757#10>

PDR Search. (2020). Retrieved October 23, 2020, from

<https://www.pdr.net/drug-summary/Zosyn-piperacillin-tazobactam-629>

Assessment

Physical Exam (18 points)

<p>GENERAL: Alertness: Orientation: Distress: Overall appearance:</p>	<p>Appears alert and oriented to time, place, and person x3. No distress Appearance is within normal limits</p>
<p>INTEGUMENTARY: Skin color: Character: Temperature: Turgor: Rashes: Bruises: Wounds: Braden Score: Drains present: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Type:</p>	<p>Pink Perspiration Warm Normal turgor 2+ None No bruises 11 braden score Bilateral lower extremity pressure wounds on heels and lateral malleolus of right ankle – purulent drainage bilateral decubitus ulcer on hip area.</p>
<p>HEENT: Head/Neck: Ears: Eyes: Nose: Teeth:</p>	<p>Head and neck are symmetrical, trachea is midline without deviation Patients ears are free of discharge Bilateral sclera white, cornea clear, conjunctiva pink, no drainage. Septum is midline, turbinates are moist and pink bilaterally Teeth are within normal limits</p>
<p>CARDIOVASCULAR: Heart sounds: S1, S2, S3, S4, murmur etc. Cardiac rhythm (if applicable): Peripheral Pulses: Capillary refill: Neck Vein Distention: Y <input type="checkbox"/> N <input checked="" type="checkbox"/></p>	<p>Heart sounds are normal, S1, S2 present. No murmurs, gallops, or rubs Pulses are 2+ throughout bilaterally Capillary refill is normal mobility</p>

<p>Edema Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Location of Edema:</p>	
<p>RESPIRATORY: Accessory muscle use: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Breath Sounds: Location, character</p>	<p>Respirations are regular, even and nonlabored bilaterally. No wheezes, crackles, or rhonchi noted.</p>
<p>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 <input type="checkbox"/> N <input checked="" type="checkbox"/> Nasogastric: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Size: Feeding tubes/PEG tube Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Type:</p>	<p>Carb consistent med calorie diet 5'2" 184 lbs Bowel sounds are normoactive in all 4 quadrants Last BM, Sunday 10/18/20 No CVA tenderness No abnormalities were found upon inspection for distention, incisions, scars, drains, or wounds.</p>
<p>GENITOURINARY: Color: Character: Quantity of urine: Pain with urination: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Dialysis: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Inspection of genitals: Catheter: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Type: Size:</p>	<p>Pt was incontinent of urine Yellow Clear</p> <p>Indwelling double lumen catheter size 16</p>

<p>MUSCULOSKELETAL: Neurovascular status: ROM: Supportive devices: Strength: ADL Assistance: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Fall Risk: Y <input checked="" type="checkbox"/> N <input checked="" type="checkbox"/> Fall Score: Activity/Mobility Status: Independent (up ad lib) <input type="checkbox"/> Needs assistance with equipment <input type="checkbox"/> Needs support to stand and walk <input type="checkbox"/></p>	<p>.</p> <p>Normal ROM Strength upper extremities Pt is bedbound</p> <p>Bedbound</p>
<p>NEUROLOGICAL: MAEW: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> PERLA: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Strength Equal: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> if no - Legs <input type="checkbox"/> Arms <input checked="" type="checkbox"/> Both <input type="checkbox"/> Orientation: Mental Status: Speech: Sensory: LOC:</p>	<p>.</p> <p>Cognitive of space, time, and location Articulative speech Mature and cognitive Alert No gross facial neurological deficits</p>
<p>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):</p>	<p>.</p> <p>Family Mature Catholic Pt lives at home with husband who is primary caregiver and has 8 children.</p>

Vital Signs, 1 set (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0830	77	93/60	16	98.3	100

Pain Assessment, 1 set (5 points)

Time	Scale	Location	Severity	Characteristics	Interventions
1000	0-10	n/a	n/a	n/a	Pt denies of any pain at the moment

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
220 mL Water	200 mL (Catheter bag was drained and emptied prior to assessment, checked pts record)

Nursing Diagnosis (15 points)

Must be NANDA approved nursing diagnosis

Nursing Diagnosis	Rational	Intervention (2 per dx)	Evaluation
<ul style="list-style-type: none"> • Include full nursing diagnosis with “related to” and “as evidenced by” components 	<ul style="list-style-type: none"> • Explain why the nursing diagnosis was chosen 		<ul style="list-style-type: none"> • How did the patient/family respond to the nurse’s actions? • Client response, status of goals and outcomes, modifications to plan.
1. Risk for infection	Related to pts catheter as evidenced by: increased WBC count and “my husband just changed my catheter last week”	1. Monitor vital signs for evidence of infection. 2. Prevent transmission of infectious agents by washing hands thoroughly before and after as well as wearing gloves when contact with catheter.	Goal met. Vital signs were within patients’ baseline. Goal met. Proper hand hygiene in prevention of microbial transmission.
2. Acute pain	Related to pts rating pain a 6 on	1. Continuous pain scale	Goal met. Pain is assessed during shift.

	a 0-10 scale on admission as evidenced by: “there was a lot of pain and pressure in my lower pelvic area and it burns when I do pee”	assessment to evaluate pain. 2. Administer pain medication.	Goal met. Meds are given by the nurse.
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Other References (APA):

Concept Map (20 Points):

Subjective Data

Nursing Diagnosis/Outcomes

1. Risk for infection related to patient's catheter as evidenced by: increased WBC, and "my husband just changed my catheter last week".
 - Goal met: Vital signs were within patients' baseline
 - Goal met: Proper hand hygiene for prevention of microbial transmission
2. Acute pain related to patient's rating pain a 6 on a 0-10 scale on admission as evidenced by "there was a lot of pain and pressure in my lower pelvic area and it burns when I do pee".
 - Goal met: Pain assessed during shift.
 - Goal met: Meds are given by the nurse.

Objective Data

Patient Information

Nursing Interventions

1. Monitor vital signs for elevated pain and pressure when urinating. 62-year-old female patient with urinary tract infection associated with indwelling catheter, primary diagnosis, well-being without gloves, drainage of urine from catheter.
2. Provide oral fluids. Alert and oriented to person, place, time, and situation.
3. Continuous pain scale assessment to evaluate pain.
4. Administer pain medication.
 - Temp: 98.3
 - SpO2%: 100
 - Pulse: 77



