N321 Care Plan #3

Lakeview College of Nursing

Ana Punsalan

Demographics (3 points)

Date of Admission 4/8/2020	**Patient Initials** AG	**Age** 85	**Gender** Male
Race/Ethnicity Hispanic	**Occupation** Retired Professor at a local college & a Veteran	**Marital Status** Married	**Allergies** No Known Allergies
Code Status FULL	**Height** 5'6	**Weight** 165 lbs.	

Medical History (5 Points)

Past Medical History: Hypertension, Type 2 Diabetes, Hyperlipidemia, Glaucoma

Past Surgical History: No surgical history.

Family History: Mother died of a stroke; Father had hypertension

Social History (tobacco/alcohol/drugs): No drug or alcohol use

Assistive Devices: Cane

Living Situation: Lives at a local nursing home with his wife

Education Level: Graduated college with a master's degree

Admission Assessment

Chief Complaint (2 points): Urinary frequency and burning on urination

History of present Illness (10 points): Mr. Green lives at a local nursing home. Mr. Green is usually alert and oriented and needs little assistance from staff. Two days ago, the staff started to notice Mr. Green acting different, then yesterday Mr. Green became confused and was striking out at the staff, refused to eat and thought he was in prison. Mr. Green keeps stating he is having pain but cannot tell us the location. He gets very agitated when asked question. Staff reports last urine output was cloudy and he has been incontinent, which is abnormal. Foley catheter inserted- very concentrated dark urine in bag, sample sent to lab.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): UTI and sepsis

Secondary Diagnosis (if applicable): N/A

Pathophysiology of the Disease, APA format (20 points): **SEE NEXT PAGE**

Pathophysiology References (2) (APA):

Cirino, E. (2017, June). *What Is Urosepsis?*. Healthline; Healthline Media. https://www.healthline.com/health/urosepsis

Ciprofloxacin (Intravenous Route) Description and Brand Names – Mayo Clinic. (2020). Mayoclinic.Org. https://www.mayoclinic.org/drugs-supplements/ciprofloxacin-intravenous-route/description/drg-20072232

Piperacillin and Tazobactam (Intravenous Route) Description and Brand Names – Mayo Clinic. (2020). Mayoclinic.Org. https://www.mayoclinic.org/drugs-supplements/piperacillin-and-tazobactam-intravenous-route/description/drg-20072716

Urinary tract infection (UTI) – Diagnosis and treatment – Mayo Clinic. (2019). Mayoclinic.Org. https://www.mayoclinic.org/diseases-conditions/urinary-tract-infection/diagnosis-treatment/drc-20353453

UTI and Sepsis

Urinary tract infections (UTI) is an infection in any part of the urinary system that can be treated easily with antibiotics (Cirino, 2017). Sometimes, though, the bacteria that caused the UTI can infect your bloodstream (Cirino, 2017). This condition is called urosepsis, and it can be deadly (Cirino, 2017.). Urosepsis develops as a complication of UTI (Cirino, 2017.).

Mr. Green states he is having pain but can't tell the location. According to Mr. Green's wife, he has been complaining of urinary frequency and burning on urination. Also, the staff reports that Mr. Green's last urine output was cloudy and has been incontinent. Some signs and symptoms related to UTI that Mr. Green is experiencing consists of the persistent urge to urinate, a burning sensation when urinating, urine that appears cloudy, and passing frequent, small amounts of urine (Mayo Clinic, 2019). Mr. Green's skin appears to be dry and warm, with elevated temperature of 101.8°F, ECG shows sinus tachycardia, pulse of 113, and respirations of 28. Mr. Green started to get confused and when staff came in, he became agitated. Some signs and symptoms indicating that Mr. Green may have urosepsis consists of high body temperature/fever, abnormal heart function, rapid heart rate, fast breathing, and the inability to think clearly (Cirino, 2017).

A urine sample for lab was acquired to look for white blood cells, red blood cells, or bacteria (Mayo Clinic, 2019). When testing the sample, the doctor will look for a large number of white blood cells in the urine that indicates an infection (Cirino, 2017). A foley catheter was inserted into Mr. Green and shows very concentrated dark urine in the bag, which was then sent to the lab. Mr. Green's lab results: WBC-5, RBC-2, and Bacteria-3+.

Mr. Green is ordered Piperacillin/tazobactam IV and Ciprofloxacin IV for his UTI. These medications are used to treat bacterial infections in many parts of the body (Mayo Clinic, 2020).

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	4.40-5.80	5.65		
Hgb	13.0-16.5	12		Low count, indication of anemia (Pagana et al., 2019).
Hct	38.0-50.0	38.5		
Platelets	140-440	400		
WBC	4.00-12.00	17,000	14,000	High count due to the immune system fighting an infection (Pagana et al., 2019).
Neutrophils	40.0-68.0%		75%	High count indicating that the body has an infection (Pagana et al., 2019).
Lymphocytes	19.0-49.0%		20%	
Monocytes	3.0-13.0%			
Eosinophils	0.0-8.0%			
Bands	0.0-4.0		15%	High count suggesting that a serious infection is present (Pagana et al., 2019).

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 mmol/L	152	145	Increased level due to dehydration (Pagana et al., 2019).
K+	3.5-5.0 mmol/L	2.2	3.0	Low levels related to UTI (Pagana et al., 2019).
Cl-	98-108	99	110	Increased level indicates kidney dysfunction (Pagana et al., 2019).
CO2	23-29	88		
Glucose	70-100 mg/ dL	400	190	Increased levels due to Type 2 Diabetes (Pagana et al., 2019).

BUN	8-25 mg/dL	28	22	Increased level due to dehydration (Pagana et al., 2019).
Creatinine	0.6-1.3 mg/ dL	1.5	1.6	Increased levels due to possible malfunction or failure of the kidneys (Pagana et al., 2019).
Albumin	3.5-5.2 gm/ dL		2.2	Decreased level due to inflammation (Pagana et al., 2019).
Calcium	8.6-10 mg/dL			
Mag	1.5-2.6			
Phosphate	2.5-4.5			
Bilirubin	<1.5 mg/dL			
Alk Phos	34-104			
AST	10-30 units/ L			
ALT	23-470			
Amylase	20-86			
Lipase	20-86			
Lactic Acid	0.5-1.0	3.2		Increased level indicating severe infection – sepsis (Pagana et al., 2019).

Other Tests 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
INR	2-3			
PT	F: 9.5-11.3 s M: 9.6-11.8 s			
PTT	30-40 s			

D-Dimer	≤250 ng/mL			
BNP	<125			
HDL	40-59			
LDL	100-129			
Cholesterol	<200			
Triglycerides	<150			
Hgb A1c	4-5.6%			
TSH	0.4-4.0			

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	Ambery yellow clear	Dark yellow & cloudy		Dark and cloudy due to dehydration (Pagana et al., 2019).
pH	5.0-9.0	7.8		
Specific Gravity	1.003-1.030	1.045		Increased level due to dehydration (Pagana et al., 2019).
Glucose	Negative			
Protein	-0.8 mg/dL			
Ketones	Negative	Positive		Positive due to cells not getting enough glucose (Pagana et al., 2019).
WBC	0.4	5		Increased level due to inflammation in the urinary tract (Pagana et al., 2019).
RBC	≤2	2		
Leukocyte esterase	Negative	Positive		There are WBC in the urine, indicating UTI (Pagana et al., 2019).

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	(-) < 10,000mL (+)> 100,000mL			
Blood Culture	Negative	Positive		Bacteria in the blood (Pagana et al., 2019).
Sputum Culture	Normal upper respiratory tract			
Stool Culture	Normal intestinal flora			

Lab Correlations Reference (APA):

Pagana, K. D., Pagana, T.J., & Pagana, T.N. (2019). *Mosby's Diagnostic and Laboratory Test Reference* (14th ed). Elsevier.

Diagnostic Imaging

All Other Diagnostic Tests (5 points): Chest X-ray: Normal

Diagnostic Test Correlation (5 points): The most used imaging study in the diagnosis of sepsis is a chest x-ray (White, 2019). Chest x-rays can provide useful information regarding the possibility of infections (White, 2019).

Diagnostic Test Reference (APA):

White, M. (2019, February 11). *Sepsis – Cancer Therapy Advisor*. Cancer Therapy Advisor. https://www.cancertherapyadvisor.com/home/decision-support-in-medicine/hospital-medicine/sepsis-2/

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

Home Medications (5 required)

Brand/Generic	Olmesartan (Benicar)	Simvastatin (Zocor)	Glucophage (Metformin)	Insulin detemir (Levemir)	Xalatan (Latanoprost)
Dose	20 mg	40 mg	500 mg	30 units	1 drop each eye
Frequency	Daily	At bedtime	2x Daily	At bedtime	At bedtime
Route	Oral	Oral	Oral	SUBQ	Eyes
Classification	Angiotensin II receptor antagonist	HMG-CoA reductase inhibitor	Biguanide	Pancreatic	Prostaglandin analog
Mechanism of Action	Blocks vasoconstrictor effects of angiotensin II.	Slow production of cholesterol in the body.	Decreases hepatic glucose production.	Lower blood glucose.	Reduce the intraocular pressure by increasing the outflow of aqueous humor.
Reason Client Taking	To treat high BP.	Lower LDL and triglycerides and raise HDL.	Helps control blood sugar levels.	Lowering levels of glucose in the blood.	To treat high pressure inside the eye due to glaucoma.
Contraindications (2)	1. Type 2 Diabetes 2.Hypotnatremia	1. hepatic disease 2. cholestasis	1. Allergy 2. sepsis	1. Allergy 2. Hypoglycemia	1. Closed-angle glaucoma 2. Aphakia
Side Effects/Adverse Reactions (2)	1. Dizziness 2. joint/muscle pain	1. Heartburn 2. Indigestion	1. weakness 2. diarrhea	1. thickening of skin at injection site 2. swelling of hands/feet	1. Blurred vision 2. Browning of the iris
Nursing Considerations (2)	1. Correct volume depletion, if possible, before initiation of therapy.	1. Monitor liver functions prior to initiation of therapy. 2. If pt.	1. Administer with meals to minimize GI effects. 2. XR tablets must be	1. Do NOT mix insulin detemir w/ any other insulin or solution. 2. Rotate	1. Close observation during first dose of administration.

	2. Administer once daily without regard to food.	develops muscle tenderness during therapy, CPK levels should be monitored.	swallowed whole, do no crush, dissolve, or chew.	injection sites.	2. Assess vital signs, baseline, visual acuity, pulmonary crackles & wheezes.

Hospital Medications (5 required)

Brand/Generic	Zosyn (Piperacillin/ Tazobactam)	Cipro (Ciprofloxacin)	acetaminophen (Tylenol)	lorazepam (Ativan)	Dilaudid (hydromorphone hydrochloride)
Dose	3.375 g	400 mg	650 mg	0.5 mL	0.5 mg
Frequency	q6h	q8h	q4 to 6	Every 6hrs. as needed	Every 6hrs. as needed
Route	IV	IV	Oral	IV	IV
Classification	Extended spectrum penicillin	Fluroquinolone	Nonopioid analgesics	Benzodiazepine	Opioid analgesics
Mechanism of Action	Death of susceptible bacteria.	Inhibits bacterial DNA.	Inhibits synthesis of prostaglandins that may serve as mediators of pain & fever.	Depresses the CNS.	Analgesia
Reason Client Taking	To treat infections caused by bacteria.	To treat bacterial infections.	Pain reliever and fever reducer.	To manage anxiety.	To treat moderate to severe pain.
Contraindications (2)	1. Hypokalemia 2. Bleeding	1. Hypokalemia 2. Diabetes	1. Acute liver failure 2. Caloric undernutrition	1. Allergy 2. Severe hypotension	1. Bronchial asthma 2. GI obstruction
Side Effects/Adverse Reactions (2)	1. diarrhea 2. rash	1. Nausea 2. vomiting	1. Nausea 2. Stomach pain	1. Severe drowsiness 2. Unusual changes in mood/behavior	1. Constipation 2. Nausea/ vomiting

Nursing Considerations (2)	1. Assess pt. for infection at beginning of & during therapy. 2. Monitor bowel function.	1. Observe signs & symptoms of anaphylaxis 2. Lab test – may cause increase AST, ALT, LDH, bilirubin, and alkaline phosphate.	1. Assess overall health status & alcohol usage before administering Tylenol. 2. Assess amount, frequency, and types of drugs taken in pt.'s self-medicating, especially w/ OTC drugs.	1. Administer at a rate not to exceed 2 mg/min. 2. Rapid IV administration may result in apnea, hypotension, bradycardia, or cardiovascular arrest.	1. Elderly pts. may have increased sensitivity to hydromorphone. Start at the low end of the dosing range. 2. Titrate the dosage of dilaudid slowly in geriatric pts. & monitor closely for signs of CNS and respiratory depression.

Medications Reference (APA):

Jones & Bartlett Learning. (2019). *2019 Nurse's drug handbook*. Jones & Bartlett Learning.

Assessment

Physical Exam (18 points)

GENERAL (1 point): **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	Appears confused – knows his name, does not know where or what time it is. Ativan has calmed patient; looks his age
INTEGUMENTARY (2 points): **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** **Drains present: Y☐ N ☒** **Type:**	 Skin is within patient's norm Fair skin; hot & dry; He is not diaphoretic; Temperature is warmer than the average range. There is good skin turgor No rashes, bruises, wounds, or scars; No peripheral edema is noted; Nailbeds are pale **Braden Score:** 12
HEENT (1 point): **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	Head & neck are symmetrical; Face appears flushed, dry mucosa; His neck & veins are flat, no abnormalities are noted; Auricle is moist & pink w/out lesions; He now moans & opens his eyes when moderately shaken; His pupils are equal and react briskly to light; septum is midline; sinuses nontender; dentition is good
CARDIOVASCULAR (2 points):	S1 & S2 without murmurs, gallops, or rubs;

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:**	Cardiac monitor shows sinus tachycardia at 110 beats per minute; Rhythm is regular; Pulses are 2+ throughout; capillary refill less than 2 seconds
RESPIRATORY (2 points): **Accessory muscle use: Y☐ N ☒** **Breath Sounds: Location, character**	Breath sounds are present and equal bilaterally. No adventitious breath sounds are auscultated. Rate & quality are the same as previously noted.
GASTROINTESTINAL (2 points): **Diet at home:** **Current Diet** **Height:** **Weight:** **Auscultation Bowel sounds:** **Last BM:** **Palpation: Pain, Mass etc.:** **Inspection:** **Distention:** **Incisions:** **Scars:** **Drains:** **Wounds:** **Ostomy: Y ☐ N ☒** **Nasogastric: Y ☐ N ☒** **Size:** **Feeding tubes/PEG tube Y ☐ N ☒** **Type:**	 Eats a regular balanced diet at facility. Can have a soft diet w/ liquid but pt. is not taking much in Height: 5'6 Weight: 165 lbs. Normal bowel sounds are auscultated in all quadrants Last BM: One day ago. Abdomen is soft, slightly distended in lower quads. No pain, No masses. No incisions, scars, drains, or wounds.
GENITOURINARY (2 Points): **Color:** **Character:** **Quantity of urine:** **Pain with urination: Y ☒ N ☐** **Dialysis: Y ☐ N ☒** **Inspection of genitals:** **Catheter: Y ☒ N ☐** **Type:** **Size:**	 Color Dark Yellow Clarity – Cloudy Urine output over the past 2hrs. is 100mL Genitals appear pink & dry
MUSCULOSKELETAL (2 points):	

Neurovascular status: **ROM:** **Supportive devices:** **Strength:** **ADL Assistance: Y☒ N ☐** **Fall Risk: Y ☒ N☐** **Fall Score:** **Activity/Mobility Status:** **Independent (up ad lib) ☐** **Needs assistance with equipment ☒** **Needs support to stand and walk ☒**	CV II-XII are intact; Reflexes are 1-2+ throughout; Coordination: Normal finger to nose bilaterally; No pain, paralysis; No paresthesia; Not pallor; Warm temperature; No swelling or increased pressure; Need supportive device: cane; Needs some assistance with his ADLs; **Fall Score:** 50
NEUROLOGICAL (2 points): **MAEW: Y ☒ N☐** **PERLA: Y ☒ N☐** **Strength Equal: Y ☒ N ☐ if no - Legs ☐ Arms ☐ Both ☐** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	Alert, but confused and oriented x1; Gets agitated; Speech is articulate; Normal sensation; No LOC
PSYCHOSOCIAL/CULTURAL (2 points): **Coping method(s):** **Developmental level:** **Religion & what it means to pt.:** **Personal/Family Data (Think about home environment, family structure, and available family support):**	Lutheran and active in church. Married with two grown children that live in different states but involved in care for Mr. Green. When house is completed, Mr. Green will move to Arizona with his youngest daughter. Ego integrity, wisdom & the ability to participate in life with a sense of satisfaction.

Vital Signs, 2 sets (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
1400	113	158/88	28	101.8°F	95 on RA
1600	106	140/82	24	99.4°F	96 on RA

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
1400	Numeric	Pt. unable to provide location	9/10	Burning, sharp sensation	Tylenol

1600	Numeric	Lower abdomen	4/10	Slight burning sensation	Diet as tolerated & encourage fluids

IV Assessment (2 Points)

IV Assessment	Fluid Type/Rate or Saline Lock
Size of IV: **Location of IV:** **Date on IV:** **Patency of IV:** **Signs of erythema, drainage, etc.:** **IV dressing assessment:**	20-gauge catheter in right forearm infusing 0.9 NS @ 100 mL/hr. ciprofloxacin 400 mg running & 18-gauge started on left forearm (saline Lock). No erythema, No drainage. Dressing clean, dry, and adheres to the skin around the IV catheter insertion site.

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
300 mL	1000 mL

Nursing Care

Summary of Care (2 points)

Overview of care: Patient has become more alert and oriented. At first uncooperative but now after treatment patient has become cooperative and very tearful that he was acting mean. Education given on UTI and how to prevent and seek treatment as soon as possible. Emotional support was given.

Procedures/testing done: CBC, Urinalysis, Lactic acid, Blood Gas, Electrolytes, Blood cultures, and a chest X-ray

Complaints/Issues: No complaints, very thankful.

Vital signs (stable/unstable): Vital signs are unstable.

Tolerating diet, activity, etc.: Tolerates diet and activities

Physician notifications: Patient improving and plan for 1-2 more nights as inpatient

Future plans for patient: PT/OT will see patient in hospital for strength. The patient will need IV antibiotics at long term care orders will be sent.

Discharge Planning (2 points)

Discharge location: Daughter states she will take both her parents back to Arizona but will wait 2 weeks. The patient will return to long term care until daughter has arrangements to take both parents home with her.

Home health needs (if applicable): N/A

Equipment needs (if applicable): Cane

Follow up plan: Daughter states they have a health care provider in Arizona and will make sure her father is seen in Arizona as well as the follow up appointments after discharge with the patient's local health care provider.

Education needs: Education on UTI & sepsis will be given to the patient and family.

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. Impaired urinary elimination related to frequent urination as evidenced by dysuria.	Patient complains of urinary frequency and burning on urination.	**1.** Assess the patient's pattern of elimination. **2.** Encourage increased fluid intake (3-4 liters a day if tolerated).	Patient achieved normal urinary elimination pattern, as evidenced by absence sign of dysuria.
2. Deficient knowledge related to unfamiliarity with nature & treatment of UTI as evidenced by lack of questions.	Patient didn't want to bother nurses with his burning sensations and tried to fix the problem himself.	**1.** Explain to client about UTI risk factors, prevention, and treatment. **2.** Encouraging the reporting of signs and symptoms of recurrence.	Patient verbalized knowledge of causes & treatment of UTI, control risk factors, and completes medical treatment of UTI.
3. Acute pain related to inflammation & infection of the urethra, bladder, & other urinary tract structures.	Patient states he has pain but can't tell location.	**1.** Assess patient's description of pain such as quality, nature, and severity of pain. **2.** Encouraged the use of analgesic or antispasmodics	Patient reports satisfactory pain control at a level less than 3-4 on a scale of 0-10.

Other References (APA):

Swearingen, P.L. (2008). *All-in-one care planning resource: medical-surgical, pediatric, maternity, & psychiatric nursing care plans*. Mosby Elsevier.

Concept Map (20 Points): **SEE NEXT PAGE**

N321 Care Plan

Subjective Data

"Urinary frequency and burning on urination"

Nursing Diagnosis/Outcomes

Diagnosis #1 Impaired urinary elimination related to frequent urination as evidence by dysuria.
Outcome Patient achieved normal urinary elimination pattern, as evidenced by absence sign of dysuria.
Diagnosis #2 Deficient knowledge related to unfamiliarity with nature and treatment of UTI as evidenced by lack of questions.
Outcome Patient verbalized knowledge of causes and treatment of UTI, control risk factors, and completes medical treatment of UTI.
Diagnosis #3 Acute pain related to inflammation and infection of the urethra, bladder, and other urinary tract structures.
Outcome Patient reports satisfactory pain control at a level less than 3-4 on a scale of 0-10.

Objective Data

WBC 14,000
Neutrophils 14,000
Lymphocytes 75%
Bands 15%
BP 126/60; 124/50
K+ 3.0
Cl- 110
Glucose 190
Creatinine 1.6
Albumin 2.2
Pulse 113; 106
BP 158/88; 140/82
Resp Rate 28; 24
Temp 101.8°F; 99.4°F
Oxygen 95; 96
Pain 9/10; 4/10

Patient Information

G.
Admitted 4/8/2020
85 years old
Male, Hispanic
Retired Professor at a local college & a Veteran
Married
Allergies – No known allergies
Height: 5'6
Weight: 165 lbs.
Code: FULL

Nursing Interventions

Diagnosis #1 Interventions:
Assess the patient's pattern of elimination.
Encourage increased fluid intake (3-4 liters a day if tolerated).
Diagnosis #2 Interventions:
Explain to client about UTI risk factors, prevention, and treatment.
Encouraging the reporting of signs and symptoms of recurrence.
Diagnosis #3 Interventions:
Assess patient's description of pain such as quality, nature, and severity of pain.
Encouraged the use of analgesic or antispasmodics.

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