N321 Care Plan # 3

Lakeview College of Nursing

Olamide Adewole

Demographics (3 points)

Date of Admission 10/13/2020	Patient Initials CM	Age 70	Gender F
Race/Ethnicity Caucasian	Occupation Homemaker	Marital Status Married	Allergies No known allergies
Code Status Full Code	Height 5'6	Weight 181lbs	

Medical History (5 Points)

Past Medical History: Hypothyroidism, Diabetes Melitus, Type 2 Diabetes, Dsylipidemia, Anxiety, Essential Hypertension, Recurrent acute SInusitis, Acute upper respiratory infection, Polyp of the left Nasal cavity, Gastroesophageal reflux disease,

Past Surgical History: Tubal Ligation

Family History: Patient was adopted, so past family history is unknown

Social History (tobacco/alcohol/drugs): drinks alcohol occasionally.

Assistive Devices: None

Living Situation: Patient lives at home with her husband, one dog, and two cats

Education Level; Patient graduated high school

Admission Assessment

Chief Complaint (2 points): Nausea, and Vomiting

History of present Illness (10 points): Patient is a 70 year old female that was presented to the ER on 10/13/2020, with dizziness, anxiety, and a fever of 100.5 which began earlier that day. The patient denied abdominal pain and flank pain. Upon assessment the patient was found to have a blood pressure read 166 / 77, Heart rate 100 beats per minute, and an oxygen saturation of 95%,

Primary Diagnosis on Admission (2 points): Pyelonephritis

Secondary Diagnosis (if applicable):

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

Pyelonephritis or kidney infection is a type of urinary tract infection (UTI) that starts in the urethra or bladder and travels to one or both of the kidneys. It can cause the kidneys to swell and permanently damage them. Pyelonephritis can be life-threatening since the bacteria can travel up into the bloodstream and poison the blood.

The symptoms of Pyelonephritis varies in people, but it includes; fever, chills, back pain, groin pain, abdominal pain, frequent urination, intense, persistent urge to urinate, burning sensation or pain when urinating, nausea and vomiting, pus or blood in your urine, urine that smells bad or is cloudy, and mental confusion. Some risk factors that increase the chances of a person getting Pyelonephritis are; Being female, previously having a urinary tract blockage, having a weakened immune system, and having a damaged nerve around the bladder.

For treating Pyelonephritis, antibiotics are the first course of action against acute Pyelonephritis. Some antibiotic options to treat Pyelonephritis includes; Levofloxacin, Ciprofloxacin, Co-trimoxazole, and Ampicillin. Another treatment method is getting admitted to a hospital and receiving intravenous hydration and antibiotics for 24 to 48 hours. While in the hospital, doctors will monitor the infection. In comparison, surgery is also a treatment option for recurrent kidney infections resulting from an underlying medical problem. Some things people do to prevent urinary tract infection include; Drinking plenty of fluids because they help remove bacteria from your body, avoid delaying urination, and wiping from front to back after urinating and after a bowel movement could help prevent bacteria from spreading to the urethra.

The patient presented to the emergency department with nausea and vomiting. During the assessment, the patient's blood pressure read 166 / 77, Heart rate 100 beats per minute, oxygen saturation 95%, and the oral temperature was 100.5 degrees. The patient had a head CT, which showed mild cortical atrophy, and she also had some blood work drawn, which showed elevated WBC, RBC, and Neutrophils levels, and low Albumin and CO2 levels. The patient was then admitted and was given sodium chloride to replace the fluids lost when she was vomiting and used to piggyback the Ceftriaxone, an antibiotic used to treat a broad spectrum of bacteria. The IV Ceftriaxone was later replaced with Levofloxacin, which treats a narrower range of bacteria after the diagnosis of Pyelonephritis. The patient was receiving some other medications while she was in the hospital includes; Ketorolac, an NSAIDs used to treat inflammation. Amlodipine and Clonidine treat hypertensionGlyburide to control her diabetes. Lantus is hormonal replacement insulin, Acetaminophen to treat mild to moderate pain, and Fluticasone nasal spray to prevent fungal infections, Lorexapam to control anxiety Ondansetron to control nausea and vomiting.

Pathophysiology references (2) (APA);

***Kidney infection*. (2020, August 26). https://www.mayoclinic.org/diseases-conditions/kidney-infection/symptoms-causes/syc-20353387.**

DiMaria, C. (2019, March 22). *Pyelonephritis: Symptoms, Causes, Treatment, Pregnancy & More*. Healthline. https://www.healthline.com/health/pyelonephritis.

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 - 5.2	5.50	4.59	High RBC could be caused by poor kidney circulation
Hgb				
Hct				
Platelets				
WBC	4.3 - 11	22.4	12.5	The patient's WBC levels could be high because the body is fighting off an infection.
Neutrophils	37 - 85%	91.9	90.9	Neutrophils percentage can be high because of the stress physical illness brings.
Lymphocytes	20 - 45%	3.5	12.2	Low lymphocytes are caused by the body's low resistance to fight infection.
Monocytes	00.1 - 1%			
Eosinophils	0.00 - 0.1%			
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 mmol/L			
K+	3.5 - 5.0 mmol/L			

Cl-	**95 - 110 mmol/L**			
CO2	**23 - 31 mmol/L**	**21**	**22**	**Low CO2 in the body could be caused by kidney infection.**
Glucose	**70 - 110 mg/dL**	**66**	**109**	**The patient glucose is low as a result of the insulin she is getting.**
BUN	**8 -25 mg/dL**			
Creatinine	**0.70 - 1.50 mg/dL**			
Albumin	**3.5 -5.0 mg/dL**	**4.3**	**3.1**	**The patient has a kidney infection which leads to the increase of ammonia level**
Calcium	**8.4 - 10.3 mg/dL**			
Mag	**1.5-2.6 mg/dL**			
Phosphate	**2.5-4.5 mg/dL**			
Bilirubin	**0.2-0.8 mg/dL**			
Alk Phos	**40 -150 U/L**			
AST	**16 - 40**	**19**	**15**	**Low levels of AST signifies muscle damage in the body**
ALT	**7 - 52**			
Amylase	**23 - 85 u/L**			
Lipase	**12 -70u/L**			
Lactic Acid	**7.0 - 31.4 u/ L**			

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	**0.8 - 1.4**			
PT	**10.1 - 13.1 seconds**			
PTT	**25-36 sec**			
D-Dimer	**<0.5**			
BNP	**<100 mg/ml**			
HDL	**>60 mg/ml**			
LDL	**<100 mg/ml**			
Cholesterol	**<200mg/ml**			
Triglycerides	**<150mg/ml**			
Hgb A1c	**<7%**			
TSH	**0.4 - 4.0mu/ L**			

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	**Yellow and clear**			
pH	**4.6 - 8.0**			
Specific Gravity	**1.005 - 1.030**			
Glucose	**Negative**			
Protein	**0 -8 mg / dl**			
Ketones	**Negative**			
WBC	**0 - 4**			
RBC	**0 - 2**			

Leukoesterase	**Negative**			

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	**Negative**			
Blood Culture	**Negative**			
Sputum Culture	**Negative**			
Stool Culture	**Negative**			

Lab Correlations Reference (APA):

Todd, J. C., & Sanford, A. H. (1948). ***Clinical diagnosis by laboratory methods*****. Saunders.**

Diagnostic Imaging

All Other DiagnosticTests (5 points):

CT Scan Head without Contrast: Results (10/13/2020); There is cloudiness in the left and right sinuses,but there is no signs of cerebral edema, and hemorrhage.

CT Scan Head without Contrast: Results (10/14/2020); There is fluid and thick mucus in both maxillary sinuses, and cloudiness of the ethmoid cells.

Diagnostic Test Reference (APA):

Todd, J. C., & Sanford, A. H. (1948). Clinical diagnosis by laboratory methods. Saunders.

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

Home Medications (5 required)

Brand/Generic	**Alprazolam / Xanax**	**Amlodipine/ Norvasc**	**Ativan / Lorazepam**	**Invokana / Canagliflozin**	**Glyburide / DiaBeta**
Dose	**1mg**	**10 mg**	**1mg**	**300 mg**	**500 mg**
Frequency	**q.d**	**q.d**	**q.d**	**q.d**	**q.2.h**
Route	**oral**	**oral**	**oral**	**oral**	**oral**
Classification	**Benzodiazepine**	**Antihypertensive**	**Benzodiazepine**	**Antidiabetes**	**Antidiabetic**
Mechanism of Action	**increase effect of GABA by binding to benzodiazepine receptor**	**binds to dihydropyridine cell membrane at the receptor**	**increase effect of GABA by binding to benzodiazepine receptor**	**inhibits sodium - glucose co-transporter responsible for the**	**stimulate insulin release from beta cells in the pancreas.**

	in the limbic and cortical area of the CNS	**sites on myocardial and vascular smooth muscle cells**	**in the limbic and cortical area of the CNS**	**majority of the reabsorption of filtered glucose from the tubular lumen**	
Reason Client Taking	**It relieves her anxiety**	**The patient is hypertensive**	**It relieves her anxiety**	**It controls her diabetes**	**It controls her diabetes**
Contraindications (2)	**Glaucoma, Hypersensitivity to benzodiazepine**	**Aliskiren therapy, Hypersensitivity to amlodipine**	**Glaucoma, Hypersensitivity to benzodiazepine**	**Diabetic ketoacidosis, Severe renal failure**	**Diabetes complicated by pregnancy, Type 1 diabetes mellitus**
Side Effects/Adverse Reactions (2)	**Chest pain, Hypotension**	**Anxiety, Arrhythmias**	**Diaphoresis, Tachycardia**	**Hypoglycemia, Abdominal pain**	**Arrhythmias, Dyspnea**
Nursing Considerations (2)	**Warn patient about stopping medication abruptly, Warn patient not to increase dosage.**	**Assess patients frequently for chest pain, monitor blood pressure while adjusting dosage .**	**Warn patient about stopping medication abruptly, Warn patient not to increase dosage.**	**Use cautiously in patient with chronic kidney disease, Monitor serum potassium levels regularly**	**give glyburide before the first meal of the day, monitor blood sugar to determine effect of glyburide**

Hospital Medications (5 required)

Brand/Generic	**Sodium Chloride 0.9**	**Levofloxacin/ Levaquin**	**Acetaminophen/ Exdol**	**Ondansetron / Zofran**	**Ketorolac / Toradol**
Dose	**125ml / hr**	**750mg/ 150ml**	**650 mg**	**4mg**	**30 mg**
Frequency	**Continuous IV**	**IV piggyback qd for 5 days**	**q8h / PRN**	**q6h, PRN**	**q6h / PRN**
Route	**IV**	**IV**	**Oral**	**IV push**	**IV push**
Classification	**Isotonic solution.**	**Antibiotics**	**Non opioid analgesic**	**Antiemetic**	**Analgesic**
Mechanism of Action	**creates an onotonic gradient gradient for expanding volume.**	**interferes with bacterial cell replication**	**inhibits the enzyme cyclooxygenase, blocking prostaglandin production and interfering with pain impulse**	**blocks serotonin receptors centrally in the chemoreceptor trigger zone or vagal nerve in the intestine**	**promote pain transmission for periphery to spinal cord**
Reason Client Taking	**The patient is taking it as maintenance fluid**	**To help the patient fight the infection**	**To relieve mild to moderate pain**	**To prevent nausea and vomiting**	**To treat moderate to severe pain**
Contraindications (2)	**Sodium retention, Congestive heart failure.**	**Hypersensitivity with levofloxacin, myasthenia gravis**	**Hypersensitivity to acetaminophen, severe hepatic impairment**	**concomitant use of apomorphine, hypersensitivity to ondansetron**	**Advanced renal insufficiency, History of GI bleeding**
Side Effects/Adverse Reactions (2)	**Weakness, headache**	**Psychosis, Paranoia**	**Agitation, hemolytic anemia**	**Bronchospasm, drowsiness**	**Abdominal pain, Seizures**
Nursing Considerations (2)	**Assess for fluid volume**	**Use cautiously in patient**	**monitor renal function in**	**Monitor for hypersensitivity, know if**	**Beware NSAIDs should be**

	overload. monitor for allergies	**with renal insufficiency, obtain culture and sensitivity before beginning treatment**	**patient on long term therapy, use cautiously in patient with renal impairment**	**hypokalemia or hypomagnesemia is present**	**avoided, read label carefully**

Medications Reference (APA):

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

Assessment

Physical Exam (18 points)

GENERAL (1 point): **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	 **Alert** **Oriented to person, place, time, and situation** **Shows no sign of distress** **Well-groomed, looks appropriate for age**
INTEGUMENTARY (2 points): **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** **Drains present: Y☐ N ☐** **Type:**	 **Normal for race** **Warm and dry** **Warm** **Intact** **No rashes** **No bruises** **No open wounds** **21** **No drains present**
HEENT (1 point): **Head/Neck:** **Ears:** **Eyes:** **Nose:**	 **Normal cephalic, and atraumatic** **outer ear looks normal** **No drainage from the eyes, PERRLA and extraocular movement present.** **Pink and Moist**

Teeth:	**Oral mucosa pink, No mouth ulcer, lips dry.**
CARDIOVASCULAR (2 points): **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:**	. **Strong** **No murmurs, gallops, or rubs.** **Normal sinus** **Strong** **Less than 3** **No neck vein distension** **No Edema**
RESPIRATORY (2 points): **Accessory muscle use: Y☐ N ☐** **Breath Sounds: Location, character**	. **No use of accessory muscle use** **Breath non laboured**
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:**	. **Regular Diet** **Regular Diet** **5'6** **181** **Active bowel sounds in all 4 quadrants** **10/14/2020** **No pain or masses detected upon palpation** **Abdomen intact** **No distension** **No Incision** **Scar present at site of tubal ligation** **No Drains** **No Wound** **No Ostomy** **No Nasogastric** **No Feeding tubes**
GENITOURINARY (2 Points): **Color:** **Character:** **Quantity of urine:** **Pain with urination: Y ☐ N ☐** **Dialysis: Y ☐ N ☐** **Inspection of genitals:** **Catheter: Y ☐ N ☐** **Type:** **Size:**	 **Yellow** **Clear and free of particles** **No pain with urination** **No dialysis** **N/A** **No catheter**

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☐**	. **Intact** **Full active ROM** **No use for supportive devices** **Equal strength on all extremities** **No ADL assistance needed** **No** **60** **Independent**
NEUROLOGICAL (2 points): **MAEW: Y ☐ N☐** **PERLA: Y ☐ N☐** **Strength Equal: Y ☐ N ☐ if no -** **Legs ☐ Arms ☐ Both ☐** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	. **Yes** **Yes** **Yes** **Both** **Oriented X4** **Competent** **Clear** **No sensory deficits** **Alert**
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):**	. **Effective** **Appropriate for age** **Christian** **Patient has a significant family support system. She is close to her children and lives with her husband.**

Vital Signs, 2 sets (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
8 : 30 am	**69**	**120 / 64** **Right arm Sitting up in bed**	**18**	**97.7**	**97 % on room air**
10 : 00 am	**72**	**119 / 73** **Right arm Sitting up**	**18**	**98.1**	**95% on room air**

		in bed.			

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
8 :30 am	**0 - 10**	**N/A**	**0**	**N/A**	**No interventions needed**
10 : 00 am	**0 - 10**	**N/A**	**0**	**N/A**	**No interventions needed**

IV Assessment (2 Points)

IV Assessment	Fluid Type/Rate or Saline Lock
Size of IV: 20 gauge **Location of IV: Left Forearm** **Date on IV: 10/13/2020** **Patency of IV: IV still ongoing** **Signs of erythema, drainage, etc; No signs of erythema, drainage** **IV dressing assessment: Dry and intact**	**Levofloxacin IV 750 mg** **300 ml / hr**

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
1170	**340**

Nursing Care

Summary of Care (2 points)

Overview of care: The patient is diabeteic and requires blood check in the morning and before meals. The patient last rated her pain a 0 on a scale of 0 - 10, so no pain medication was administered. The patient is currently receiving IV levofloxacin which is supposed to be administered every 24 hours for five days to control her bacterial infection, she has some

other IV meds and some oral medications. The patient needs a gait belt while ambulating. The patient had some blood drawn up this morning which showed her white blood cell count is almost back to normal.

Procedures/testing done: When hospitalized, the patient received two aHead CT scans without contrast which showed no damage and some blood work which had some elevated counts.

Complaints/Issues: The patient has no complaints

Vital signs (stable/unstable): Stable

Tolerating diet, activity, etc; Patient will continue with her regular diet. Patients may participate in normal activities as tolerated.

Physician notifications: No notifications

Future plans for patient; The patient should follow up with her doctor to have her diabetes and hypertension under control.

Discharge Planning (2 points)

Discharge location: Home

Home health needs (if applicable): N/A

Equipment needs (if applicable):N/A

Follow up plan: The patient would continue to control her hypertension, and diabetes.

Education needs: Patient would need to learn how to prevent the recurrence of kidney infection, and how to tell the signs and symptoms of a urinary tract infection.

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. Potential for local and systemic infection due to the presence of uremia as evidenced by increased levels of albumin in her body	**The patient was diagnosed with with pyelonephritis which is the infection of the kidneys, which caused increased levels of albumin levels in the body**	**1. Assess temperature and secretion for indication of infection** **2.Provide poor oral hygiene and skin care at frequent intervals** **3.Use meticulous sterile when inserting and changing IV's.**	**Patient verbalized knowledge of these activities.** **Outcome; The patient is free of infection as evidence by normal white blood cell count**
2. Potential for fluid, electrolyte, and acid-base imbalances due to the kidneys inability to maintain biochemical homeostasis as evidence by the medical diagnosis of pyelonephritis	**The patient was diagnosed with pyelonephritis which is the infection of the kidneys, which causes nausea and vomiting and leads to an electrolyte balance.**	**1. Assess for and alert the patient to indication of alteration in fluid.** **2. Maintain adequate nutritional intake** **3. Prevent the patient from getting new infection**	**Patient verbalized knowledge of these activities.** **Outcome;The patient is free of neurosensory, musculoskeletal, and cardiac changes**
3. Fluid overload	**The patient was diagnosed with**	**1. Assess and document intake and**	**Patient verbalized knowledge of these**

due to compromised regulatory mechanism occurring with renal dysfunction as evidence by the infection of the kidney	**with pyelonephritis which is the infection of the kidneys, which could cause fluid overload because the kidneys were not working well**	**output** **2. Assess for edema, hypotension, crackles, tachycardia, and SOB.** **3. carefully adhere to the prescribed fluid restriction.**	**activities.** **Outcome; Getting the patient B/P, HR, and Central venous passage (CVP) are back to normal limits.**

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*. Elsevier.

Concept Map (20 Points):

Subjective Data

Nursing Diagnosis/Outcomes

Patient is a 70 year old female that presented to the ER on 10/13/2020, with nausea and vomiting. The patient says she does not smoke cigarettes, but occasionally drinks alcohol. The patient also said she was adopted so her family history is unknown

Objective Data

Height; 5'6
Weight; 181

Vital sign
Pulse; 69 / 72
B/P; 120/64 /119/73
Resp: 18 /18
Temp; 97.7 /98.1
O2: 97% / 97%
Pain: 0 / 0

70 year old caucasian female
Admitted on 10/13/2020
Diagnosis; pyelonephritis

Full code
No known allergies

Potential for local and systemic infection due to the presence of uremia as evidenced by increased levels of albumin in her body

Potential for fluid, electrolyte, and acid-base imbalances due to the kidneys inability to maintain biochemical homeostasis as evidence by the medical diagnosis of pyelonephritis

Fluid overload due to compromised regulatory mechanism occurring with renal dysfunction as evidence by the infection of the kidney

Nursing Interventions

Patient Information

for indication of infection
-.Provide poor oral hygiene and skin care at frequent intervals
- Use meticulous sterile when inserting and changing IV's.

2. Assess for and alert the patient to indication of alteration in fluid.
Maintain adequate nutritional intake
Prevent the patient from getting new infection

3 Assess and document intake and output
Assess for edema, hypotension, crackles, tachycardia, and SOB.
carefully adhere to the prescribed fluid restriction.

N321 Care Plan

N321 Care Plan