N431 Care Plan # 1

Lakeview College of Nursing

Bailey Pierce

Demographics (3 points)

Date of Admission	Patient Initials	Age	Gender
09/29/21	J.N.	75	M
Race/Ethnicity	**Occupation**	**Marital Status**	**Allergies**
Caucasian	Retired	Married	No known allergies (NKA)
Code Status	**Height**	**Weight**	
Full Code	180 cm	97.9 kg	

Medical History (5 Points)

Past Medical History: Chronic Obstructive Pulmonary Disease (COPD), Gastroesophageal Reflux Disease (GERD), High cholesterol, Paraplegic from T3 down (Motorcycle accident, 2005).

Past Surgical History:

Suprapubic catheter (2005), Skin graft (2005), Back Surgery (2006), several teeth extractions.

Family History: Mother: coronary artery disease Father: coronary artery disease, myocardial infarction.

Social History (tobacco/alcohol/drugs): Patient reports no history of alcohol, tobacco, or drug use.

Assistive Devices: Patient uses a wheelchair, has a partial denture, and wears reading glasses.

Living Situation: Patient currently resides at Marshal Nursing and Rehab Facility in Marshall, Illinois.

Education Level: High level of education completed is 12th grade.

Admission Assessment

Chief Complaint (2 points): Patient presented to the emergency room 09/29/2021 with abdominal pain.

History of present Illness (10 points): Patient states right lower quadrant abdominal pain started 2 days prior to admission (09/27). Patient states “It just kind of came and went”. Pain ranges from dull to sharp. When asked to rate the pain on a scale of 1-10 the patient stated the pain was a “8/10”. Patient states “It got pretty painful a few times and I threw up.” Patient also indicated he had little appetite and food did seem to make nausea worse. Patient states “nothing made it better. That’s why I came here.” Patient has not experienced these symptoms in the past.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): Hydronephrosis, right

Secondary Diagnosis (if applicable): Hydroureter, right

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

The main job is the kidneys is to filter blood and remove toxins via urine. Hydronephrosis occurs when there is an obstruction or blockage of the kidney, which leads to distension of the renal calyces and pelvis related to urine backup (Capriotti,2020). Hydronephrosis can be unilateral, meaning only one kidney is affected, or bilateral, where both kidneys are affected. The patient, J.N., is experiencing unilateral hydronephrosis to the R kidney. In addition to hydronephrosis, J.N. is also experiencing hydroureter, which causes the ureter to become dilated in response to an obstruction (Capriotti, 2020). Causes of hydronephrosis include but are not limited to kidney stones, blood clots, enlarged prostate, and scar tissue (National Kidney Foundation, 2020). Common signs and symptoms of hydronephrosis include pain in the flank region, abdomen., and groin (National Kidney Foundation, 2020). Other signs and symptoms include nausea, fever, and urine with the presence of red and white blood cells (National Kidney Foundation, 2020). J.N. has experienced nausea, vomiting, pain in the lower right quadrant and

presented with red and white blood cells in his urine. Several methods, including computerized tomography (C.T.), magnetic resonance imaging (MRI), x-ray, and ultrasound, can be used to make a proper diagnosis of hydronephrosis. J.N. received an x-ray, ultrasound, and C.T. (National Kidney Foundation, 2020). C.T. showed inflammation and dilation of the right ureter in addition to inflammation of the R kidney.

Treatment of hydronephrosis is contingent on treating the underlying cause. Infection requires the use of antibiotics to be treated (National Kidney Foundation, 2020). J.N. is currently receiving 2 gm ceftriaxone daily via IV push. He is also receiving 500 mg metronidazole three times daily by mouth, as yeast was present in his urine sample. A nephrostomy or unique tube drains excess fluid from the kidneys (National Kidney Foundation, 2020). Acute hydronephrosis, if caught early enough, usually results in full recovery (Capriotti, 2020). Chronic hydronephrosis can result in irreversible damage to the kidney (Capriotti, 2020).

Pathophysiology References (2) (APA):

Capriotti, T. (2020). *Davis advantage for pathophysiology: Introductory concepts and clinical perspectives* (2nd ed.). F.A. Davis Company.

Kidney Foundation. (2020, June 12). *Hydronephrosis*. https://www.kidney.org/atoz/content/hydronephrosis

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	4.0-6.60 million/cumm	4.36	4.0	WNL
Hgb	14-18 Gm/dL	12.1	11.0	Decreased levels can be linked to dietary deficiency and antibiotic use (Pagana et al., 2016). The patient has not eaten since 09/27. The patient is also receiving ceftriaxone which would explain the continual decrease since admission.
Hct	42-54%	36.4%	34.8%	Decreased levels could be related to dietary deficiency (Pagana et al., 2016). The patient has not eaten since 09/27.
Platelets	150-450 k/cuum	324	304	WNL
WBC	4.5-10.8	28.3	11.1	Increased WBCs are indicative of infection (Pagana et al., 2016). The patient is being treated with both antibiotics and antifungals for infection.
Neutrophils	55-70%	91.5%	76.2%	Increased neutrophils are indicative of bacterial infection and inflammation (Pagana et al., 2016). The patient is currently being treated with antibiotics. Inflammation of the ureter and kidney were observed on the abdominal CT.
Lymphocytes	20-40%	3.2%	13.4%	Decreased lymphocytes can be indicative of stress and deficient nutrition (Pagana et al., 2016). The patient has not eaten since 09/27. The stress of the patient's current condition could cause a decrease in lymphocytes.
Monocytes	2-8%	3.6%	7.9%	WNL
Eosinophils	0-6%	0.0%	0.6%	WNL

Bands	**0-10%**	**0.2%**	**0.5%**	**WNL**

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 mEq/L**	**122**	**137**	**Decreased sodium levels can be related to sodium loss through diarrhea, vomiting, and excess fluid (Pagana et al., 2016). The patient was unable to keep food down for the two days prior to admission.**
K+	**3.5-5 mEq/ L**	**4.65**	**3.74**	**WNL**
Cl-	**98-106 mEq/L**	**84**	**101**	**Decreased chloride levels can be related to vomiting (Pagana et al., 2016). The patient experienced vomiting for two days leading up to his admission.**
CO2	**23-30 mEq/ L**	**28.8**	**24.9**	**WNL**
Glucose	**74-106 mg/ dL**	**75**	**122**	**Glucose levels can be increased due to certain medications and stress (Pagana et al., 2016). Atorvastatin can increase glucose levels. The patient is also experiencing stress as he feels he has not received adequate treatment while at Union Hospital.**
BUN	**10-20 mg/dL**	26	**19**	**Elevated BUN levels can be linked to dehydration (Pagana et al., 2016). The patient states he experience vomiting for 2 days prior to admission.**
Creatinine	**0.5-1.1 mg/ dL**	**0.74**	**0.63**	**WNL**
Albumin	**3.5-5 mg/dL**	****	**2.9**	**Decreased albumin can be indicative of fluid volume overload (Pagana et al., 2016). The patient's output is currently less than input.**

Calcium	**9-10.5 mg/dL**	**8.4**	**7.9**	**Decreased calcium levels can be related to vitamin D deficiency and malabsorption (Pagana et al., 2016). The patient currently has an NG tube and is NPO.**
Mag	**1.3-2.1 mEq/dL**	**	**	
Phosphate	**3-4.5 mg/dL**	**	**	
Bilirubin	**0.3-1 mg/dL**	**0.7**	**	**WNL**
Alk Phos	**30-120 U/L**	**153**	**	**Increased alkaline phosphate levels can be indicative of gallstones or cholecystitis (Pagana et al., 2016). The patient was suspected to have both, but these were later ruled out during the GI HIDA scan.**
AST	**0-35 U/L**	**24**	**	**WNL**
ALT	**4-36 U/L**	**20**	**	
Amylase	**60-120 U/L**	**	**	
Lipase	**0-160 U/L**	**	**	
Lactic Acid	**Venous blood: 5-20 mg/dL or 0.6-2.2 mmol/L** **Arterial blood: 3-7 mg/dL or 0.3-0.8mmol/L**	**	**	
Troponin	**0-0.04 ng/mL**	**	**	
CK-MB	**3-5 %**	**	**	
Total CK	**22-198 U/L**	**	**	

****Labs not performed.**

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	0.8-1.1	**	1.1	WNL
PT	11-13.5 sec	**	11.9	WNL
PTT	25-36 sec	**	27.9	WNL
D-Dimer	Greater than 0.4 mcg/mL or greater than 250 ng/mL	**	**	
BNP	Less than 100 pg/mL	**	**	
HDL	Male: greater than 45 mg/dL Female: greater than 55 mg/dL	**	**	
LDL	Adult: less than 130 mg/dL Children: less than 110 mg/dL	**	**	
Cholesterol	Less than 200 mg/dL	**	**	
Triglycerides	40-180 mg/dL	**	**	
Hgb A1c	Below 5.7%	**	**	
TSH	2-10 mU/L	**	**	

**Labs not performed

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, Amber/ Yellow**	**Yellow, Turbid**	**	**Turbid urine is an indicator of infection within the urine. The patient is currently being treated with both antibiotics and antifungals related to an inflamed ureter and kidney.**
pH	**4.6-8 Average: 6**	**8.0**	**	**WNL**
Specific Gravity	**1.005-1.03**	**1.03**	**	**WNL**
Glucose	**30-300 mg/day**	**Neg**	**	**WNL**
Protein	**0-8 mg/dL**	**3+, Abnormal**	**	**Protein in the urine is consistent with hydronephrosis (National Kidney Foundation, 2020)**
Ketones	**Negative**	**1+ abnormal**	**	**Ketones in the urine can be consistent with insufficient dietary intake (Pagana et al., 2016). The patient has been unable to eat since 09/27.**
WBC	**0-4 per low-power field Negative for cast**	**6.20, abnormal**	**	**WBC in the urine is consistent with infection (Pagana et al., 2016). The patient is being treated with antibiotics and antifungal medication.**
RBC	**Less than or equal to 2, negative for cast**	**>50, abnormal**	**	**RBCs in the urine are consistent with hydronephrosis (National Kidney Foundation, 2020).**
Leukoesterase	**Negative**	**2+ abnormal**	**	**Leukoesterase within the urine is a consistent finding of hydronephrosis (National Kidney Foundation, 2020).**

Arterial Blood Gas 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
pH	**7.35- 7.45mm Hg**	**	**	
PaO2	**80-100 mm**	**	**	

	Hg			
PaCO2	**35-45 mm Hg**	**	**	
HCO3	**22-26 mEq/ L**	**	**	
SaO2	**greater than or equal to 95**	**95**	**96**	**WNL**

****Labs not performed.**

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: less than 10,000 per mm of U** **Positive: greater than 100,000 per mm of U**	**Positive**	**neg**	**Budding yeast found upon admission. Patient is being treated with metronidazole.**
Blood Culture	**Negative**	**	**Neg**	**WNL**
Sputum Culture	**Normal Upper RT**	**	**	
Stool Culture	**Normal intestinal flora**	**	**	

Lab Correlations Reference (1) (APA):

National Kidney Foundation. (2020, June 12). *Hydronephrosis*.

https://www.kidney.org/atoz/content/hydronephrosis

Pagana, K. D., Pagana, T. J., & Pagana, T. N. (2016). *Mosby's diagnostic and laboratory test reference* (13th ed.). Mosby.

Diagnostic Imaging

All Other Diagnostic Tests (5 points):

CT Abdominal/Pelvis w/ IV contrast (09/29/2021): 3.6x5.1 cm fluid collection surrounding inflammatory changes compressing R ureter and 3rd part of duodenum. Covering for abscess. Stomach distension and proximal duodenum, worsening moderate/severe proximal R hydroureteronephrosis. Fistulas connection between R proximal ureter and duodenum no excluded.

XR Abdominal KUB (09/29/2021): NG placement. Tip of the feeing tube is projected at the gastroesophageal junction and should be advanced.

CT Head w/o Contrast (09/30/2021): Altered mental status. No acute intracranial hemorrhage or hydrocephalus present.

XR of Abdomen KUB (09/30/2021): Suprapubic cystoscopy.

CT Abdomen/Pelvis w/ IV Contrast (10/02/21): Duodenal obstruction. Proximal hydroureter noted w/ complex fluid collection seen on adjacent to the proximal R ureter and proximal duodenum measuring 4.9x4.2x5. Collection abuts the duodenum which is nondilated currently. Small L renal cyst seen. Renal vascular calcifications are present bilaterally. Distal L ureter non dilated. Irregular wall thickening and enhancements seen involving wall of renal pelvis and R ureter.

Ultrasound Abdominal, limited (10/04/2021): Rule out cholecystitis. Severe R sided hydronephrosis seen w/ an adjacent complex hypoechoic area. Some degree of hepatic steatosis suspected.

IR PICC with Imaging (10/05/2021): Successful insertion of L basilic vein. PICC LINE.

NM GI HIDA Scan GB w/o pharm. Intervention (10/06/2021): Abdominal Pain. No signs for acute cholecystitis. Gallbladder ejection fraction of 38% noted.

Diagnostic Test Correlation (5 points):

J.N. had a NG tube placed due to abdominal distension on 09.29. The x ray abdominal KUB was taken to confirm placement of the NG tube. J.N. was experiencing a change in mental status 09/30. A head CT was performed to assess for potential stroke. The x ray abdominal KUB on 09/30 was performed when J.N.s suprapubic catheter was replaced. CT with contrast on 10/02 confirmed the diagnosis of hydronephrosis and hydroureter of the right kidney. This diagnosis is made based on inflammation of the kidney and ureter in response to a blockage or obstruction (Capriotti, 2020). The ultrasound of the abdomen was performed 10/04 to rule out gall stones or gall bladder inflammation. On 10/05, J.N. received a peripherally inserted central catheter (PICC line) and imaging was used to ensure successful insertion into the L basilic vein. 10/06, a GI HIDA can was performed to again rule out issues from the gallbladder. The gallbladder was found to have an ejection rate of 38%.

Diagnostic Test Reference (1) (APA):

Pagana, K. D., Pagana, T. J., & Pagana, T. N. (2016). *Mosby's diagnostic and laboratory test reference* (13th ed.). Mosby.

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

Home Medications (5 required)

Brand/ Generic	amlodipine (Norvasc)	alprazolam (Xanax)	atorvastatin (Lipitor)	gabapentin (Gralise)	carvedilol (Coreg)
Dose	10 mg	0.5 mg	40mg	300 mg	12.5 mg
Frequency	Daily	Daily PRN	QHS (evenings at bedtime)	TID (three times daily	BID (two times daily)
Route	PO	PO	PO	PO	PO
Classification	PC: Calcium channel blocker TC: Antianginal/antihypertensive (Jones & Bartlett, 2019)	PC: Benzodiazepine TC: Anxiolytic, antipanic (Jones & Bartlett, 2019)	PC: HMG-CoA reductase inhibitor TC: Antihyperlipidemic (Jones & Bartlett, 2019)	PC: 1-amino-methyl-cyclohexaneacetic acid TC: Anticonvulsant (Jones & Bartlett, 2019)	PC: Nonselective beta blocker and alpha-1 betablocker TC: Antihypertensive, heart failure treatment adjunct. (Jones & Bartlett, 2019)
Mechanism of Action	Binds to dihydropyridine	Inhibits excitatory	Reduce plasma	Exact mechanism	Reduces cardiac

	and nondihydropyridine cell membrane receptor sites on myocardial and vascular smooth-muscle cells and inhibits influx of calcium ions across slow calcium channels. Decreases intracellular calcium levels, inhibiting smooth muscle cell contractions and relaxing coronary and vascular smooth muscles, decreasing peripheral vascular resistance, and reducing blood pressure. (Jones & Bartlett, 2019)	stimulation which helps control emotional behavior. (Jones & Bartlett, 2019)	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. (Jones & Bartlett, 2019)	of action unknown, GABA inhibits the rapid firing of neurons associated with seizures, pain, and restless leg syndrome. (Jones & Bartlett, 2019)	output and tachycardia causes vasodilation and decreased peripheral vascular resistance which reduces blood pressure and cardiac workload. (Jones & Bartlett, 2019)
Reason Client Taking	Hypertension	Anxiety	High cholesterol	Pain	Hypertension
Contraindications (2)	hypersensitivity to metronidazole, patients experiencing hypotension (Jones & Bartlett, 2019)	Patient with respiration count less than 16, hypersensitivity to alprazolam or other benzodiazepines. (Jones & Bartlett, 2019)	Patients with decreased kidney function, hypersensitivity to atorvastatin. (Jones & Bartlett, 2019)	patients with depression, COPD (Jones & Bartlett, 2019)	Asthma, emphysema (Jones & Bartlett, 2019)

Side Effects/Adverse Reactions (2)	abdominal cramps and pain, arrhythmias	Blurred vision, nausea (Jones & Bartlett, 2019)	abdominal or biliary pain, arrhythmias (Jones & Bartlett, 2019)	Anaphylaxis, hyponatremia (Jones & Bartlett, 2019)	decreased PT, hyponatremia (Jones & Bartlett, 2019)
Nursing Considerations (2)	Use cautiously in patients with impaired renal function. Monitor blood pressure while adjusting dosage, may cause hypotension. (Jones & Bartlett, 2019)	Give higher doses if patient's panic attacks occur unexpectedly. Reduce dosage slowly when discontinued due to risk of dependency. (Jones & Bartlett, 2019)	Atorvastatin should not be given to patients taking cyclosporin, gemfibrozil, tipranavir, or telaprevir due to increased fish for rhabdomyolysis. monitor patients' glucose as atorvastatin may lead to an increase in blood glucose. (Jones & Bartlett, 2019)	Do not give drugs sooner than 2 hrs after administration of an antiacid. Capsules may be opened and mixed with food. (Jones & Bartlett, 2019)	Hold if BP <60. Monitor blood glucose. May mask signs of hypoglycemia such as tachycardia and may delay recovery. (Jones & Bartlett, 2019)
Key Nursing Assessment(s) /Lab(s) Prior to Administration	Assess patient's kidney function via creatinine and BUN labs. Assess labs pertaining to liver function such as AST and ALT. (Jones & Bartlett,	Assess patients blood pressure prior to administration as it may cause hypotension.	Assess liver function test prior to atorvastatin therapy with follow up labs as necessary. Assess blood	monitor blood sugar as may lead to hypoglycemia. Monitor blood pressure hypotension	Monitor blood glucose, may cause hypoglycemia. Assess BUN and creatinine.

	2019)	Understand patients "normal" heart rhythms. May lead to palpitation and ECG changes. (Jones & Bartlett, 2019)	pressure as atorvastatin may decrease blood pressure. (Jones & Bartlett, 2019)	is a side effect. (Jones & Bartlett, 2019)	May elevate levels. (Jones & Bartlett, 2019)
Client Teaching needs (2)	Tell patient to report dizziness, arm or leg swelling, difficulty breathing, hives, or rash. Suggest patient take with food to avoid upset stomach. (Jones & Bartlett, 2019)	Educate patient that abrupt discontinuance may lead to dependence. Instruct patient to never increase dosage without provider consent due to dependency. (Jones & Bartlett, 2019)	Educate patient that atorvastatin should be used in conjunction with a low-fat diet. Educate patient that atorvastatin should be taken the same time each day, preferably in the evenings. (Jones & Bartlett, 2019)	Educate patient when a dose is missed, do not take if within 2 hours of next dose do not double up, wait until next dose and resume normal schedule. Educate patient that medication may cause suicidal tendencies and to report and concerns immediately. (Jones & Bartlett, 2019)	Warn patient to move slowly when getting up. May cause orthostatic hypotension. Educate patient to notify provider of a weight change of 5lb or more in 2 days. (Jones & Bartlett, 2019)

Hospital Medications (5 required)

Brand/Generic	metronidazole (Flagyl)	trazodone (Desyrel)	ceftriaxone (Rocephin)	hydromorphone (Dilaudid)	hydralazine (Apresoline)
Dose	500mg	50 mg	2 gm	0.2 mg	50mg
Frequency	TID	qhs	daily	q4h PRN (every 4 hrs)	TID
Route	PO	PO	IV push	IV push	PO
Classification	PC: Nitroimidazole TC: Antiprotozoal (Jones & Bartlett, 2019)	PC: Triazolopyridine derivative TC: antidepressant (Jones & Bartlett, 2019)	PC: 3rd generation cephalosporin TC: antibiotic (Jones & Bartlett, 2019)	PC: Opioid TC: opioid analgesic (Jones & Bartlett, 2019)	PC: Vasodilator TC: antihypertensive (Jones & Bartlett, 2019)
Mechanism of Action	Undergoes intracellular chemical reduction during anaerobic metabolism. After metronidazole is reduced, it damages DNA's	Blocks serotonin reuptake along the presynaptic neuronal membrane, causing an antidepressant effect. Also inhibits the vasopressor	Interferes with bacterial cell wall synthesis by inhibiting cross linking of peptidoglycan strands, causing the bacterial cells to	Binds with receptors in the spinal cord and higher levels in the CNS. In this way, hydromorphone is believed to stimulate kappa and mu	Exerts a direct vasodilating effect on vascular smooth muscle and dilates arteries not veins which minimizes orthostatic hypotension.

	helical structure and breaks strands, which inhibits bacterial nucleic acid synthesis and causes cell death. (Jones & Bartlett, 2019)	response to norepinephrine, which reduces blood pressure.	rupture and die. (Jones & Bartlett, 2019)	receptors, thus altering the perception of and emotional response to pain. (Jones & Bartlett, 2019)	(Jones & Bartlett, 2019)
Reason Client Taking	Yeast present in urine.	Insomnia, Sleep aid	Bacterial Infection	Pain	Hypertension
Contraindications (2)	administration of disulfiram within 2 weeks of initial dose of metronidazole, hypersensitivity to metronidazole,	hypersensitivity to trazadone, use within 14 days of an MAO inhibitor (Jones & Bartlett, 2019)	Penicillin allergy, calcium containing IV solutions (Jones & Bartlett, 2019)	hypersensitivity to hydromorphone, acute asthma (Jones & Bartlett, 2019)	Coronary artery disease, hypersensitivity to hydralazine (Jones & Bartlett, 2019)
Side Effects/Adverse Reactions (2)	leukopenia, encephalopathy (Jones & Bartlett, 2019)	hypotension, hyponatremia (Jones & Bartlett, 2019)	agranulocytosis, anaphylaxis (Jones & Bartlett, 2019)	confusion, adrenal insufficiency (Jones & Bartlett, 2019)	nausea, vomiting (Jones & Bartlett, 2019)
Nursing Considerations (2)	Discontinue IV infusion during metronidazole infusion. Stop	monitor patient for arrhythmias. give after meal to avoid upset	Do not give calcium containing products within 48 hrs of ceftriaxone.	Use cautiously in elderly patients as respiratory depression may occur.	Drug may change color in solution. Give tablets with food to increase

	infusion immediately if patient experiences peripheral neuropathy or seizures. (Jones & Bartlett, 2019)	stomach. (Jones & Bartlett, 2019)	Ask patient if an they have ever experienced an allergic reaction to penicillin. (Jones & Bartlett, 2019)	Give IV form by direct injection over at least 2 minutes. (Jones & Bartlett, 2019)	bioavailability. (Jones & Bartlett, 2019)
Key Nursing Assessment(s)/Lab(s) Prior to Administration	May alter AST, SGOT, LDH and triglycerides. Labs should be performed prior to administration for baseline value. Assess LOC prior, may cause confusion and encephalopathy. (Jones & Bartlett, 2019)	Monitor blood pressure. May cause hypotension. Assess sodium levels. May cause hyponatremia. (Jones & Bartlett, 2019)	BUN and creatinine should be assessed prior and after administration to detect early signs of nephrotoxicity. Assess input and output. Decreased output may be an indication of nephrotoxicity. (Jones & Bartlett, 2019)	Assess blood pressure, hypotension may occur. Assess respirations, respiratory depression may occur. (Jones & Bartlett, 2019)	Assess blood pressure prior to administration, may cause changes during administration. CBC will be obtained before and periodically over the course of long-term treatment. (Jones & Bartlett, 2019)
Client Teaching needs (2)	Instruct patient to take the full course of medication. Medication may cause dry mouth.	Avoid taking on an empty stomach due to probability of upset stomach. Move slowly	Instruct patient to inform provider of any itching skin, hives, or rash as this may be an indictor	Take with food to avoid upset stomach. Instruct patient to report pain before it is	Take with food to avoid upset stomach. Notify provider immediately of fever,

	Sugar free chewing gum or candies can help with this adverse effect. (Jones & Bartlett, 2019)	when standing after taking medication as orthostatic hypotension is an adverse side effect. (Jones & Bartlett, 2019)	of an allergic reaction. Report any bloody stools up to 2 months following end of drug therapy. (Jones & Bartlett, 2019)	severe to ensure pain is kept to a tolerable level. (Jones & Bartlett, 2019)	joint or muscle aches, or sore throat. (Jones & Bartlett, 2019)

Medications Reference (1) (APA):

Jones & Bartlett Learning. (2019). *2020 Nurse's drug handbook* (19th ed.). Jones & Bartlett Learning.

Assessment

Physical Exam (18 points)

GENERAL (1 point): **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	 AxO x4 (Person, place, time, situation) Patient appears to be in no distress. He has been sleeping comfortably most of the evening. Well-groomed and dressed appropriately.

INTEGUMENTARY (2 points): **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** **Drains present: Y☐ N ☒** **Type:**	 Ivory Lentigo generalized. Skin is dry. Warm to touch. Normal Skin turgor (2+) No rashes present. Bruise on R forearm. No wounds present observed with the exception of the back which was not observed. 9
HEENT (1 point): **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	 Symmetric, free of lesions Symmetric, dry auricles, no drainage present Symmetric. Sclera white, cornea clear, conjunctiva pink. No drainage or lesions present. Septum is midline without deviation. Patient has an NG tube inserted through the left nare. No signs of skin breakdown. Patient wears a partial upper denture. Oral mucosa is pink and moist. No lesions present. Patient exhibits pursed lip breathing occasionally.
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:**	. Clear S1 and S2 sounds without gallops, murmurs, or rubs. N/A Bilateral radial pulses 2+. Bilateral dorsalis pedis pulses 1+ Capillary refill 3+ fingers and toes bilaterally. No edema present.
RESPIRATORY (2 points): **Accessory muscle use: Y☐ N ☒** **Breath Sounds: Location, character**	 Crackles heard in the lower lobes anteriorly and posteriorly bilaterally.
GASTROINTESTINAL (2 points): **Diet at home:** **Current Diet** **Height:** **Weight:** **Auscultation Bowel sounds:** **Last BM:**	 Regular Nothing by mouth (NPO) 180 cm 97.9 kg Normoactive bowel sounds in all 4 quadrants. No bowel movements recorded in record. Patient

	unaware of when his last bowel movement was due to paraplegia.
Palpation: Pain, Mass etc.:	No masses present. Pain only in the lower right quadrant with deep palpation.
Inspection:	Was unable to assess patient's backside. Patient refused to be turned.
Distention:	Slight distension of the abdomen present.
Incisions:	No incisions observed.
Scars:	No scars observed.
Drains:	No drains present.
Wounds:	No wounds observed.
Ostomy: Y ☐ N ☒	
Nasogastric: Y ☒ N ☐	Nasogastric (NG) tube present with no size noted in the chart. Nurse states "standard size". NG tube was placed 09/29.
Size:	
Feeding tubes/PEG tube Y ☐ N ☒	
Type:	
GENITOURINARY (2 Points):	
Color:	Yellow
Character:	Clear
Quantity of urine:	400 mL
Pain with urination: Y ☐ N ☒	
Dialysis: Y ☐ N ☒	
Inspection of genitals:	
Catheter: Y ☒ N ☐	Not observed.
Type:	Suprapubic
Size:	20 French
MUSCULOSKELETAL (2 points):	
Neurovascular status:	
ROM:	Arms exhibit full range of motion. Patient is unable to move r or l leg due to paralysis.
Supportive devices:	Patient needs assistance with wheelchair.
Strength:	Patient can change position with upper body.
ADL Assistance: Y☒ N ☐	
Fall Risk: Y ☒ N☐	high risk
Fall Score:	55
Activity/Mobility Status:	
Independent (up ad lib) ☐	Patient is dependent on wheelchair to get around.
Needs assistance with equipment X	
Needs support to stand and walk ☐	
NEUROLOGICAL (2 points):	
MAEW: Y ☐ N☒	Patient unable to move lower extremities.
PERLA: Y ☒ N☐	Pupils are equal, round, reactive to light, and accommodate.
Strength Equal: Y ☒ N ☐ if no -	

Legs ☐ Arms ☐ Both ☒ **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	Equal strength observed in both hands with hand grips. Lower extremities are non-responsive due to paralysis. AxO x4 (Person, place, time, and situation) Alert with no signs of distress. Speech is comprehendible. Patient unable to feel sensation in lower extremities. Patient is alert and oriented with no alterations of mental status.
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):**	Patient likes to talk to the staff at the nursing facility he resides at as well as his wife when he is feeling distressed. Appropriate for age. Patient does not follow a particular religion. Patient states he did not grow up in a religious environment. Patient like the staff at the nursing facility where he resides and mentions they are "good listeners". He states he also makes frequent calls to his wife when he is feeling down. Patient states "she's always been there since the accident", when referring to his wife and the motor cycle accident that left him paralyzed from the waist down in 2005.

Vital Signs, 2 sets (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
14:58	**85**	**144/76**	**16**	**98.1 oral**	**95**
16:45	**87**	**140/71**	**16**	**97.8 oral**	**96**

Vital Sign Trends:

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
14:58	0-10, numeric	No pain present	0/10	No pain present	No interventions needed. Continue to monitor
16:45	0-10, numeric	No pain present	0/10	No pain present	No interventions needed. Continue to monitor.

IV Assessment (2 Points)

IV Assessment	Fluid Type/Rate or Saline Lock
Size of IV:	Patient has a Peripherally inserted central catheterPICC line). Size not documented within the patient record but is 16 cm in length.
Location of IV:	Left basilic vein
Date on IV:	10/04/2021
Patency of IV:	Free of occlusion. Patient is receiving 5% dextrose and 0.9% sodium chloride at a rate of 100 mL/hr.
Signs of erythema, drainage, etc.:	No signs of erythema or drainage present.
IV dressing assessment:	Clean, dry, and intact

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
Patient is NPO except for ice chips. No ice chips were taken in during rotation. No intake recorded within the chart. Patient is receiving 5% dextrose and 0.9% sodium chloride via PICC line at a rate of 100mL/hr. This input also was not documented within the chart. Total input based on IV fluids from 0000 until end of rotation (16:45) 1675 mL	600 mL 100 mL (NG drainage)

Nursing Care

Summary of Care (2 points)

Overview of care: Patient slept most of the rotation requiring very little intervention. Vital signs were recorded 2x's, input and output were monitored, and pain assessments were completed. Patient's bed was repositioned one time.

Procedures/testing done: Patient did not have any procedure completed during my rotation.

Complaints/Issues: Patient was unhappy with level of service he had experienced over the course of his admission. He requested to be transferred to Edward Hines in Chicago. Staffing was busy processing this request.

Vital signs (stable/unstable): Patients systolic pressure was slightly elevated in the 140's. All other vital signs were stable.

Tolerating diet, activity, etc.: Patient was tolerating diet. Patient's activity level is sedentary due to paraplegia and refusal to be repositioned or moved to chair with assistance.

Physician notifications: The physician was notified of patients request to be transferred.

Future plans for patient: Patient was in the process of being transferred. Edward Hines was contacting and stated they would call back when a bed was available.

Discharge Planning (2 points)

Discharge location: Patient will be discharged to Marshall Nursing Care and Rehab upon completion of treatment.

Home health needs (if applicable): N/A

Equipment needs (if applicable): Patient will have the same equipment needs following discharge as he did prior to admission. He will still be dependent of his wheelchair and suprapubic catheter.

Follow up plan: Follow up pending discharge date. No plans have been made.

Education needs: Patient could benefit on being educated on the S/S of infection and when to report them.

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. Urinary retention related to hydronephrosis as evidence of inflammation of the kidney and ureter observed during abdominal CT.	This nursing diagnosis was chosen based on the patient's condition of hydronephrosis or swelling of the kidney related to urine build up (National Kidney Foundation, 2020).	1.Monitor input and output. 2. Administer medication as prescribed.	Patient's input and output were recorded during rotation. Patient had voided 400 mL and had taken in 1675 mL as of 16:45. Patient received an IV infusion of metronidazole during rotation and had no complications. Patient's most recent urine culture was negative for growth.
2. Risk for electrolyte imbalance related to NG tube.	This risk was chosen based on a decrease in potassium and calcium which could be related	1. Monitor patient for s/s of electrolyte imbalance.	Patient showed no signs of cardiovascular, neurologic, or musculoskeletal symptoms which

	to an NPO diet and NG tube.	2.Maintain IV patency.	would indicate an electrolyte imbalance. Blood work would be need for further evaluation. IV line remained patent to ensure patient was receiving vital fluids and electrolytes.
3. Risk for impaired skin integrity related to patient's refusal to be repositioned and paraplegia.	This risk was chosen as the patient is paraplegic and unable to make reposition self-unassisted. Patient has refused to be repositioned for 2 days.	1. Educate patient on importance of frequent repositioning. 2. Use pillow to cushion bony prominences.	Patient was educated on importance of repositioning and still refused to do so. Pillows were used under the patients elbows. No skin breakdown was noted.
4. Risk for imbalanced fluid volume related to input greater than output.	This risk was chosen as the patients input currently exceed output.	1.Monitor I/O 2. Assess for edema	Patient's input and output were documented during rotation. No edema was observed during rotation. If edema was present, this could be a sign of fluid volume overload.

Other References (APA):

National Kidney Foundation. (2020, June 12). *Hydronephrosis*.

https://www.kidney.org/atoz/content/hydronephrosis

Concept Map (20 Points):

Subjective Data

Pain “It kind of came and went.”
“It got pretty bad a few times and I threw up.”
“Nothing made it better. That’s why I’m here”
Pain upon admission “8/10”

Nursing Diagnosis/Outcomes

inary retention related to hydronephrosis as evidence of inflammation of the kidney and ureter observed during abdominal CT.
Goal: Patient will remain free of pain due to urinary retention.

Risk for electrolyte imbalance related to NG tube.
Goal: Patient will maintain patent IV access to ensure proper administration of fluids.
Risk for impaired skin integrity related to patient’s refusal to be repositioned and paraplegia.
Goal: Patient will be compliant with repositioning.
Risk for imbalanced fluid volume related to input greater than output.
Patient will remain NPO.

Objective Data

Suprapubic catheter
positive for yeast and bacteria in urinalysis.
Elevated WBC
Turbid Urine w/ presence of RBCs, WBCs, and Leukoesterase.
Abdominal Distension
I/0: 1675 input/600 output.
NG tube
Morse Fall Score: 55
Braden Scale: 9
Pain upon palpation LRQ
Inflammation noted during CT of R kidney and R ureter.
Paraplegic from T3 down
Elevated neutrophils indicative of inflammation and infection.

Patient Information

75-year-old Male
Paraplegic
Married
Retired
Lives in rehabilitation center

Nursing Interventions

Monitor input and output.
Administer medication as prescribed.
Monitor input and output.
Administer medication as prescribed.
Educate patient on importance of frequent repositioning.
Use pillow to cushion bony prominences.
Monitor I/O
Assess for Edema