N321 Care Plan #1

Lakeview College of Nursing

Justin Pranada

Demographics (3 points)

Date of Admission 2/9/2020	**Patient Initials** CG	**Age** 42	**Gender** Female
Race/Ethnicity White; Caucasian	**Occupation** Full time employed	**Marital Status** Married	**Allergies** NKDA
Code Status Full	**Height** 157.48 cm	**Weight** 85.70 kg	

Medical History (5 Points)

Past Medical History:

- Denies any medical history

Past Surgical History:

- Repair of left ankle, date not noted

Family History:

- Parents had a history of HTN

Social History (tobacco/alcohol/drugs):

- Never a smoker
- Denies use of alcohol
- Denies use of drugs

Assistive Devices:

- No assistive devices used

Living Situation:

- Patient lives home with family

Education Level:

- N/A

Admission Assessment

Chief Complaint (2 points):

- right flank pain

History of present Illness (10 points):

Patient presented to the hospital on Thursday, 2/6, complaining of right sided flank pain that occasionally radiates to the right groin area. She states that the pain is constant and is aggravated with urination – described with burning sensation. Patient mentioned having mild fever and vomiting prior to admission. She denies any alleviating or exacerbating factors and has taken OTC medications (ibuprofen) with no change in discomfort. At time of assessment (2/10/20), patient reported of experiencing pain rated at 4/10 on the numeric scale.

Primary Diagnosis

Primary Diagnosis on Admission (2 points):

- Unspecified hydronephrosis; right kidney

Secondary Diagnosis (if applicable):

- Right ureteral stone

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

Hydronephroris is defined as the distention of the renal calyces caused by the obstruction of urine outflow. This obstruction may cause some kind of tissue damage in the kidneys (Capriotti & Frizzell, p.512). Obstruction may be caused by a calculi, which is found to be one of the most common cause of obstruction in younger adults (Capriotti & Frizzell, p.512). Upon admission, a complete admission assessment is necessary – HPI, past illnesses, surgeries, family history, and patient's daily activities. With urological symptoms, the clinician should focus on the signs and symptoms of the concerning problem (Capriotti & Frizzell, p.513).

Hydronephrosis presents with dysuria, frequency, urgency, and hesitancy. The patient may also experience some discomfort like flank pain with radiating tendencies (Capriotti & Frizzell, p.513). Hydronephrosis can be diagnosed with the use of the correlating signs and symptoms as well as a few tests – dipstick urinalysis, urine culture and sensitivity, serum electrolytes, and a complete blood count with differential may be performed (Capriotti & Frizzell, p.513). A urinalysis rules out any urological problems in the form of dehydration, infection, liver disease, protein loss, or rhabdomyolysis (Capriotti & Frizzell, p.513).

A CT scan was performed on CG and found an obstruction in a form of a stone measuring 7mm on the right ureter causing right-sided hydronephrosis, per urology notes. Serum electrolytes also play a role in the diagnosis of urological problem. The labs for CG showed a decrease in serum calcium levels, 7.8 mg/dL on the day of assessment, indicating nephrolithiasis after CT was performed (Pagana, p190). Due to provider's orders of NPO status because of scheduled ureteroscopy, the labs for CG showed a decrease in RBC at 3.72, Hgb at 10.7 g/dL, and Hct 32.5% suggesting anemia, which is why patient may have appeared lethargic during head-to-toe assessment. Serum chloride levels were also slightly elevated at 111 mEq/L, which could also indicate kidney dysfunction (obstruction), dehydration (NPO status), and anemia (RBC, Hgb, Hct) (Pagana, p234). Due to NPO status, scheduled and PRN medications were held. CG has analgesic medication, dilaudid (IV push), available if pain becomes too uncomfortable.

N321 Care Plan

Pathophysiology References (2) (APA):

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

Pagana, K. D., Pagana, T. J., & Pagana, T. N. (2019). *Mosbys diagnostic and laboratory test reference.* St. Louis, MO: Elsevier.

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	4-5.5	4.41	3.72	
Hgb	11.3-15.2	12.9	10.7	
Hct	33.2-52%	38.2%	32.5%	
Platelets	150-500 K	256 K	205 K	
WBC	4.5-11 K	7.1 K	6.5 K	
Neutrophils	45.3-79	61.0	55.3	
Lymphocytes	11.8-45.9	29.4	34.9	
Monocytes	4.4-12.0	7.5	7.6	
Eosinophils	0.0-6.3	1.8	1.8	
Bands	N/A	N/A	N/A	

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	138	141	

K+	3.5-5.0	3.8	4.0	
Cl-	97-107	107	111	Elevated levels of serum chloride could indicate kidney dysfunction, dehydration, and anemia (Pagana, pg 234)
CO2	22-29	25	27	
Glucose	70-99	142	98	
BUN	6-20	13	12	
Creatinine	0.6-1.2	0.73	0.64	
Albumin	3.5-5.2	3.9	N/A	
Calcium	8.6-10.4	8.5	7.8	Decrease serum calcium could indicate renal function. In CG, decrease is caused by underlying factors r/t diagnosis of ureteral obstruction. (Pagana, pg. 190)
Mag	1.6-2.4	N/A	N/A	
Phosphate	N/A	N/A	N/A	
Bilirubin	0.0-1.2	N/A	N/A	
Alk Phos	35-105	58	N/A	
AST	0-32	13	N/A	
ALT	0-33	10	N/A	
Amylase	N/A	N/A	N/A	
Lipase	N/A	N/A	N/A	
Lactic Acid	N/A	N/A	N/A	

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	0.86-1.14	N/A	N/A	
PT	11.9-15	N/A	N/A	
PTT	N/A	N/A	N/A	
D-Dimer	N/A	N/A	N/A	
BNP	N/A	N/A	N/A	
HDL	N/A	N/A	N/A	
LDL	N/A	N/A	N/A	
Cholesterol	N/A	N/A	N/A	
Triglycerides	N/A	N/A	N/A	
Hgb A1c	N/A	N/A	N/A	
TSH	N/A	N/A	N/A	

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, clear	Yellow	N/A	
pH	5.0-8.0	5.0	N/A	

Specific Gravity	1.005-1.034	1.026	N/A	
Glucose	Normal	Normal	N/A	
Protein	Negative	+1	N/A	
Ketones	Negative	Negative	N/A	
WBC	<5	Negative	N/A	
RBC	0-3	+3	N/A	
Leukoesterase	Negative	Negative	N/A	

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	N/A	N/A	
Blood Culture	Negative	N/A	N/A	
Sputum Culture	N/A	N/A	N/A	
Stool Culture	N/A	N/A	N/A	

Lab Correlations Reference (APA):

Diagnostic Imaging

All Other Diagnostic Tests (5 points):

- Abdominal CT and pelvis w/o contrast

Diagnostic Test Correlation (5 points):

- Patient presented to the hospital with right sided flank pain. Patient underwent an abdominal CT scan showing ureteral stone causing right sided hydronerphrosis.

Diagnostic Test Reference (APA):

Corbett, J. V., & Banks, A. D. (2019). *Laboratory tests and diagnostic procedures: with nursing diagnoses.* NY, NY: Pearson

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

Home Medications (5 required)

Brand/ Generic	Medrol (methylprednisolone)	Norco (hydrocodone acetaminophen)	Tylenol (acetaminophen)	Benadryl (diphenhydramine)	Colace (docusate)
Dose	4mg	1 tablet	650mg; 2 tablets	25mg	100mg
Frequency	1x daily	Q4h; PRN	Q6h; PRN	Q6h; PRN	BID; PRN
Route	PO	PO	PO	PO	PO
Classification	Anti-inflammatory	Analgesic	Antipyretic; Analgesic	Antihistamine	Laxtive
Mechanism of Action	Inhibits multiple inflammatory cytokines; produces multiple glucocorticoid and mineralocorticoid effects	Binds to and activates opioid receptors at sites in the periaqueductal and periventricular gray matter, medulla, and spinal cord	Inhibits the enzyme cyclooxygenase, blocking prostaglandin production and interfering with pain impulse	Non-selectively antagonizes central and peripheral histamine H1 receptors	Facilitates mixture of stool, fat, and water
Reason Client Taking	Inflammation	Pain	Fever/Pain	Itching	Constipation

Contraindications (2)	Fungal infection, ITP	Acute or severe bronchial asthma, hypersensitivity	Hypersensitivity, sever hepatic impairment	Hypersensitivity, BPH	Appendicitis, fecal impaction
Side Effects/Adverse Reactions (2)	Adrenal insufficiency, infection	Adrenal insufficiency, skin rxn	HPN, fatigue	Confusion, nausea	Diarrhea, abdominal cramps
Nursing Considerations (2)	Monitor electrolyte; Monitor BP	Caution if renal impairment; caution if hepatic impairment	Caution if hepatic impairment; caution if renal impairment	Caution in elderly pt; caution in pt w/ HTN	Hypersensitivity; Severe renal impairment

Hospital Medications (5 required)

Brand/ Generic	Flomax (tamsulosin)	Protonix (pantoprazole)	Dilaudid (hydromorphone)	Zofran (ondansetron)	phenergan
Dose	0.4mg	40mg	1mg = 1mL IV	4mg = 2mL IV	12.5mg
Frequency	1x daily	1x daily	Q2h; PRN	Q6h; PRN	Q4h; PRN
Route	PO	PO	IV push	IV push	IM
Classification	BPH treatment	Antiulcer	Analgesic	Antiemetic	Antiemetic
Mechanism of Action	Blocks alpha1 – adrenergic receptors in the prostate	Inhibits gastric parietal cell hydrogen-potassium ATPase	Binds to various opioid receptors, producing analgesia and sedation	Selectively antagonizes serotonin 5-HT3 receptors	Non-selectively antagonizes central and peripheral histamine H1 receptors
Reason Client Taking	-	-	Pain	Nausea	Nausea Vomiting
Contraindicat	Hypersensiti	Hypersensitivi	Severe renal	Hypersensitiv	Hypersensitiv

ions (2)	vity	ty, concurrent therapy with rilpivirine-containing products	impairment, GI obstruction	ity, concomitant use of apomorphine	ity, respiratory depression
Side Effects/Adverse Reactions (2)	Constipation, angioedema	Atrophic gastritis, diarrhea	Severe HPN, bradycardia	Arrythmias, headache	Fatigue, dysuria
Nursing Considerations (2)	Give drug 30min before the same meal; caution if hypersensitive to sulfonamides	Caution if hypomagnesemia; caution if pt is 50 yrs or older	Caution with renal impairment; caution with GU obstruction	Administer over 5 min; monitor patient for signs of hypersensitivity	Caution with GI/GU obstruction; caution with electrolyte abnormalities

Medications Reference (APA):

Epocrates

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

Assessment

Physical Exam (18 points)

GENERAL (1 point): **Alertness:** **Orientation:** **Distress:**	Patient was awake and talking upon assessment. She is ANO x4. Patient showed no visible sign of distress, but patient looked slightly lethargic.

Overall appearance:	Patient verbalized her discomfort in the right flank.
INTEGUMENTARY (2 points): **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** **Drains present:** **Y☐** **N ☐** **Type:**	Braden Score: 22 (not a pressure sore risk) Patient's skin color appeared normal for race and age. Skin was intact, dry, and warm to touch. Good turgor. No rashes, bruises, wounds, or drains noted.
HEENT (1 point): **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	PERRLA. Head normocephalic. TM pearly grey and intact bilaterally. No ear pain reported. Oral muscosa pink and moist. Teeth complete and intact. No deviated septum, turbinates, polyps, or drainage noted in nose. No neck vein distention noted.
CARDIOVASCULAR (2 points): **Heart sounds:** S1, S2 **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable):** RRR **Peripheral Pulses:** radial (+2), pedal (+1) **Capillary refill:** good (<2 seconds) **Neck Vein Distention:** **Y ☐** **N ☐** **Edema Y ☐** **N ☐** **Location of Edema:** Right upper arm	Auscultated for heart sounds, S1 and S2 noted. Cardiac has regular rate and rhythm. Radial pulses assessed and present, graded at (+2) bilateral. Pedal pulses assessed and present, graded at (+1) bilaterally. Good capillary refill at <2 seconds. No neck vein distention noted. Edema in the right upper arm noted, but it is r/t IV.
RESPIRATORY (2 points): **Accessory muscle use:** **Y☐** **N ☐** **Breath Sounds: Location, character**	No accessory muscle use; breathing is non-labored. Anterior breath sounds auscultated, all lobes of lungs are clear to auscultation.
GASTROINTESTINAL (2 points): **Diet at home:** **Current Diet** **Height:** 157.48 cm **Weight:** 85.70 kg **Auscultation Bowel sounds:** **Last BM:** 2/8/2020 **Palpation: Pain, Mass etc.:**	Patient stated that her diet at home was regular, no special diet used. Height: 157.48 cm Weight: 85.70 kg No distention, incisions, scars, drains, or wounds

Inspection: **Distention:** **Incisions:** **Scars:** **Drains:** **Wounds:** **Ostomy: Y ☐ N ☐** **Nasogastric: Y ☐ N ☐** **Size:** **Feeding tubes/PEG tube Y ☐ N ☐** **Type:**	noted. No ostomy, NG tube, or feeding tube in use. Bowel sounds auscultated and present in all four quadrants. Patient stated that her last BM was 2/8/20. Abdomen palpated, tenderness in right costovertebral angle (CVA) reported.
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 of urine was yellow. Patient presented to the hospital with dysuria; no dysuria noted at the time of assessment. Quantity of urine noted at 750mL. Patient is not on dialysis. No catheter in use.
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 ☐**	Fall Score: 35 Patient moves all extremities well. Patient is ad lib. Patient does not need assistance pertaining to activities or mobility. Strength in both upper and lower extremities equal bilaterally. No need for supportive devices. Can stand and ambulate self well.
NEUROLOGICAL (2 points): **MAEW: Y ☐ N☐** **PERLA: Y ☐ N☐** **Strength Equal: Y ☐ N ☐ if no -** **Legs ☐ Arms ☐ Both ☐** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	Patient does not show any signs of neurological deficits. Patient demonstrates PERRLA and MAEW well for age. Strength is equal in both upper and lower extremities. Patient is oriented with no signs of mental deficits. Patient can speak clearly and appropriately for age.
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's developmental level is appropriate for age. Patient states she has no preferred religion of practice. Husband and daughter present at bedside. Patient lives with family at home.

Vital Signs, 2 sets (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0847	66bpm	115/73 mm Hg	16rr	36.7C	98%
1040	63bpm	114/75 mm Hg	14rr	36.9C	97%

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
0800	Numeric scale 0-10	R. Flank	4/10	-	Medications held d/t NPO
1040	Numeric scale 0-10	R. Flank	4/10	-	Position change

IV Assessment (2 Points)

IV Assessment	Fluid Type/Rate or Saline Lock
Size of IV: 20G **Location of IV:** Left forearm **Date on IV:** 2/9/2020 **Patency of IV:** **Signs of erythema, drainage, etc.:** **IV dressing assessment:**	NS 0.9% 100 mL/hr IV dressing is dry and intact. No signs of erythema, drainage, phlebitis. Slight edema on right upper extremity d/t previous IV site.

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
450 mL NS 0.9% IV	750 mL since 2/9/2020

Nursing Care

Summary of Care (2 points)

Patient presented to the hospital complaining of right-sided flank pain that radiates to the right groin area. Patient stayed in bed throughout the shift. Patient complained of discomfort, but medications were held off due to NPO status ordered by Provider. Patient was to go through a ureterscopy later in the afternoon. Vital signs stable (VSS) throughout the shift. Patient is ad lib and did not need assistance ambulating or going to the bathroom. Depending on the results of the procedure, patient may stay overnight for observation; patient may also be discharged.

Discharge Planning (2 points)

Patient will be discharged and free to go home. Patient will not need any assistive devices for ADLs. Follow up with PCP and urology for updates pertaining to recovery and manifestation of hydronephrosis. Client education is needed with encouraging the increase fluid intake.

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. Acute pain d/t the presence of a calculus as evidenced by CT scan of ureteral stone	Patient is experiencing pain in right flank	1. Notify provider of sudden and/or severe pain 2. Encourage the pt to request medication before discomfort becomes severe	Not Evaluated
2. Potential for electrolyte imbalances d/t NPO status as evidenced by elevated chloride levels and decreased calcium levels	Patient is NPO and her electrolytes fluctuated since admission	1. Assess I&O 2. Assess for itching – pt is on medication taken because of itching, itching could indicate hyperphosphatemia	Not Evaluated
3. Need for health teaching d/t unfamiliarity with the dietary regimen and its relationship to calculus formation as evidenced by patient stating "this is the first time I've	Nurse needs to educate patient on how to prevent future recurrence	1. Assess the patient's knowledge about diet and its relationship with stone formation 2 Encourage patient to increase fluid intake	Not Evaluated

had this”			

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.* St. Louis, MO: Elsevier.

Concept Map (20 Points):

N321 Care Plan

Subjective Data

Patient state that she was experiencing right-sided flank pain that radiates to the right groin area rated at a 4/10 on a numeric scale during assessment.

Nursing Diagnosis/Outcomes

Acute pain d/t the presence of a calculus as evidenced by CT scan of ureteral stone
Outcome: Within 1hr of intervention, pt's subjective perception of discomfort decreases.

Potential for electrolyte imbalances d/t NPO status as evidenced by elevated chloride levels and decreased calcium levels
Outcome: Within 2 days after bladder decompression, urinary output approximates input, urinary output is normal for pt.

Need for health teaching d/t unfamiliarity with the dietary regimen and its relationship to calculus formation as evidenced by patient stating "this is the first time I've had this"
Outcome: Within a 24-hr period before hospital discharge, pt verbalizes accurate knowledge of foods and liquids to minimize recurrence.

Objective Data

Patient presented with elevated chloride and decreased calcium serum levels. Patient also presented with decreased RBC, Hgb, Hct. Vital signs stable.

Patient Information

Patient is a 42 year-old married Caucasian female who was admitted to the hospital on 2/9/2020 from her home.

Nursing Interventions

Notify provider of sudden and/or severe pain

2.Encourage the pt to request medication before discomfort becomes severe

Assess I&O

Assess for itching – pt is on medication taken because of itching, itching could indicate hyperphosphatemia

1. Assess the patient's knowledge about diet and its relationship with stone formation

2 Encourage patient to increase fluid intake

N321 Care Plan

N321 Care Plan