N311 Care Plan # 1

Lakeview College of Nursing

Bao Cuong Tran

Demographics

Date of Admission 10/05/20	Patient Initials R.D.	Age 64	Gender Male
Race/Ethnicity White/Caucasian	**Occupation Pacific's employee**	**Marital Status Married**	**Allergies NKA (no known allergies)**
Code Status Full Code	**Height 6'1''**	**Weight 137 lbs**	

Medical History

Past Medical History: Hypercholesterolemia, hypertension, MI (myocardial infarction), hyperlipidemia, alcohol withdrawal syndrome, limb ischemia, protein-calorie malnutrition

Past Surgical History: Removal of prostate, HC coronary by pass, triple arterial knee surgery

Family History: None

Social History (tobacco/alcohol/drugs): Heavy smoker (1 pack per day), heavy drinker, using marijuana regularly

Admission Assessment

Chief Complaint (2 points): Sepsis, urinary infection, acute renal failure

History of present Illness (10 points): On set: On October 5, 2020, a 64 y/o white male was admitted to OSF Health Care for urinary infection with sepsis signs, and acute renal failure. Location: lower quadrants. Duration: at least 3 days prior to admission. Characteristics: the patient experienced abdominal pain, fever, chills, urinary urgency with generalized weakness. Aggravating: moving increasing pain. Relieving: stop consuming alcohol 24 hour after experiencing the symptoms, laying in a specific position on bed. Treatment: taking pain medication for the pain.

Primary Diagnosis

Primary Diagnosis on Admission (3 points): Sepsis due to E. coli with acute renal failure, renal cortical necrosis and sepsis shock

Secondary Diagnosis (if applicable): n/a

Pathophysiology of the Disease, APA format (20 points): Acute renal failure (ARF) or acute kidney failure or acute kidney injury occurs when kidneys suddenly become unable to filter waste products from blood. The renal function loss can result in blood flow reduction or glomerular injury (Pamela, 2019). When kidneys lose their filtering ability, wastes may accumulate which can result in blood's chemical getting out of balance. Acute kidney failure can be fatal and requires intensive treatment; yet can be reversible. Acute renal failure develops rapidly, usually in less than a few days. It is most common in hospitalized people, or people who need intensive care.

Causes of ARF are categorized into prerenal, intrarenal, and postrenal (Pamela, 2019). Fluid volume deficit, shock, or cardiac decreasing function are the reason for prerenal failure (Pamela, 2019). Mechanical obstruction to urine flow is classified as postrenal failure (Pamela, 201). The most common cause of acute renal failure is acute tubular necrosis (ATN) which resulted in the damage to renal tubules by ischemia and hypoxia (Capriotti, 2016). ATN can also occurs after transfusion reactions, sepsis abortions, or crushing injuries (Pamela, 2019).

Common signs and symptoms of acute kidney failure may include: decreasing urine output, fluid retention which may cause swelling in legs, ankles or feet, shortness of breath, fatigue, confusion, nausea, weakness, irregular heartbeat, chest pain or pressure, seizures or coma in severe cases. In this case, the patient experience weakness, swelling in left ankle and foot, occasionally out of breath, and fatigue.

Acute renal failure often occurs in correlation with another medical condition which include: Being hospitalized, especially for a serious condition that requires intensive care, advanced age, blockages in the blood vessels in your arms or legs (peripheral artery disease), diabetes, high blood pressure, heart failure, kidney diseases, liver diseases, certain cancers and their treatments. In the case of this patient, he is under high risk for acute renal failure due to his age which is 64, and history of hypertension, hypercholesterolemia, and abusing of alcohol.

The diagnosis for acute renal failure may include: urine output measurements which measures how much patient urinates in 24 hours, urine tests which analyzes a sample of a patient's urine and reveal abnormalities that suggest kidney failure, blood tests, imaging tests, and removing a sample of kidney tissue for testing.

Treatment for acute renal failure typically requires a hospital stay. The treatment may include: treatments to balance the amount of fluids in your blood, medications to control blood potassium, medications to restore blood calcium levels, dialysis to remove toxins from your blood (Pamela, 2019).

Pathophysiology References (2) (APA):

Capriotti, Theresa M. and Frizzell, Joan Parker, "Pathophysiology: Introductory Concepts and Clinical Perspectives" (2016). *Faculty Bookshelf 75.*

Pamela, Swearingen L. and Jacqueline, Wright D, "All-in-One Nursing Care Planning Resource" (2019). *Faculty Bookshelf 75.*

Laboratory Data (20 points)

If laboratory data is unavailable, values will be assigned by the clinical instructor

CBC Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab	Normal Range	Admission Value	Today's Value	Reason for Abnormal Value
RBC	4.10 – 5.7	2.12	2.25	Anemia in kidney failure
Hgb	12.0 – 20.0	9.0	8.2	Anemia in kidney failure
Hct	37% - 51%	25.7	24.0	Anemia in kidney failure
Platelets	140 – 400	217	302	
WBC	4.0 – 11.0	18.5	12.20	Sepsis signs
Neutrophils				
Lymphocytes				
Monocytes				
Eosinophils				
Bands				

Chemistry Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab	Normal Range	Admission Value	Today's Value	Reason For Abnormal
Na-	136 – 145	121	133	Kidney cannot get rid of extra fluid from the body
K+	3.5 – 5.1	4.2	4.0	
Cl-	98 – 107	79	101	Electrolyte imbalance due to kidney failure
CO2	21 – 32	28	24	
Glucose	60 – 99	179	94	Stress from the situation
BUN	7 – 18	58	21	Kidneys are failing due to dehydration
Creatinine	0.70 – 1.3	4.04	1.95	Kidneys are failing due to dehydration

Albumin	**3.4 – 8.0**	**3.4**	*	
Calcium	**8.5 – 10.1**	**9.0**	**8.5**	
Mag	**1.6 – 2.6**			
Phosphate				
Bilirubin				
Alk Phos				

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				
pH				
Specific Gravity				
Glucose				
Protein				
Ketones				
WBC				
RBC				
Leukoesterase				

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				
Blood Culture				
Sputum Culture				
Stool Culture				

Lab Correlations Reference (APA):

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

Diagnostic Imaging

All Other Diagnostic Tests (10 points):

CT Head or Brain without contrast: No evidence of acute intracranial pathology.

XR Chest single view portable: Hypertension of both lungs, old left rib fractures.

US Left Duplex lower Extremity Arterial: Severe atherosclerotic disease with occlusion of the middle and distal superficial femoral artery.

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

5 <u>different</u> medications must be completed

Medications (5 required)

Brand/Generic	**Allopirunol /Zyloprim**	**Atorvastatin /Lipitor**	**Glucose 40%/Glucose**	**Aspirin EC**	**Heparin /Porcine**

Dose	**300mg**	**40mg**	**15g**	**81mg**	**5000units**
Frequency	**nightly**	**daily**	**PRN**	**daily**	**Every 8 hours**
Route	**oral**	**oral**	**oral**	**oral**	**subcutaneous**
Classification	**antigout**	**antihyperlipidemic**		**Anti-inflammatory**	**anticoagulant**
Mechanism of Action	**Inhibit uric acid production by inhibiting xanthine oxidase.**	**Reduce plasma cholesterol and lipoprotein level by inhibiting HMG – CoA reductase and cholesterol synthesis**		**Block the activity of cyclooxygenase**	**Inactivate thrombin, preventing fibrin formation and existing clot extension**
Reason Client Taking	**To treat increased urine uric acid level**	**Control lipid level**		**Relieve pain and fever**	**Treat peripheral arterial embolism**
Contraindications (2)	**Hypersensitive to allopurinol**	**Active hepatic disease**		**Active bleeding**	**breastfeeding**
Side Effects/Adverse Reactions (2)	**Chills, drowsiness, fever, headache**	**Abnormal dreams, amnesia, asthenia**		**confusion**	**Chills, chest pain**

Medications Reference (APA):

Institute for Safe Medication Practice: ISMP Medication Safety Alert. http://www.ismp.org/.

Jones & Barlett Learning. (2020). 2020 Nurse’s Drug Handbook. Burlington, MA

Assessment

Physical Exam (18 points)

GENERAL: **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	**Alerted and oriented to person, place, time** **No acute physical distress**
INTEGUMENTARY: **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** **Drains present: Y☐ N ☒** **Type:**	**Skin is warm and dry, no rashes, bruise or lesions on exposed skin** **No palpable cervical or supraclavicular adenopathy bilaterally**
HEENT: **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	**Head atraumatic and normocephalic** **Neck supple** **Pupils equal bilaterally, no icterus, conjunctival exudate bilaterally** **No ear discharge, no facial swelling, no external otitis/rhinitis/pharyngitis/oral thrush** **No pain or visual disturbance**
CARDIOVASCULAR: **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&S2 sound, no murmurs, gallops, or rubs** **No chest pain** **Pulses are palpable** **No edema** **No cyanosis**
RESPIRATORY: **Accessory muscle use: Y☐ N ☒** **Breath Sounds: Location, character**	**Equal air entry bilaterally, clear to auscultation bilaterally** **No shortness of breath** **No chest tightness**
GASTROINTESTINAL: **Diet at home:** **Current Diet** **Height:** **Weight:** **Auscultation Bowel sounds:** **Last BM: 10/12/2020**	**Abdomen is soft, nontender, normal bowel sounds, no hepatosplenomegaly** **No nausea, diarrhea**

Palpation: Pain, Mass etc.: **Inspection:** **Distention:** **Incisions:** **Scars:** **Drains:** **Wounds:** **Ostomy: Y ☐ N ☒** **Nasogastric: Y ☐ N ☒** **Size:** **Feeding tubes/PEG tube Y ☐ N ☒** **Type:**	
GENITOURINARY: **Color:** **Character:** **Quantity of urine:** **Pain with urination: Y ☒ N ☐** **Dialysis: Y ☐ N ☒** **Inspection of genitals:** **Catheter: Y ☐ N ☒** **Type:** **Size:**	**Positive for dysuria and urgency** **Hematuria and flank pain**
MUSCULOSKELETAL: **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☐**	**Negative for myalgias, joint swelling, and arthralgias**
NEUROLOGICAL: **MAEW: Y ☐ N☒** **PERLA: Y ☐ N☒** **Strength Equal: Y ☒ N ☐ if no -** **Legs ☐ Arms ☐ Both ☒** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	**Alert, oriented** **No focal weakness, cranial nerves normal** **No dizziness, headache, seizures, or numbness**

PSYCHOSOCIAL/CULTURAL: **Coping method(s):** **Developmental level:** **Religion & what it means to pt.:** **Personal/Family Data (Think about home environment, family structure, and available family support):**	.

Vital Signs, 1 set (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
7:50 a.m.	100	95/54	18	97.7 (oral)	95%

Pain Assessment, 1 set (5 points)

Time	Scale	Location	Severity	Characteristics	Interventions
8 a.m.	8	Left foot	extreme	Constant, sharp	Diversional activity encouraged

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
1320	680

Nursing Diagnosis (15 points)
Must be NANDA approved nursing diagnosis

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. Pain	**Related to renal failure as evidence by flank pain**	**1.Giving pain medication as needed** **2.Diversional activity encouraged like walking for 50 feet or showering which the patient responded positive to**	**Goal not met as the patient is still in extreme and constant pain**
2. Small amount of urine	**Related to renal failure as evidence by elevated BUN, and Creatinine as well as small amount of output comparing to intake**	**1. avoid giving food with high potassium** **2.maintain adequate nutritional intake**	**Goal partial met as the patient’s output has increased**

Other References (APA):

Concept Map (20 Points):

Subjective Data

The patient complain of nausea, dizziness, pain and general weakness

Nursing Diagnosis/Outcomes

* Pain related to renal failure as evidence by flank pain.
Goal not met as the patient is still in extreme and constant pain

*Small amount of urine related to renal failure as evidence by elevated BUN, and Creatinine as well as small amount of output comparing to intake

Objective Data

Chief Complaint: Sepsis, urinary infection, acute renal failure
Primary Diagnosis: Sepsis due to E. coli with acute renal failure, renal cortical necrosis and sepsis shock
Pulse: 100
BP: 95/54
Respiratory: 18
Temperature: 97.7
O2: 95%

Patient Information

A 64 y/o white Caucasian married male experiences fever, chills, urinary urgency with general weakness for at least 3 days. Heavy smoker, drinker. Consuming alcohol every day, but not in the past 24 prior to admission.

Nursing Interventions

Giving pain medication as needed

2. Diversional activity encouraged like walking for 50 feet or showering which the patient responded positive to
3. Avoid giving food with high potassium

4. Maintain adequate nutritional intake
Goal partial met as the patient's output has increased