

N431 Care Plan #1

Lakeview College of Nursing

Name: Alexis White

Demographics (3 points)

Date of Admission 09/16/19	Patient Initials KJ	Age 45	Gender Male
Race/Ethnicity African American	Occupation Retired	Marital Status Married	Allergies No known
Code Status Full code	Height 5'8"	Weight 78.6kg	

Medical History (5 Points)

Past Medical History: Renal disease, Pulmonary Embolism, Pancreatitis, Hypertension, Hematemesis, Gout, Dehydration, Chronic GERD, Chest pain, Atrial fibrillation, Acute alcoholic gastritis.

Past Surgical History: Upper gastrointestinal endoscopy, eye surgery, electrical cardioversion

Family History: Mom with hypertension. Father with gout.

Social History (tobacco/alcohol/drugs): Patient was a former drinker who consumed 5-6 glasses per week but, no social history of smoking or other drugs.

Assistive Devices: None. Patient is up and lib.

Living Situation: Lives with wife and children at their home.

Education Level: High school diploma. Patient understood all incoming information upon his diagnosis and how to manage his conditions, therefore was well educated upon his developmental level.

Admission Assessment

Chief Complaint (2 points): Abnormal hemoglobin per Emergency Department's H&P note as well as epigastric discomfort.

History of present Illness (10 points): Patient is a 45-year-old African American Male who came into the ED last night with a low hemoglobin count. The emergency department did not specify what he came in for or how he was feeling for his chief complaint. His hemoglobin dropped from the week previously. Occult blood was negative. Patient has a history of chronic kidney disease and his kidney function appears to have worsened. He is now complaining of epigastric discomfort. Denies any chest pain, shortness of breath, nausea, vomiting, diarrhea, black stool, swelling of extremities, and no change in urinary habits. He says he is a little anxious but, no other active complaints at this time.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): Acute kidney injury

Secondary Diagnosis (if applicable): N/A

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

An acute renal injury or AKI is a significant decrease in renal function resulting in an increase of serum creatinine level. This insufficiency aids in the accumulation of waste product throughout the body which can further result in fluid volume excess or decrease and electrolyte imbalances. The patient followed closely with this diagnosis due to his creatinine level being 2.86 on the date of admission and 1.87 on the clinical date. The most commonly associated cause of an AKI is ischaemia which means there is an inadequate blood supply to a specific organ, this is why the red blood cells, hemoglobin and hematocrit can also be lowered which was also the case with my particular patient. When the patient was admitted into the emergency department the first indication of the diagnosis was the decrease in hemoglobin and hematocrit which alerted a red flag. When an organ becomes ischaemic it can cause damage to all other organs therefore resulting in multi-organ destruction due to cellular injury. Kidneys are very likely to result in injury due to vasoconstriction, endothelial injury by a decrease in intracellular ATP, and inflammation because ischaemia does not allow blood flow to the nephron. When there is no blood supply reaching the organs, there is also a deficiency in oxygen which can result in

decrease in perfusion resulting in necrosis of the tissues. AKI also affects the hepatic and cardiac systems. The liver is also affected by ischaemia which damages the hepatocytes that make up the organ which can often times correlate with cirrhosis. Cardiac and renal insufficiency often times can run together meaning if the kidneys are damaged enough to result in failure, it can often result in heart failure which is a huge risk factor especially for my patient that has an abnormal dysrhythmia.

The important laboratory values to monitor are serum creatinine, BUN, hemoglobin, and hematocrit. Serum creatinine is the most important indicator to be able to diagnose a patient with an acute renal injury. Diagnostics to be ordered are mainly to rule out an obstruction, infection, or fluid around the kidneys. These diagnostics include a CT, and an ultrasound of the abdomen sometimes in the case of my patient an EKG and an X-Ray of the chest are ordered in order to rule out any serious cardiac injuries. The important vital sign to watch for is blood pressure because an increase in BP can be a positive indicator for fluid overload and can cause more serious injuries such as increased cardiac workload resulting in a decrease in cardiac output. Some common signs and symptoms could include oliguria, edema, shortness of breath, swelling in the extremities, nausea, fatigue, and sometimes chest pain. My patient only exhibited fatigue therefore the common signs and symptoms did not correlate with him.

Treatment varies upon patient because it is often times a result from an underlying issue that is causing a flare of acute renal injury. Often times patients have to stay at the hospital to be treated in order to assess the functioning of their kidneys as well as their other organs which has been the specific treatment for my specific patient. In some serious cases that could result in kidney failure dialysis may be needed. It is best to follow up with the primary care provider in order to assess if the laboratory levels are normal. If there is a prescribed diet, fluid restriction, or medication regimen it should be followed as directed. The most important aspect of treatment is the prevention of the AKI from resulting in a more serious injury such as kidney failure. The treatment provided for my patient is a restriction of fluids, frequent resting breaks, adhering to the specific medication regimen, and to follow up with his primary care physician in order to assess if his laboratory values have returned to normal and for further evaluation.

Pathophysiology References (2) (APA): Makris, K., & Spanou, L. (2016, May). Acute Kidney Injury: Definition, Pathophysiology and Clinical Phenotypes. *PMC*.

National Kidney Foundation. (2019). A to Z health guide. In *Acute Kidney Injury*. Retrieved from <https://www.kidney.org/atoz/content/AcuteKidneyInjury>

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	4.10-5.70	2.65	2.30	RBC could be depleted due to ischaemia which is related to injury within the kidneys.
Hgb	11-16	8.4	7.4	Hgb can be related to ischaemia or lack of blood supply to a specific organ such as the kidneys. Hcg can be related to anemia secondary to chronic kidney disease
Hct	34-47	25.4	22.1	Hct can be lowered due to ischaemia within the kidneys. Hct can also be associated with anemia secondary to chronic kidney disease
Platelets	140-400	197	177	
WBC	4-11	6.10	4.70	
Neutrophils	1.60-7.70	N/A	53.5	Increased neutrophil count can indicate there is a possible infection therefore these are fighting off the potential pathogen.
Lymphocytes	1-48	N/A	28.2	
Monocytes	2-8	N/A	16.0	
Eosinophils	1-4	N/A	1.1	
Bands	3-5	N/A	N/A	

Risk for Vitamin B12 deficiency, folate deficiency, or iron deficiency.

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
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Na-	136-145	138	140	
K+	3.5-5	4.2	4.1	
Cl-	98-107	103	107	
CO2	21-32	24	23	
Glucose	79-99	99	77	
BUN	7-18	50	37	The increase in BUN can be an indicator of the acute renal injury.
Creatinine	.55-1.02	2.86	1.87	The CREAT level is the most indicative of lab results to diagnose an AKI.
Albumin	3.4-5.0	3.6	3.0	
Calcium	8.5-10.1	8.6	8.0	
Mag	1.5-2.5	N/A	N/A	
Phosphate	3.4-4.5	N/A	N/A	
Bilirubin	0.3-1.9	N/A	N/A	
Alk Phos	30-120	82	85	
AST	15-37	74	72	The liver is overcompensating for the decrease in the kidney function therefore the liver is beginning to decrease in function as well due to ischaemia.
ALT	12-78	31	33	
Amylase	12-125	N/A	N/A	
Lipase	10-160	N/A	N/A	
Lactic Acid	4.5-19.8	N/A	N/A	
Troponin		N/A	N/A	

CK-MB		N/A	N/A	
Total CK		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	0.9-1.1	1.4	1.4	An increase in INR can be directly correlated to AKI with taking Warfarin.
PT	2-3	16.2	16.2	An increase in PT can be correlated with kidney dysfunction due to the medication of Warfarin.
PTT	22.4-35.9	N/A	N/A	
D-Dimer	0.5-1.0	N/A	N/A	
BNP	<100	N/A	N/A	
HDL		N/A	N/A	
LDL		N/A	N/A	
Cholesterol	70-129	N/A	N/A	
Triglycerides	<150	N/A	N/A	
Hgb A1c		N/A	N/A	
TSH		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	Clear-Straw colored	Clear straw	Clear colorless	

pH	4.6-8.0	5.0	6.0	
Specific Gravity	1.003-1.030	1.009	1.008	
Glucose	0.08	Negative	Negative	
Protein	0-20	Negative	Negative	
Ketones	40-160	Negative	Negative	
WBC	0-3	Negative	Negative	
RBC	4	Negative	Negative	
Leukoesterase	Negative	Negative	Negative	

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		N/A	N/A	
PaO2		N/A	N/A	
PaCO2		N/A	N/A	
HCO3		N/A	N/A	
SaO2		N/A	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		N/A	N/A	
Blood Culture		N/A	N/A	
Sputum Culture		N/A	N/A	
Stool Culture		N/A	Negative for occult blood	

Lab Correlations Reference (APA):

Brodsky, S. (2014). Anticoagulants and acute kidney injury: clinical and pathology considerations. *PMC*.

Hales, M., Solez, K., & Kjellstand, C. (1994). The anemia of acute renal failure: association with oliguria and elevated blood urea. *Pub Med*. doi:10.3109/08860229409044854

Hinkle, J. L., & Cheever, K. H. (2018). *Brunner & Suddarth's Textbook of Medical-Surgical Nursing* (14th ed.). Philadelphia, PA: Wolters Kluwer.

Makris, K., & Spanou, L. (2016, May). Acute Kidney Injury: Definition, Pathophysiology and Clinical Phenotypes. *PMC*.

Diagnostic Imaging

All Other Diagnostic Tests (5 points): CT, X-Ray of the Chest, EKG, Ultrasound of the Abdomen

Diagnostic Test Correlation (5 points): The CT and the Ultrasound of the abdomen was ordered to first detect if there were any lesions or obstructive conditions to rule out kidney stones or fluid around the kidneys. The X-Ray of the chest and EKG is to see if the damage to the kidneys caused a fluid shift leading to fluid overload that could potentially cause heart failure. Urine creatinine level is the most indicative for diagnosing an acute renal injury.

Diagnostic Test Reference (APA): Licurse, A., Kim, M., & Dziura, J. (2010, November 22). Renal Ultrasonography in the Evaluation of Acute Kidney Injury. *JAMA Network*.

Makris, K., & Spanou, L. (2016, May). Acute Kidney Injury: Definition, Pathophysiology and Clinical Phenotypes. *PMC*.

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

Home Medications (5 required)

Brand/Generic	Sodium bicarbonate/ Baking soda	Diazepam/ Valium	Warfarin/ Coumadin	Sotalol/ Betapace	Sucralfate/ Carafate
Dose	650ng	5mg	4mg	80mg	1 gram
Frequency	BID	BID	Daily	Daily	Daily
Route	Oral	Oral	Oral	Oral	Oral
Classification	Antiulcer agents	Antianxiety agents or anticonvulsants	Anticoagulants	Antiarrhythmic	Antiulcer
Mechanism of Action	Neutralization of gastric acid	Depress the CNS by potentiating GABA with a relief of anxiety or sedation for muscle relaxation.	Interferes with hepatic synthesis of vitamin K-dependent clotting factors. Prevention of thromboembolic events.	Blocks stimulation of beta1 and beta2 adrenergic receptor sites. Suppression of arrhythmias.	Aluminum salt of sulfated sucrose reacts with gastric acid to form a thick pate, which adheres to the ulcer surface.
Reason Client Taking	Antacid	Anxiety	Atrial Fibrillation	Atrial fibrillation	Protection of ulcers
Contraindications (2)	Hypocalcemia, and Hybernatremia	Hypersensitivity , and sleep apnea	Uncontrolled bleeding, and open wounds	Hypersensitivity , pulmonary edema, asthma, cardiogenic shock, uncompensated heart failure.	Hypersensitivity (only contraindication))and use cautiously with renal failure, diabetes, and impaired swallowing
Side Effects/Adverse Reactions (2)	Edema, gastric distension	Respiratory depression, and dizziness	Calciphylaxis, and bleeding	Arrhythmias, and bradycardia	Anaphylaxis, and dizziness.
Nursing Considerations (2)	Assess fluid balance with I/O's, assess for epigastric or abdominal pain with frank blood in stool or emesis.	Monitor BP, pulse, respiratory rate, and IV therapy, assess IV for phlebitis.	Assess for signs of bleeding, assess for black tarry stools or hematuria, assess for increased thrombosis.	Monitor ECG, monitor BP, and I/O, assess for orthostatic hypotension.	Assess patient routinely for abdominal pain and drank or occult blood in the stool, assess for any bleeding.
Key Nursing Assessment(s)/Lab(s) Prior to Administration	Monitor serum sodium, potassium, calcium, acid-base balance, ABG's, urine PH, and renal function	Evaluate hepatic and renal function and a CBC.	Monitor PT, INR and monitor for stool and urine for occult blood before periodically during therapy.	Monitor Creatinine, BUN, ANA titers, and blood glucose levels.	Monitor BUN and Creatinine, monitor for any bleeding.
Client Teaching needs (2)	Take missed dose as soon as remembered, do not take the medication	Caution patient to avoid alcohol while taking this medication due to CNS	Advise patient to report any symptoms of unusual bleeding or	Advise the patient not to abruptly discontinue the medication it	Advise patient to continue with course of therapy for 4-8 weeks even if feeling better, advise to

Hospital Medications (5 required)

Brand/Generic	Allopurinol/ Zyloprim	Buspirone/ Buspar	Folic acid/ Folate	Magnesium oxide (MAG-OX)/ Slo-Mag	Pantoprazol e/ Protonix
Dose	300mg	10mg	1mg	300mg	40mg
Frequency	Daily	BID	Daily	BID	Daily
Route	Oral	Oral	Oral	Oral	Oral
Classification	Antigout agents	Antianxiety agents	Antianemi cs	Laxatives	Antiulcer agents
Mechanism of Action	Inhibits the production of uric acid by inhibiting the action of xanthine oxidase.	Binds to serotonin and dopamine receptors in the brain, increases norepinephr ine metabolism in the brain.	Required for protein synthesis and red blood cell function. Stimulates the productio n of red blood cells, white blood cells, and platelets.	Essential for the activity of many enzymes, play an important role in neurotransmi ssion and muscular excitability, are osmotically active in GI tract, drawing water into the lumen and causing peristalsis.	Binds to an enzyme in the presence of acidic gastric pH, preventing the final transport of hydrogen ions into the gastric lumen.
Reason Client Taking	Gout	Anxiety	Folate deficiency	Prophylaxis/ upset stomach	GERD
Contraindicati ons (2)	Hypersensiti vity (only contraindica tion) use cautiously with acute attacks of gout and dehydration.	Hypersensiti vity, MAO inhibitors and severe hepatic or renal impairment.	Uncorrect ed pernicious , aplastic, or normocyti c anemias, and benzyl	Hypomagnes emia, and hypocalcemia .	Hypersensit ivity to rabeprazole , and OB should only use this medication is needed.

			alcohol should not be used in newborns.		
Side Effects/Adverse Reactions (2)	Hypotension, diarrhea, renal failure, and rash.	Dizziness, tachycardia, rashes, sweating, myalgia and tinnitus.	Rash, and fever.	Diarrhea, and flushing.	Clostridium difficile, and cutaneous lupus erythematosus.
Nursing Considerations (2)	Monitor intake and output ratios, and assess for rash.	Assess degree and manifestations of anxiety before and periodically during the therapy, and assess for tolerance of the drug.	Assess patient for signs of megaloblastic anemia, and assess for rash.	Assess patient for abdominal distention, presence of bowel sounds, and usual pattern of bowel function, assess color and consistency and amount of stool produced, assess for heartburn.	Assess patient routinely for epigastric or abdominal pain, and assess for frank or occult blood in stool, emesis, or gastric aspirate.
Key Nursing Assessment(s)/ Lab(s) Prior to Administration	Monitor serum and uric acid levels, monitor blood glucose, monitor kidney and liver function such as BUN, CREAT, AST, and ALT.	Monitor BUN, CREAT, and AST, and ALT to check for liver and kidney function to see if the patient is tolerating the drug.	Monitor plasma folic acid levels, hemoglobin, hematocrit, and reticulocyte before and during the therapy.	Monitor for abnormal bowel sounds with auscultation and document findings.	Monitor AST, ALT, alkaline phosphatase, and bilirubin, and monitor serum magnesium.
Client Teaching	Take missed	The drug	Encourag	Advise	Do not

needs (2)	dose as soon as remembered, take up to 300mg for next dose if taking once daily, alkaline diet will be ordered and advise patient of need for increased fluid intake.	may cause dizziness to avoid driving or other activities that requires alertness until response to the medication is known, advise against the use of alcohol due to the CNS depression.	compliance of the recommended diet, the foods to consume include vegetables, fruits, and organ meats, explain that folic acid may make urine more intensely yellow.	patient not to take this medication within 2 hours of taking other medications, and caution patient to consult health care professional before taking antacids for more than 2 weeks.	crush the medication, do not treat with antidiarrheal without consulting the health care professional if rash, diarrhea, fever or bloody stools occur, and advise not to drink alcohol.
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Medications Reference (APA):

Davis, F. (2019). Up-to-Date Drug Information. In *Davis's Drug Guide Online*. Retrieved from <https://www.drugguide.com/ddo/>

Assessment

Physical Exam (18 points)

GENERAL (1 point): Alertness: Orientation: Distress: Overall appearance:	Patient is alert and oriented to person, place and time. He appears well nourished and at his appropriate developmental level. Patient does not appear to be in distress.
INTEGUMENTARY (2 points): Skin color: Character: Temperature: Turgor: Rashes: Bruises: Wounds: Braden Score: 18	Warm, pink, and dry skin. No presence of bruises, rashes, or wounds. Rapid turgor determining the client is not dehydrated. Braden score was determined to be 18. Patient does not have any drains. Temperature was within normal limits being 96.6 degrees.

Drains present: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Type:	
HEENT (1 point): Head/Neck: Ears: Eyes: Nose: Teeth:	Normocephalic, PERRLA noted, neck is supple, no JVD, No thyromegaly, proper edematation, no polyps within the nasal cavity. Pearly grey TM bilaterally. Trachea is midline without deviation. No lymphadenopathy. Oral mucosa is pink and moist.
CARDIOVASCULAR (2 points): Heart sounds: S1, S2, S3, S4, murmur etc. Cardiac rhythm (if applicable): Peripheral Pulses: Capillary refill: Neck Vein Distention: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Edema Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Location of Edema:	Normal rate, regular rhythm, strong pulses equal in all extremities. S1 and S2 heard upon auscultation and no gallops or murmurs present. Peripheral pulses were 2+ throughout. No murmur or gallops noted. Capillary refill of 2 seconds. No JVD or edema.
RESPIRATORY (2 points): Accessory muscle use: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Breath Sounds: Location, character	Effort is normal, no increased work of breathing, no wheezes, or rhonchi noted. Lung sounds are clear to auscultation. No accessory use of the muscle.
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 <input type="checkbox"/> N <input checked="" type="checkbox"/> Nasogastric: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Size: Feeding tubes/PEG tube Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Type:	Soft, non-tender, non-distended abdomen with normoactive bowel sounds. No indication of a mass or pain. No presence of an ostomy, NG tube, or PEG tube. Last bowel movement was 09/18. Patient has a normal diet at home as well as at the hospital. His height is 5'8" and weighs 78.6kg. Patient does not have any incisions, scars, drains or wounds.

<p>GENITOURINARY (2 Points): Color: Character: Quantity of urine: Pain with urination: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Dialysis: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Inspection of genitals: Catheter: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Type: Size:</p>	<p>Quantity of urine was 2475mL for output and intake was 1,330. The color was straw like to clear. Patient did not have any pain with urination nor did he have any difficulty with urination. No ketones were found in the urine. Patient is not on dialysis and was not placed on a urinary catheter. Genitals were normal.</p>
<p>MUSCULOSKELETAL (2 points): Neurovascular status: ROM: Supportive devices: Strength: ADL Assistance: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Fall Risk: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Fall Score: 25 Activity/Mobility Status: Independent (up ad lib) <input checked="" type="checkbox"/> Needs assistance with equipment <input type="checkbox"/> Needs support to stand and walk <input type="checkbox"/></p>	<p>No acute deformities. Neurovascular status was intact. Patient was able to move all extremities with no difficulty, ROM was intact. Patient is up and lib with no supportive devices. Strength was equal on both sides. Patient was a low fall risk score of 25 since he is up and lib orientated, no history of falls, no use of a Heparin lock, but did have an IV and no use of any assistive devices.</p>
<p>NEUROLOGICAL (2 points): MAEW: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> PERLA: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Strength Equal: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> if no - Legs <input type="checkbox"/> Arms <input type="checkbox"/> Both <input type="checkbox"/> Orientation: Mental Status: Speech: Sensory: LOC:</p>	<p>Patient did not exhibit signs of cranial nerve deficits. Exhibited MAEW, PERLA, and strength equal bilaterally. He was orientated to place, time, and location. His mental status was intact with no signs of confusion, and no sensory deficits. No decrease in LOC.</p>
<p>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):</p>	<p>Patient had a normal mood and affect of behavior is normal. Judgement and thought content was normal. His developmental level was appropriate for his age. Patient had a strong family support system which helps him to cope with his illnesses. He did not identify with a religion base. His family life at home was stable and reassuring.</p>

Vital Signs, 2 sets (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
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0830	80	152/80	20	96.6	97
1138	82	148/84	20	96.6	98

Vital Sign Trends: There was no significant change in vitals during the shift at the hospital therefore the trend is the vitals stayed the same. The B/P may be increased due to a fluid shift.

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
0830	4/10	hand	cramp	tightening	acetaminophen
1148	0/10	N/A	N/A	N/A	N/A

Patient exhibited no pain once given the acetaminophen for his hand therefore when asked again what his pain was like he said he was in zero pain anywhere.

IV Assessment (2 Points)

IV Assessment	Fluid Type/Rate or Saline Lock
Size of IV: 18G Location of IV: Basilic vein Date on IV: 09/16/19 Patency of IV: Flushed without difficulty Signs of erythema, drainage, etc.: None IV dressing assessment: Dry and intact	Midline Catheter placed on 09/16/19 in the basilic vein of the medial side of the arm. Used an 18-gauge needle. Saline lock is noted. Site is patent and dressing is clean, well intact and dry, no signs of drainage or erythema.

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
1,330mL	2475mL

Nursing Care

Summary of Care (2 points)

Overview of care: Patient had a bright mood, and adhered to all education and medications provided. He identified the need to take all medications and how to manage his symptoms. He was very active throughout the clinical day and was able to perform all self-care tasks. He voiced his desire to return home and to be able to leave the hospital. I gave him all of the prescribed medication he needed during the day of clinical.

Procedures/testing done: No procedures or labs were taken during the clinical day.

Complaints/Issues: Patient complained of cramping and tightening in the hand which was resolved with acetaminophen.

Vital signs (stable/unstable): Vital signs were stable throughout the day with the baseline of vitals being within a normal range except for the B/P being elevated at 0830 being 152/80 and 1138 being 148/84.

Tolerating diet, activity, etc.: Patient tolerates his normal diet with ease and ordered breakfast at 0900. His activity level is very active. He is up and lib without assistance and is able to do all tasks on his own.

Physician notifications: Patient is responding to treatment well, with increased energy. PT needs to increase fluid intake, will be given medications to regulate his kidney function as well as decrease side effects of his anemia.

Future plans for patient: Discharging the patient with a follow up for his primary care provider to see if the medication regimen has been following and to assess his baseline labs in order to assess if the interventions have worked or need further evaluation.

Discharge Planning (2 points)

Discharge location: Discharging to home to his wife and children.

Home health needs (if applicable): N/A

Equipment needs (if applicable): N/A

Follow up plan: Patient needs to schedule a primary care visit in order to assess if the treatment was successful.

Education needs: Patient needs education to adhere to the medication regimen without missing doses and taking what is prescribed.

Nursing Diagnosis (15 points)

Must be NANDA approved nursing diagnosis and listed in order of priority

Nursing Diagnosis <ul style="list-style-type: none">• Include full nursing diagnosis with “related to” and “as evidenced by” components	Rational <ul style="list-style-type: none">• Explain why the nursing diagnosis was chosen	Intervention (2 per dx)	Evaluation <ul style="list-style-type: none">• How did the patient/family respond to the nurse’s actions?<ul style="list-style-type: none">• Client response, status of goals and outcomes, modifications to plan.
1. Excess fluid volume related to a compromised regulatory mechanism as evidence by a decrease in hemoglobin and hematocrit.	Hemoglobin and hematocrit have been significantly out of proportion therefore this could be an indication of fluid volume excess	1.Accurately record I/O. 2.Weigh daily at the same time of day, on the same scale, with same equipment and clothing	The patient helped with verbalized the amount he voided each time in compliance to recording accurate I/O and stayed in the same clothing when he was weighed. Patient reported that taking daily measurements is a good way to keep track of too much fluid. No modifications needed.
2. Risk for infection related to the placement of an invasive deice, the midline	There are huge risks with midline catheters to become infected if proper protocol is not	1. Promote good hand washing by patient and staff. 2.Monitor WBC count with differential.	After explaining the need to keep the site dry and intact the main priority is keeping the site free from possible infection. The best way to prevent infection is

<p>catheter as evidence by an elevated neutrophil count.</p>	<p>followed with sterile technique. An elevation of neutrophils means the body is already working to prevent an infection from occurring.</p>		<p>proper hand hygiene. The patient voiced that this intervention is key in order to prevent a worse condition and complied by sanitizing after touching the skin around the site. Monitoring WBC is to detect if an infection is occurring. The patient stated that this was good to do in order to keep away from infection. Patient reported signs and symptoms of infection and what he needs to monitor for. No modifications.</p>
<p>3. Risk for decreased cardiac output related to fluid overload (kidney dysfunction) as evidence by hypertension</p>	<p>Hypertension can be directly correlated with fluid volume excess since the heart is working harder to compensate for the dysfunction of the kidneys this can lead to cardiac failure.</p>	<p>1. Monitor BP and heart rate 2. Auscultate heart sounds.</p>	<p>The goal is to prevent heart and renal failure therefore monitoring the key vital signs for a significant change can alert the care provider of a change in condition. Patient allowed for his vitals to be taken regularly as well as letting me listen to his heart frequently. Patient noted he needs to check his own vitals at home by purchasing a pulse oximeter as well as a blood pressure device or to have regular checkups with his primary care provider.</p>
<p>4. Fatigue related to decrease in energy as evidence by a decrease in</p>	<p>Fatigue can be correlated immensely to anemia as well as a significant drop in hgb and</p>	<p>1. Evaluate the patient's description of fatigue 2. Review his</p>	<p>Patient identified he has been fatigued over the past several weeks with an increase in fatigue when going to work, his alleviating factor is</p>

<p>hemoglobin and hematocrit</p> <p>5. Deficient knowledge related to unfamiliarity with information resources as evidence by questions about given information and statement of misconception .</p>	<p>hct.</p> <p>Patient stated he did not understand how his hematocrit and hemoglobin levels could correlate with his diagnosis of acute renal injury. He asked how this could happen.</p>	<p>hemoglobin and hematocrit</p> <p>1. Provide efficient education as to how the lab levels correlate.</p> <p>2. Review medication regimen and discuss all medications for this particular diagnosis.</p>	<p>when he gets home to rest on the couch. He voiced that the goal for him to take restful periods would help in allowing him to not feel as fatigued. Changes in hcg and hct can be a huge indication of a reason for fatigue. The patient voiced he would make a follow-up appointment with his doctor to ensure his levels were appropriate. Patient verbalized an understanding of the medications given to enhance his kidney function as well as verbalized the understanding of how hemoglobin and hematocrit decreasing can be an indicator of something being wrong with his renal system.</p>
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Other References (APA): Vera, M. (2014, February 27). Nurselabs. In *6 Acute Renal Failure Nursing Care Plans*. Retrieved from <https://nurseslabs.com/6-acute-renal-failure-nursing-care-plans/6/>

Concept Map (20 Points):

Subjective Data

- Patient complained of epigastric discomfort on 09/16 once placed into a room on the floor
- Patient complained of pain within his hand during the date of clinical due to gout which was alleviated by acetaminophen
- Patient denied any chest pain, shortness of breath, or nausea with no change in urinary habits.

Objective Data

- Patient's BUN and Creatinine levels were significantly increased demonstrating the diagnosis of an acute renal injury.
- Patient's Hcg and Hct were decreased resulting of admission.
- Patient underwent a CT, Ultrasound of the abdomen to rule out a blockage, and Chest X-Ray, and EKG to rule out a heart issue relating to the renal injury.

Patient Information

Patient is a 45-year-old African American male who was admitted on to the unit for a decrease in hcg and hct. Patient complained of epigastric pain but, no further complaints. Patient has a medical history of renal disease, PE, pancreatitis, hypertension, hematemesis, gout, dehydration, chronic GERD, chest pain, Atrial fibrillation, and acute alcoholic gastritis. Patient was a former drinker.

Nursing Diagnosis/Outcomes

Excess fluid volume related to a compromised regulatory mechanism as evidence by a decrease in hemoglobin and hematocrit.
-Goal is to decrease his fluid intake.
-Outcome: Patient was administered an ample amount of IV fluids but, once he became at risk for fluid overload he was taken off of the fluids which decreased his overall symptoms for fluid excess.

Risk of infection related to the placement of an invasive device, the midline catheter as evidence by an elevated neutrophil count.
-Goal is to decrease the chance of an infection from occurring by using proper hand hygiene.
-Outcome: No increase in WBC therefore no further signs and symptoms have occurred.

Risk for decreased cardiac output related to fluid overload (kidney dysfunction) as evidence by hypertension.
-Goal is to manage the hypertension with medication and decrease in fluids.
-Outcome was not reached since the BP was still high when checked again at 1148.

Nursing Interventions

- Monitor BUN and CREAT levels for any significant change
- Monitor Hcg and Hct
- Monitor WBC and neutrophils for any sign of infection
- Monitor the catheter to make sure the dressing is clean, dry and intact
- Monitor vital signs every 4 hours
- Auscultate for heart, lung, and bowel sounds
- Monitor for changes in LOC
- Educate the client about the importance of adhering to the medication regimen.
- Educate to the client fluids may need to be restricted therefore keep an accurate measurement of fluids consumed at home
- Measure the client's weight daily with the same amount of clothing on, and standing

