

*Complete and submit to the corresponding dropbox by 1600 on the assigned clinical day.

To Be Completed Before the Simulation

** Blue boxes should be completed using textbook information. What do you expect to find? This information should be collected before you start the ATI simulation.

Medical Diagnosis/ Disease: CKD

NCLEX IV (8): **Physiological Integrity/Physiological Adaptation**

Anatomy and Physiology
Normal Structures
 The primary functions of the kidney are to regulate the volume and composition of extracellular fluid and excrete waste products from the body. There are 2 kidneys located behind the peritoneum on each side of the vertebral column. The adrenal gland lies on top of each kidney. The capsule covers the surface of the kidney. Parenchyma is the tissue of the kidney. The outer layer is the cortex, and the inner is the medulla. The medulla consists of a number of pyramids. The top pillae which urine passes to enter the calyces. The minor calyces widen and merge creating the renal pelvis. Urine is transported to the renal pelvis and is drained through the ureter to the bladder. The nephron is the functional unit of the kidney. Each composed of the glomerulus, bowmans capsule, and a tubular system. The loop of Henle is located in the tubular system. Blood reaches the kidneys through the renal artery, which arises from the aorta and enters the kidney through the hilus.

Pathophysiology of Disease
 CKD involves progressive, irreversible loss of kidney function. GFR is less than 60 ml/min 1.73 for longer than 3 months. As kidney functions deteriorate, all body systems become affected. The manifestations result from retained urea, creatinine, phenols, hormones, electrolytes, and water. Uremia is a syndrome in which kidney function declines to the point that symptoms may develop in multiple body systems. As the disease progresses the ability the ability to concentrate urine that does not need to be absorbed is lost. The urine osmolality is usually fixed and urine volumes does not respond readily to variation in water intake.

NCLEX IV (7): **Reduction of Risk**

Anticipated Diagnostics
Labs
 CBC, BMP (BUN, Creatinine), urinalysis,
Additional Diagnostics
 CT of the abdomen and pelvis, KUB scan, Renal bx

NCLEX II (3): **Health Promotion and Maintenance**

Contributing Risk Factors
 Family hx, hypertension, glomerulonephritis, cystic diseases, urologic, diabetes, diseases, hyperlipidemia, pyelonephritis, obesity, smoking, and age

Signs and Symptoms
 Possible polyuria, fluid retention, anuria, increased bun and creatinine levels- nausea, vomiting, lethargy, fatigue, impaired thought processes, headaches, hyperglycemia, hyperinsulinemia,

NCLEX IV (7): **Reduction of Risk**

Possible Therapeutic Procedures
Non-surgical
 Hemodialysis, drug therapy
Surgical
 Transplant

Prevention of Complications
 (What are some potential complications associated with this disease process)
 Electrolyte imbalances, CHF, anemia, dehydration

	SOB , muscle cramps, lateral back pain, hair thinning, peripheral edema , infertility, and anticholinergic effects.		
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NCLEX IV (6): Pharmacological and Parenteral Therapies

Anticipated Medication Management
Loop diuretics, sodium polystyrene sulfonate, **calcium supplements**, ace inhibitors, arbs, iron supplements, vitamin supplements, statins, **diabetic agents**, and antibiotics.

NCLEX IV (5): Basic Care and Comfort

Non-Pharmacologic Care Measures
Fluid restrictions, **potassium restriction/ replacement**, exercise, improved diet

NCLEX III (4): Psychosocial/Holistic Care Needs

What stressors might a patient with this diagnosis be experiencing?
Anxiety, hospitalization, deficient knowledge

Client/Family Education

List 3 potential teaching topics/areas

- **Fluid restrictions**
- **Diabetes management**
- Smoking cessation

NCLEX I (1): Safe and Effective Care Environment

Multidisciplinary Team Involvement
(Which other disciplines do you expect to share in the care of this patient)

Urologist, nephrologist, dialysis, dietician

Anticipated Patient Problems, Goals, & Interventions Based on Medical Diagnosis

** This worksheet should be completed before you begin the ATI simulation.

Problem #1: Excess fluid volume

Patient Goals:

1. Will have no edema in lower extremities bilaterally during my time of care.
2. Will have no crackles anteriorly and posteriorly bilaterally during my time of care.

Assessments:

- Assess vital signs q4hours, assess weight at the beginning of each shift, monitor input and output q8hours, assess for edema throughout my shift, assess lung sounds throughout my shift.

Interventions (In priority order):

1. Elevate edematous extremities q4 hrs throughout my time of care.
2. Administer diuretics as prescribed during my time of care.
3. Record intake and output every 8 hours during my time of care.

4. Encourage out of bed for meals during my time of care.
5. Educate importance of fluid restrictions during my time of care.
6. Educate importance of proper nutrition and balanced hydration status during my time of care.

Problem #2: Risk for electrolyte imbalance

Patient Goals:

1. Will maintain a potassium level between 3.5- 5.0 during my time of care.
2. Will have a heart rate between 60 and 100 in normal sinus rhythm during my time of care.

Assessments:

- Assess serum electrolytes during my time of care, assess vital signs q4hours throughout my time of care, assess for cardiac symptoms (palpitations, chest pain, bradycardia/tachycardia, syncope) during my time of care, assess level of consciousness during my time of care.

Interventions (In priority order):

1. Administer fluids as prescribed throughout my time of care.
2. Administer electrolyte replacements as prescribed prn during my time of care.
3. Maintain continuous cardiac monitoring throughout my time of care.
4. Educate dietary sources of sodium throughout my time of care.
5. Educate the importance of potassium replacement during my time of care.
6. Educate the importance of hydration throughout my time of care.

At this time, complete assigned ATI Real Life Simulation

Actual Patient Problems & Goals

** The following should be completed after the ATI simulation.

Problem #1: Excess fluid volume

Patient Goals:

1. Will have no edema in lower extremities bilaterally during my time of care.

Met
Unmet x

2. Will have no rhonchi anteriorly and posteriorly bilaterally during my time of care.

Met x
Unmet

Problem #2: Risk for electrolyte imbalance

Patient Goals:

1. Will maintain a potassium level between 3.5- 5.0 during my time of care.

Met x
Unmet

2. Will have a heart rate between 60 and 100 in normal sinus rhythm during my time of care.

Met x

Unmet

SOAP Notes Based on Priority Problems

Priority Patient Problem #1: Excess fluid volume

<p><u>Subjective:</u></p> <p><i>This section explains the client symptoms. Include a narrative of the patient's complaints/concerns and/or information obtained from secondary sources.</i></p>	<p>Chief Complaint: Two days ago, reports difficulty completing peritoneal dialysis with recent a weight gain of 13.2 kg. Reports shortness of breath and edema to lower extremities.</p> <p>PMH: Chronic kidney disease, type 2 diabetes mellitus, hypertension, uremic pruritis, peripheral neuropathy to lower extremities bilaterally, and hyperlipidemia.</p> <p>Allergies: NKA</p> <p>Current Medications: Glipizide, aspirin, losartan, furosemide, ferric citrate, linagliptin, tramadol, sevelamer carbonate, docusate sodium, tacrolimus, gentamicin, gabapentin, atorvastatin</p>
<p><u>Objective:</u></p> <p><i>This section is your clinical observations. Include, pertinent vital signs, pertinent labs and diagnostics related to priority problem.</i></p>	<p>Vital Signs: On admission- T- 37.2, HR- 110, BP- 170/92, O2- 95% on RA</p> <p>Labs: @ 1700 2/10 – Hemoglobin- 10.2, hematocrit- 32%, WBC- 14,000, Potassium- 6.0, Sodium- 132, BUN- 42, Creatinine- 8.0, glucose- 174, GFR- 8</p> <p>Diagnostics: @1700 2/10- Urinalysis- cloudy, amber, +1 blood, negative ketones and glucose and bacteria. Chest x ray- bilateral pulmonary venous congestion with infiltrates.</p>
<p><u>Assessment:</u></p> <p><i>Focused assessment on your priority problem.</i></p>	<p>Alert and oriented x4. Scattered rhonchi anterior and posterior loves bilaterally. Respirations regular with a rate of 24. Dyspnea with exertion. Bladder non distended. +2 pitting edema in lower extremities bilaterally. Pedal pulses +3 bilaterally. Weakness with gait.</p>

<p>Plan <u>*Based on priority problem only</u></p> <p><i>Include what your plan is for the client. What treatments or medications are needed. You can include procedures, consults, labs/diagnostics, etc. What nursing interventions are being performed?</i></p>	<p>Plan: Implement continuous cardiac monitoring. Administer furosemide 80mg IV bolus x1 and the resume PO does of 20mg BID. Apply oxygen prn to keep o2 greater than 95%. Daily weights. Restrict fluids to 1L per day. Strict I and O. Obtain BMP 1 hour after administrating IV furosemide.</p> <p>Teaching/Resources: Sodium restrictions and fluid restrictions. Daily weights at the same time each day wearing the same amount and type of clothing. Diet modifications. Importance of taking diuretics as prescribed.</p>
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Priority Patient Problem #2: Risk for Electrolyte imbalance

<p>Subjective:</p> <p><i>This section explains the client symptoms. Include a narrative of the patient's complaints/concerns and/or information obtained from secondary sources.</i></p>	<p>Chief Complaint: No subjective complaints but objective data shows sinus tachycardia with peaked t waves and a potassium level of 6.0 on admission.</p>
<p>Objective:</p> <p><i>This section is your clinical observations. Include vital signs, pertinent labs and diagnostics <u>related to priority problem.</u></i></p>	<p>Vital Signs: @ 2040 2/10- HR-110 BP- 170/84, T- 37.0, R- 20, O2- 96% on 2L NC</p> <p>Labs: @ 2045 2/10- Potassium- 5.9 Sodium- 132</p> <p>Diagnostics: EKG- Sinus tachycardia with peaked t waves at 114 bpm @ 2100 2/10</p>
<p>Assessment:</p> <p><i>Focused assessment on your priority problem.</i></p>	<p>Heart rate was sinus tachycardia at 110bpm. Alert and oriented to place, time, and situation. AV fistula intact to left forearm with palpable thrill and audible bruit noted. Reported feeling chilled and very tired. +2 pitting edema bilateral lower extremities. Weakness with gait.</p>
<p>Plan</p>	<p>Plan: Monitor for the presence of Chvostek sign.</p>

<p><u>*Based on priority problem only</u></p> <p><i>Include what your plan is for the client. What treatments or medications are needed. You can include procedures, consults, labs/diagnostics, etc. What nursing interventions are being performed?</i></p>	<p>Implement continuous cardiac monitoring. Administer regular insulin in 5% dextrose and calcium gluconate IV. Monitor for the development of tetany. Monitor muscle strength. Administer phosphate binder between meals.</p> <p>Teaching/Resources: Sodium and fluid restrictions. Diet modifications along with instructing what foods have what electrolytes in them. Educating those signs and symptoms of low sodium and potassium (Chvostek’s sign, muscle twitching, and cardiac symptoms. Importance of taking electrolyte replacements as prescribed.</p>
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Reflection:

1. Go back to your Preconference Template:
 - a. Indicate (circle, star, highlight, etc.) the components of your preconference template that you saw applied to the care of this virtual patient.

2. What was your biggest “take-away” from participating in the care of this patient? How did this impact your nursing practice?

My biggest “take-away” from participating in the care of this patient is the importance of anticipation while taking care of patients in the hospital setting. The nurse saw the diagnosis and anticipated the next steps of care before the orders were put in. That is important when trying to prevent complications from happening. He knew what meds should be given during the event of her arrhythmia and he knew what labs and orders should be drawn upon her admission. Anticipating care ahead of time is important when critical thinking. This allows the nurse to be more aware of the patient’s condition and can have the appropriate supplies at the bedside if needed. This impacts my nursing practice by allowing me to better take care of my patients and ensure they receive the best care while in the hospital.

Time Allocation: 8 hours
