

*Complete and submit to the corresponding drop-box by 1600 on the assigned clinical day.

To Be Completed Before the Simulation

Medical Diagnosis/ Disease: Chronic Kidney Disease - CKD

NCLEX IV (8): Physiological Integrity/Physiological Adaptation

NCLEX IV (7): Reduction of Risk

Anatomy and Physiology
Normal Structures
 There are two kidneys that both filter blood & remove waste from the body → control of fluid & electrolyte balances in the body
 The kidneys are located in the retroperitoneal space on each side of the spine. The adrenal glands are located on top of each kidney. Both the adrenal glands and kidneys are protected by the ribs, muscles, & fat.
 Blood is brought to the kidneys through the renal arteries.
 The nephron is made up of the tubules (go from the center & regulate chemicals moving to & from blood) & the corpuscles (contain glomeruli)
 Under the renal capsule is the cortex. The Loop of Henle is a location in part of the tubules that helps with filtering. Waste, electrolytes, and fluid leave the body through urine.

Pathophysiology of Disease
 There is a gradual loss of kidney function over time → the body cannot properly remove waste → this causes an ↑ in the amount of waste, fluid, & electrolytes in the body (the body cannot concentrate urine with the waste that needs to leave the body)
 The more time that passes, the more of a decrease in kidney function occurs
 Urine volume does not respond readily to the variations & changes in a person's intake of water – urine osmolality usually maintains the same.
 Some causes of CKD include: recurrent kidney infections, glomerulonephritis, HTN, diabetes, or polycystic kidney disease

Anticipated Diagnostics
Labs
 BUN
 Creatinine
 Electrolytes
 Lipid panel
 CBC
 Urinalysis
Additional Diagnostics
 KUB scan
 CT
 Renal biopsy
 Family/health history
 Xray

NCLEX II (3): Health Promotion and Maintenance

NCLEX IV (7): Reduction of Risk

Contributing Risk Factors
 Family history
 HTN
 Smoking
 Obesity
 ↑ in age
 Diabetes
 Use of nephrotoxic meds
 Hyperlipidemia
 Lupus

Signs and Symptoms
 N/V
 Fatigue, weakness
 SOB
 Insomnia
 Non-elastic skin turgor
 Pale complexion
 Muscle cramps
 CP, thinning of hair
 Peripheral edema

Possible Therapeutic Procedures
Non-surgical
 Hemodialysis
 Peritoneal dialysis
Surgical
 Fistula placement
 Kidney transplant

Prevention of Complications
 (What are some potential complications associated with this disease process)
 Electrolyte imbalances
 Possible death
 ↓ nutrition
 ↓ hydration
 CHF
 Depression
 Pulmonary edema

NCLEX IV (6): Pharmacological and Parenteral Therapies

NCLEX IV (5): Basic Care and Comfort

NCLEX III (4): Psychosocial/Holistic Care Needs

Anticipated Medication Management
 ACE inhibitors/ARBS, statins
 Loop diuretics
 Electrolyte replacements
 Supplements (iron, nutritional)
 Sodium, polystyrene sulfonate

Non-Pharmacologic Care Measures
 Fluid restrictions
 Diet restrictions/weight loss
 Limit potassium intake
 ↑ exercise

What stressors might a patient with this diagnosis be experiencing?
 Depression, anxiety about dx
 Being in the hospital, family adjustment
 Unknow/not understanding care/treatment
 Insurance/financial difficulties

Client/Family Education

NCLEX I (1): Safe and Effective Care Environment

List 3 potential teaching topics/areas
 • Low sodium diet, low potassium diet
 • New medication teaching – timing, dosing, purpose, side effects, when to notify the MD when at home
 • Promote a healthy lifestyle – teaching r/t smoking cessation, starting an exercise regimen

Multidisciplinary Team Involvement
 Nephrologist
 Urologist
 Surgeon
 Dietitian, nutritionist
 environmental services
 case management
 radiology
 pharmacy
 CNA
 phlebotomy
 dialysis staff

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. Lung sounds will remain clear in all lobes bilaterally during my time of care.
2. Urine output will be greater than or equal to 30mL per hour during my time of care.

Assessments:

- Peripheral edema q 4hr, I&O q hr, monitor BP & HR q 4hr/PRN, lung sounds q 4hr

Interventions (In priority order):

1. Administer diuretics as ordered, prn.
2. Maintain head of bed in a 45° - 90° position while in bed or when sitting in chair, prn.
3. Maintain fluid restriction as ordered during my time of care.
4. Elevate lower extremities when lying in bed or while sitting in chair at all times during my time of care.
5. Educate on how to read a food label & that sodium does not equal salt in foods once during my time of care.
6. Educate on purpose of the use of a urinary hat/urinal (do not know gender of pt prior to starting scenario) to measure urine output once during my time of care.

Problem #2: Risk for electrolyte imbalance

Patient Goals:

1. Will maintain a 2g sodium restriction diet with sodium levels between 135-145 during my time of care.
2. Will be able to verbalize three foods that contain high amounts of sodium (greater than 500mg) during my time of care.

Assessments:

- Heart sounds & cardiac dysrhythmias on telemetry (if ordered, not known prior to scenario) q 2 hr/PRN, level of consciousness/mental status q 2 hr, I&O q hr, discomfort/pain level q 4 hr

Interventions (In priority order):

1. Provide IV or oral hydration as ordered, as needed during my time of care.

2. Supplement electrolytes as appropriate as ordered during my time of care.
3. Administer pain medication as ordered, as appropriate relating to discomfort or cramping during my time of care.
4. Educate what “normal” lab values are (sodium: 135-145, potassium: 3.5-5, calcium: 8.3-10.5, magnesium 1.6-2.6) once/PRN during my time of care.
5. Educate on how to read a food label and count amounts on the back of a food label once/PRN, during my time of care.
6. Consult the nutritionists/dietitian as needed, as ordered during 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. Urine output will be greater than or equal to 30mL/hr during my time of care. – MET
2. Potassium levels will remain within normal limits (3.5 – 5) during my time of care. – MET

Problem #2: Deficient knowledge: treatment/care

Patient Goals:

1. A.S will verbalize at least two questions relating to alterations in treatment relating to hemodialysis during my time of care. – MET
2. A.S. will be able to identify at least one food from her lifestyle prior to this admission that will be accepted into the new diet plan once during my time of care. – MET

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: Weight gain of 13.2kg within 2 days – shortness of breath – edema of lower extremities, stated “my legs feel so tight” – hypervolemia, hyperkalemia, complications with at home peritoneal dialysis</p> <p>PMH: Stage V kidney failure, CKD – type 2 DM – HTN – Uremic pruritis – peripheral neuropathy in bilateral lower extremities – hyperlipidemia</p> <p>Allergies: No known allergies</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: 2/10 (admission date) – BP: 174/94, HR: 118 bpm, RR: 22, Oxygen sat: 94% on RA, temp: 37.2°C</p> <p>Labs: 2/10 (admission date) – potassium: 5.9, glucose: 166, GFR: 8mL/min 2/12 – hemoglobin: 10, hematocrit: 30%, potassium: 4.7, BUN: 37, creatinine: 6.9</p> <p>Diagnostics: Chest Xray – pulmonary congestion EKG, telemetry – correlating to hyperkalemia</p>
<p><u>Assessment:</u></p> <p><i>Focused assessment on your priority problem.</i></p>	<p>Alert & oriented x4 – lethargic Tachypnea – scattered rhonchi in bilateral lobes – labored breathing with activity Sinus tachycardia with peaked t-waves on admission (2/10) but returned to normal sinus rhythm on 2/11 – pedal pulses +3 bilaterally, pitting edema 2+ on bilateral lower extremities Reports legs feeling “tight” – muscle weakness Fluid balance on 2/10: -6mL Fluid balance on 2/11: 89mL Left forearm AV fistula intact with a bruit & thrill</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: Obtain a stat EKG to check any dysrhythmias due to hyperkalemia Maintain cardiac/telemetry monitoring Monitor for Chvostek’s sign Apply supplemental o2 via nasal canula to keep o2 sat above 96% Maintain 1 liter fluid restriction Hemodialysis will occur in the mornings & then 3x a week once discharged Administer 80mg initial IV Furosemide bolus & then 20mg of Furosemide PO daily Administer calcium gluconate Administer 50% dextrose Administer adenosine</p> <p>Teaching/Resources: Sodium/potassium restriction/new dietary rules Fluid restriction if not taking a diuretic Emphasize the importance of following medication orders & dialysis instructions/regimen The s/s to look out for when at home & when to notify health care professionals</p>
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Priority Patient Problem #2: Deficient knowledge: treatment/care

<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: Not sure what hemodialysis complications are Questioning how hemodialysis works/the process of hemodialysis How to include hemodialysis into her daily life Diet modifications</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: Heart rate stayed between 60-100bpm during times of increased anxiety or when visibly upset</p> <p>Labs: N/A</p>

	<p>Diagnostics: The Social Determinants of Health Questionnaire (SDHQ) showed that A.S. is concerned about finances/paying for food Evaluating A.S.'s knowledge of procedures/diagnostics/assessments before they are being done</p>
<p>Assessment: <i>Focused assessment on your priority problem.</i></p>	<p>Asked about how hemodialysis works Asked how to include hemodialysis into her everyday life Questioned what complications are relating to hemodialysis Asked what the difference between peritoneal dialysis & hemodialysis was Questioned how to include her favorite foods while also following new diet restrictions Showed concern & questioned how to eat at public events when the diet restrictions are in place Was sitting in chair, leaning over, appeared to be crying/visibly upset/overwhelmed when presented new information r/t treatment adjustments/changes</p>
<p>Plan <u>*Based on priority problem only</u> <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: Educate A.S. as questions or concerns arise Home Health will complete home visits to check in & monitor A.S on how she is doing with the new lifestyle adjustments Hemodialysis will be done 3x a week Maintain a strict diet r/t sodium, potassium, protein, & fluid Provide written education & visual aids to assist in education throughout care</p> <p>Teaching/Resources: Importance of sticking to treatment care plan How to manage DM, HTN, & CKD Dialysis support groups s/s of complications, importance of/ when to have lab work drawn When next appointments are/follow up appointments Dietary classes/teaching r/t new diet</p>

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 this scenario is how much of an impact CKD can have on a person’s life and how much stress it can cause someone. I have taken care of patients who have come in for complications related to CKD or happen to have CKD in their past medical history, but I did not realize how much of a toll it can have on a person’s time, money, and emotions. In the hospital, we know where everyone is at all times and we kind of “make” their schedules. When a patient is discharged, they are more on their own to keep their schedule. With the treatment needs that are as demanding as they are with CKD, going to hemodialysis 3 times a week, getting lab work, getting to appointments, trying to follow all the restrictions when grocery shopping or when out to eat in public is a lot. I did not realize how much it all adds up to a person who has CKD until this scenario. This also emphasizes how important educating a patient is. I can see how in the hospital people can brush off or rush through educating a patient on what to do once they are discharged but if they don’t actually understand or follow what is being told to them – it is a huge disservice and can actually harm a patient.

This scenario impacts my nursing practice because if a patient has a question, they aren’t just asking it “for fun.” They truly don’t understand and don’t know something that could be very important for their health outside of the hospital. If I don’t know an answer, I will tell them that I’m unsure, go to the proper resources to find the answer, and keep my word by following back up with the patient.

Time Allocation: 8 hours
