

ATI Real Life Student Packet
N202 Advanced Concepts of Nursing
2022

Student Name: _____ Grace Sweetman _____

ATI Scenario: ___ATI Real Life: Kidney Disease_____

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: __kidney disease_____

NCLEX IV (8): Physiological Integrity/Physiological Adaptation

Anatomy and Physiology

Normal Structures

We have 2 kidneys, 2 ureters, one bladder, and one urethra. Kidneys regulate volume and composition of ECF, excrete waste, make erythropoietin, activate Vit. D, and regulate Acid base. There are two layers Cortex and medulla. Calyces form in the renal pelvis (3-5mL urine). There kidneys have nephrons. Nephrons are made out of the glomerulus, Bowmans's capsule, tubular system, and Loop of Henle. Glomerulus-capillaries. Where urine formation begins, and it is where blood is filtered. Amount of blood filtered/min = GFR (Glomerular filtration rate). Bowman's Capsule – Contains the glomerulus. Tubular System – Responsible of reabsorption of electrolytes and excretion of non-essential ones. Loop of Henle has two parts – Descending: permeable to H₂O and permeable to Na, urea, and others. Ascending: chloride is actively reabsorbed followed by reabsorption of Na ions. The ureters connect kidney to bladder. Joins renal pelvis at ureteropelvic junction and bladder at the ureterovesical junction. They are common sites of obstruction. The Bladder is a reservoir for urine/waste. Normal UO is 30mL/hr. At 200-250mL start to feel urge to urinate, bladder can hold up to 600-100mL of urine. The urethra extends from bladder neck to meatus. Controls voiding, and conduit of urine from bladder to the outside

NCLEX IV (7): Reduction of Risk

Pathophysiology of Disease

Kidney disease is the product of irreversible damage. It is defined as 1) kidney damage (looking at markers), and 2) a low glomerular filtration rate (<60mL/min for 3 months or longer. There are five stages. With the end stage resulting in a GFR <15 or dialysis. It results in retained substances like urea, creatinine, phenols, hormones, electrolytes, and water. As Kidney disease worsens → fluid retention → dialysis → anuria. With kidney disease, the kidneys aren't excreting a lot of urine so there is a build up of waste. Which can lead to HTN, edema, and HF (CVD is the leading cause of death in patients with kidney disease).

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 not have any pitting edema in lower extremities ____
2. _ Will not gain 2 pounds or more in 24 hours

Assessments: Assess lower extremities for edema q 4 hours, Assess weight daily, Asses for JVD daily, assess VS (esp. BP and HR) q 4 hours, Assess lung sounds q shift, Monitor labs daily (BUN, GFR, creatinine).

Interventions (In priority order):

1. ____ Administer Diuretics like furosemide as ordered _____
2. ____ Administer Diuretics like furosemide as ordered _____
3. __ Administer an indwelling catheter or straight catheter q 2 hours ____
4. ____ Implement a fluid restriction of 2000mL/day _____
5. ____ Prepare patient for dialysis if indicated during my time of care _____
6. _ Educate on the importance of bladder training every 2 hours during my time of care ____

Problem #2: Risk for electrolyte Imbalance

Patient Goals:

1. Will have a normal kidney function with BUN (7-21) and creatinine (0.4-1.2) during my time of care
2. Will not have any excess potassium (<5.1) or excess sodium (<145) during my time of care

Assessments: Assess daily laboratory values, Assess EKG for dysrhythmias, Assess for signs of hyperkalemia (dysrhythmias, SOB) during my time of care

Interventions (In priority order):

1. __Administer Kayexalate or insulin with D50% to reduce potassium as ordered____
2. ____Administer Diuretics as ordered____
3. __ Administer erythropoietin to increase kidney function to excrete excess electrolytes as ordered __
4. _Administer a healthy diet that does not have high sodium or potassium during my time of care
5. _Educate to not take any OTC laxatives to prevent the build up of magnesium during my time of care __
6. __Educate on the importance of limiting salt from diet during my time of care

To Be Completed During the Simulation**Nursing Notes**

Time	I Or E	Notes	Specify Problem #
0800	E	Lying in bed supine with 2L O2 via NC. VS: HR 132 BP 120/72 SPO2 88%. Ulcer on right heel in bandaging. Stated he could not feel touch to well by the toes-----GS	1, 5
0800	I	Increased O2 to 3L via NC and changed dressing on heel -----GS	1, 5
0830	E	Stated breathing does not feel better. "I just can't seem to catch my breath."	1
0830	I	Administered Furosemide 20mg IV-----GS	1, 2
0930	E	Stated "I feel better." UO 150mL. SPO2 95% 2L O2 via NC-----GS	1, 2
0930	I	Discontinued IV fluids and reduced O2. -----GS	1
1030	I	Performed a bladder scan-----GS	2
1030	E	Bladder scanner showed a scant amount of urine in bladder. Lying in bed. Stated "I do feel like my heart is racing."	2
1130	E	Having SOB. Stated "I feel really sick, like I'm going to throw up. And I'm so hot."V-Tach on the EKG-----GS	1
1130	I	Called a rapid response. Administered Amiodarone 150mg IV -----GS	3,4
1300	E	Heart rhythm a-fib with a HR of 100 bpm-----GS	4
1500	E	Potassium level 6.0 -----GS	3
1500	I	Administered Sodium polystyrene sulfonate (kayexalate) 30g PO-----GS	3
1730	E	Potassium is 5.0 Had two BM. Stated, "It's not as tough to breathe." -GS	1, 3
1745	I	Administered 40mg furosemide IV -----GS	2, 3
1815	E	Potassium level 4.8. Excreted 350mL of dark urine. IV site warm and swollen-----GS	2,3,5
1815	I	Removed peripheral IV-----GS	5
0800	E	Sitting up in bed. No nasal cannula needed. Alert and oriented. -----GS	1

Initials/ Signature G.Sweetman,SNB

Actual Patient Problems & Goals

** This worksheet should be completed after you complete the ATI simulation.

Problem #1: Impaired Gas Exchange

Patient Goals:

- 1. _____ SPO2 will not drop below 92% during my time of care_____ Met
Unmet
- 2. __Respiratory Rate will stay between 12-20 during my time of care _____ Met
Unmet

Problem #2: Impaired Urinary Elimination

Patient Goals:

- 1. Will have a normal UO of 30mL/hr_____ Met
Unmet
- 2. Will have a normal kidney function with BUN (7-21) and creatinine (0.4-1.2) during my time of care
Met
Unmet

Problem #3: Risk for Electrolyte Imbalance

Patient Goals:

- 1. _____ Met
Unmet
- 2. _____ Met
Unmet

Problem #4: Decreased Cardiac Output

Patient Goals:

- 1. _____ Met
Unmet
- 2. _____ Met
Unmet

Problem #5: Impaired Skin Integrity

Patient Goals:

- 1. _____ Met
Unmet
- 2. _____ Met
Unmet

Patient Resources: follow up with a nephrologist
 Patient Teaching: Educate on attempting to void every 2 hours

To Be Completed After the Simulation

**The orange boxes should be filled out with your simulation patient's actual results, assessments, medications, and recommendations.

NCLEX IV (7): Reduction of Risk

Actual Labs/ Diagnostics
 Bladder scan – scant urine
 Potassium – 5.1, 6.0, 4.8
 BUN - 52
 Creatinine – 3.6

NCLEX II (3): Health Promotion and Maintenance

Signs and Symptoms
 Not producing a lot of urine/urinary retention

NCLEX II (3): Health Promotion and Maintenance

Contributing Risk Factors
 Hx of renal failure
 Diabetes
 Coronary artery disease

NCLEX IV (7): Reduction of Risk

Therapeutic Procedures
Non-surgical
Dialysis
Surgical

Prevention of Complications
 (Any complications associated with the client's disease process? If not what are some complications you anticipate)
 Urinary Retention

NCLEX IV (6): Pharmacological and Parenteral Therapies

Medication Management
 Furosemide – 40mg IV and 20mg IV
 Sodium polystyrene sulfate – 30mg PO

NCLEX IV (5): Basic Care and Comfort

Non-Pharmacologic Care Measures
 Intermittent catheterization – q 2 hr PRN

NCLEX III (4): Psychosocial/Holistic Care Needs

Stressors the client experienced?
 Could not breathe
 Had to have a rapid response called

Client/Family Education

NCLEX I (1): Safe and Effective Care Environment

Document 3 teaching topics specific for this client.

- Use of Furosemide
- That potassium is excreted through bowel movements using kayexalate
- The use of a PICC line

Multidisciplinary Team Involvement

(Which other disciplines were involved in caring for this client?)

Nurse
Nephrologist
Rapid response team

Reflection Paper

Directions: Write a 1-page reflection paper using Times New Roman, 12 pt. font and double-spaced. Include the following:

1. Describe an “Aha” moment you experienced during this learning experience.
2. What were the most important aspects of this simulation and what did you learn?
3. How will this simulation experience impact your nursing practice?

I had a couple of “Aha” moments. The first one was when I had to give a med to treat the hyperkalemia. It was a choice between kayexalate and calcium gluconate. I was for sure that it was calcium gluconate because I was in a different observation, and they taught me that is one of the first medications a patient should receive when they are critically hyperkalemic. When I saw that my patient was declining and needed a rapid response called, I knew that I would need to redo the simulation. I realized that the calcium gluconate can affect the heart. Which is what happened to my patient. I understand that kayexalate is a better option. It doesn't affect the heart like calcium gluconate does, it promotes the patient to have bowel movements. My other “Aha” moment was during the scenario where I got another patient. A question popped up that asked me how I should delegate my time: should I see my chronic kidney disease patient, or should I see my patient who is reporting chest pain. I remembered the ABC's and that chest pain can be a sign of a myocardial infarction. I chose to go see the chest pain patient first and I am glad that I did. It showed me that I knew how to delegate, and priority think. The most important aspects of this simulation were listening to the patient and communicating with the doctor. The nurse would call the doctor with regular updates and do over the phone medication orders. This simulation will be taken with me when I start my career by reminding me to have good communication with my patient's provider. It is important to notice the signs and symptoms that the patient is reporting and notifying the doctor. Doctors make changes to the patients care plan all the time and to make sure the orders get implemented the nurse and doctor needs to have good communication.