Acute Kidney Injury NCLEX Practice Questions

This quiz will test your knowledge on Acute Kidney Injury (also called Acute Renal Failure) in preparation for NCLEX.

1. _____ is solely filtered from the bloodstream via the glomerulus and is NOT reabsorbed back into the bloodstream but is excreted through the urine.*

A. Urea
B. Creatinine
C. Potassium
D. Magnesium

2. A patient with acute renal injury has a GFR (glomerular filtration rate) of 40 mL/min. Which signs and symptoms below may this patient present with? Select all that apply:*

A. Hypervolemia
B. Hypokalemia
C. Increased BUN level
D. Decreased Creatinine level

3. You're assessing morning lab values on a female patient who is recovering from a myocardial infarction. Which lab value below requires you to notify the physician?*

A. Potassium level 4.2 mEq/L
B. Creatinine clearance 35 mL/min
C. BUN 20 mg/dL
D. Blood pH 7.40

4. A 55-year-old male patient is admitted with a massive GI bleed. The patient is at risk for what type of acute kidney injury?*

A. Post-renal
B. Intra-renal
C. Pre-renal
D. Intrinsic renal

5. Select all the patients below that are at risk for acute intra-renal injury?*

A. A 45 year old male with a renal calculus.
B. A 65 year old male with benign prostatic hyperplasia.
C. A 25 year old female receiving chemotherapy.
D. A 36 year old female with renal artery stenosis.

E. A 6 year old male with acute glomerulonephritis.
F. An 87 year old male who is taking an aminoglycoside medication for an infection.

6. A patient with acute kidney injury has the following labs: GFR 92 mL/min, BUN 17 mg/dL, potassium 4.9 mEq/L, and creatinine 1 mg/dL. The patient's 24 hour urinary output is 1.75 Liters. Based on these findings, what stage of AKI is this patient in?*

A. Initiation
B. Diuresis
C. Oliguric
D. Recovery

7. A 36-year-old male patient is diagnosed with acute kidney injury. The patient is voiding 4 L/day of urine. What complication can arise based on the stage of AKI this patient is in? Select all that apply:*

A. Water intoxication
B. Hypotension
C. Low urine specific gravity
D. Hypokalemia
E. Normal GFR

8. True or False: All patients with acute renal injury will progress through the oliguric stage of AKI but not all patients will progress through the diuresis stage.*

True
False

9. Which patient below with acute kidney injury is in the oliguric stage of AKI:*

A. A 56 year old male who has metabolic acidosis, decreased GFR, increased BUN/Creatinine, hyperkalemia, edema, and urinary output 350 mL/day.
B. A 45 year old female with metabolic alkalosis, hypokalemia, normal GFR, increased BUN/creatinine, edema, and urinary output 600 mL/day.
C. A 39 year old male with metabolic acidosis, hyperkalemia, improving GFR, resolving edema, and urinary output 4 L/day.
D. A 78 year old female with respiratory acidosis, increased GFR, decreased BUN/creatinine, hypokalemia, and urinary output 550 mL/day.

10. You're developing a nursing care plan for a patient in the diuresis stage of AKI. What nursing diagnosis would you include in the care plan?

A. Excess fluid volume

B. Risk for electrolyte imbalance
C. Urinary retention
D. Acute pain

11. While educating a group of nursing students about the stages of acute kidney injury, a student asks how long the oliguric stage lasts. You explain to the student this stage can last?*

A. 1-2 weeks
B. 1-3 days
C. A few hours to 2 weeks
D. 12 months

12. A patient with AKI has a urinary output of 350 mL/day. In addition, morning labs showed an increased BUN and creatinine level along with potassium level of 6 mEq/L. What type of diet ordered by the physician is most appropriate for this patient?*

A. Low-sodium, high-protein, and low-potassium
B. High-protein, low-potassium, and low-sodium
C. Low-protein, low-potassium, and low-sodium
D. High-protein and high-potassium

13. After an arteriovenous graft is inserted in a patient's right forearm, the patient reports pain and coldness in the right fingers. Which action would the nurse take?

A. Remind the patient to take a daily low-dose aspirin tablet.
B. Report the patient's symptoms to the health care provider.
C. Elevate the patient's arm on pillows above the heart level.
D. Teach the patient about normal arteriovenous graft function.

14. Which assessment finding would the nurse expect when a patient with acute kidney injury (AKI) has an arterial blood pH of 7.30?

A. Persistent skin tenting
B. Rapid, deep respirations
C. Hot, flushed face and neck
D. Bounding peripheral pulses

15. The nurse is planning care for a patient with severe heart failure who has developed increased blood urea nitrogen (BUN) and creatinine levels. Which aim will be the primary treatment goal?

A. Augmenting fluid volume
B. Maintaining cardiac output

C. Diluting nephrotoxic substances
D. Preventing systemic hypertension

16. Which statement by a patient with stage 5 chronic kidney disease (CKD) indicates that the nurse's teaching about management of CKD has been effective?

A. "I need to get most of my protein from low-fat dairy products."
B. "I will increase my intake of fruits and vegetables to 5 per day."
C. "I will measure my output each day to help calculate the amount I can drink."
D. "I need erythropoietin injections to boost my immunity and prevent infection."

17. Which information will the nurse monitor to determine the effectiveness of prescribed calcium carbonate (Caltrate) for a patient with chronic kidney disease (CKD)?

A. Blood pressure
B. Phosphate level
C. Neurologic status
D. Creatinine clearance

18. Sodium polystyrene sulfonate (Kayexalate) is prescribed to be given via nasogastric tube for a patient with hyperkalemia. Which assessment would the nurse make before administering the medication?

A. Bowel sounds
B. Blood glucose
C. Blood urea nitrogen (BUN)
D. Level of consciousness (LOC)

19. Which laboratory result would the nurse check before administering calcium carbonate to a patient with chronic kidney disease?

A. Serum potassium
B. Serum phosphate
C. Serum creatinine
D. Serum cholesterol

20. Which action will the nurse include in the plan of care to maintain the patency of a patient's left arm arteriovenous fistula?
A. Auscultate for a bruit at the fistula site.

B. Assess the quality of the left radial pulse.
C. Irrigate the fistula with saline every 8 to 12 hours.
D. Compare blood pressures in the left and right arms.

21. Which action by a patient who is using peritoneal dialysis (PD) indicates that the nurse should provide more teaching about PD?

A. The patient leaves the catheter exit site without a dressing.
B. The patient plans 30 to 60 minutes for a dialysate exchange.
C. The patient cleans the catheter while in the bathtub each day.
D. The patient slows the inflow rate when experiencing abdominal pain.

22. A patient with diabetes who has bacterial pneumonia is being treated with IV gentamicin. Which laboratory value would the nurse monitor for adverse effects of the medication?

A. Blood glucose
B. Urine osmolality
C. Serum creatinine
D. Serum potassium

23. A patient has been hospitalized for 4 days with acute kidney injury (AKI) caused by dehydration. Which information will be **most** important for the nurse to report to the health care provider?

E. The creatinine level is 3.0 mg/dL.
F. Urine output over an 8-hour period is 2500 mL.
G. The blood urea nitrogen (BUN) level is 67 mg/dL.
H. The glomerular filtration rate is less than 30 mL/min/1.73 m^2.

24. A patient admitted with acute kidney injury due to dehydration has oliguria, anemia, and hyperkalemia. Which prescribed action would the nurse take **first**?

I. Insert a urinary retention catheter.
J. Administer epoetin alfa (Epogen).
K. Place the patient on a cardiac monitor.
L. Give sodium polystyrene sulfonate (Kayexalate).

25. A patient in the oliguric phase after an acute kidney injury has had a 250-mL urine output and an emesis of 100 mL in the past 24 hours. What is the patient's fluid restriction for the next 24 hours? _____950mL_____

Define each of the below labs, list normal values, and the impact kidney injury has on their value.

Finding	Description	Normal Value	AKI	CKD
BUN	Blood urea nitrogen, measures amount of urea nitrogen in blood.	6-20 mg/dL	Increase BUN.	Increases BUN.
Cr	Formed and excreted by the kidneys.	0.6-1.2 mg/dL	Increases Cr.	Increases Cr.
Hct	Percentage of RBC in the blood.	48% for Females and 41-53% for males.	Decreases Hct.	Decreases Hct.
Hgb	Protein in RBC's that carries oxygen.	12-16g/dL for females and 14-18 g/dL for males.	Decreases Hgb.	Decreases Hgb.
K+	Regulates acid base and water balance in the blood.	3.5-5 mEq/L	Increases K+.	Increases K+.
Ca+	Excreted and absorbed by the kidneys.	100-300 mg/24 hours.	Increases Ca+.	Increases Ca+