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Acute Kidney Injury NCLEX Practice Questions

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. 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

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

Finding	Description	Normal Value (adults)	AKI	CKD
BUN	Measurement of nitrogen from urea in blood – kidney function, hydration status, liver health	7-20 mg/dL	Rapid rise in BUN but reversible	Elevated bc damaged kidneys cannot effectively filter waste
Cr	Waste product produced by muscle metabolism – kidney function	Males: 0.7-1.3 mg/dL Females: 0.5-1.1 mg/dL	Rapid rise in Cr	Elevated d/t decreased kidney filtration
Hct	how well kidneys are maintaining fluid balance & producing blood-stimulating hormones	Males: 41-53% Females: 36-46%	Decreases leading to anemia d/t decrease in production of erythropoietin	Decreases
Hgb	Presence of broke down RBC's = potential renal injury, infection, etc. Often present red/brown, cloudy urine	Males: 13.5-17.5 g/dL Female: 12.0-16.0 g/dL	Decreases d/t impaired erythropoietin production, blood loss or reduced RBC	Decrease d/t kidneys failing to produce enough EPO = decreased RBC production
K+	Electrolyte balance and kidney function – kidneys ability to filter excrete potassium for acid/base balance	3.5-5.0 mEq/L	Elevates = hyperkalemia d/t inability to secrete potassium	Increase d/t kidneys inability to filter properly
Ca+	Evaluate kidney stone risk and monitors hypo/hypercalcemia	8.4-10.2 mg/dL	Decreases = hypocalcemia d/t reduced calcium absorption from GI tract	Decreases d/t decreases vitD prod. which is need for calcium absorption

