

### 1. Disease Process & Brief Pathophysiology

Kidney function can be considered the rate of passage of solute across the specialized walls of the capillaries within the glomerulus. In the normal glomerulus the pressure within the glomerular capillaries determines the rate of filtration (GFR). Most cases of AKI are due to vascular insults to the kidney that affect this perfusion pressure.

### 4. Diagnostic Tests Pertinent or confirming of diagnosis

- Urine output measurement (P)
- Urinalysis (P)
- Blood tests (P)
- Imaging tests
- Removing a sample of kidney tissue for testing

### 2. Factors for the Development of the Disease/Acute Illness

- Age 65 years or older (P)
- Chronic kidney disease- particularly if eGFR <60
- Past history of AKI
- Co-existing illness- cardiac failure, liver disease or diabetes (P)
- Neurological impairment or disability, in particular where reliance on a carer may mean reduced access to fluids.
- Hypovolemia (P)
- Symptoms or history of urological obstruction
- Sepsis (P)
- Use of iodinated contrast agents within the previous week
- Current or recent medication with nephrotoxic potential
- Patients in the perioperative period

### 5. Lab values that may be affected

- ACR (P)
- RBC (P)
- WBC (P)
- UP/CR

### 3. Signs and Symptoms

- Decreased urine output (P)
- Swelling in legs or feet
- Feeling tired (P)
- Trouble catching breath
- Confusion
- Nausea
- Dehydration (P)

### 6. Current Treatment

- Antibiotics (P)
- IV therapy (P)
- Blood transfusion (P)
- Diet change (P)

**Student Name:** Click or tap here to enter text. **Unit:** Click or tap here to enter text. **Pt Initials:** Click or tap here to enter text. **Date:** Click or tap to enter a date.

**7. Focused Nursing Diagnosis:**

Electrolyte imbalance

**8. Related to (r/t):**

Increased potassium levels

**9. As evidenced by (aeb):**

Kidney failure or kidneys not functioning properly

**10. Desired Patient Outcome:**

Patient will achieve restored fluid balance by 1/13/2021 by 1600.

**11. Nursing Interventions related to Nursing Diagnosis in #7:**

1. Record I&O

**Evidence Based Practice:**

Accurate monitoring of I&O is necessary for determining renal function and fluid replacement needs.

2. Monitor urine specific gravity

**Evidence Based Practice:**

Measures the kidney's ability to concentrate urine.

3. Monitor BP and HR

**Evidence Based Practice:**

Orthostatic hypotension and tachycardia suggest hypovolemia.

**12. Patient Teaching:**

1. Teach patient how to measure the amount of urine and stool they have each day.

2. Learn to take own blood pressure and keep a record of results.

3. Teach patient how to record an I&O.

**13. Discharge Planning/Community Resources:**

1. Weigh yourself daily, at same time every day, with same kind of clothes. A weight gain of more than 0.5kg/day suggest fluid retention.

2. A referral to a nutritionist. Dietary changes are required.

3. Record I&O.

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[Acute Kidney Injury AKI Acute kidney failure, renal failure. Patient | Patient](#)

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