# Fluid and Electrolyte Imbalance Nursing Care Plan

**Name:** Cam Dunphy **Age:** 52

**Gender:** Male **Date of admission:** October 5, 2024

| **Medical history** |
| --- |
| Cam was admitted with severe dehydration following 3 days of persistent vomiting and diarrhea. He has a history of hypertension and takes diuretics regularly, which may have contributed to electrolyte imbalances. No other significant medical history noted. |
| **Assessment** |
| **Subjective assessment (based on patient's description)** |
| I've been feeling really weak, dizzy, and I haven ' t been able to keep anything down for the past few days. My muscles feel sore, and I can barely stand. |
| **Objective assessment** |
| **1. Clinical manifestations:** |
| Signs of dehydration: |
| ☑ Dry skin ☑ Dry mucous membrane ☑ Decreased skin turgor ☑ Oliguria |
| Signs of fluid overload: |
| ☐ Edema ☐ Ascites ☐ Dyspnea ☐ Crackles in lungs |
| Symptoms related to specific electrolyte imbalance: |
| ☑ Muscle weakness ☐ Cramps ☐ Confusion ☐ Cardiac rhythm disturbances |
| **2. Laboratory findings:** |
| Serum electrolytes (Na, K, Ca, Mg, Cl, HCO3): |
| Na: 136 mEq/L (normal), K: 2.9 mEq/L (low), Ca: 9.2 mg/dL (normal), Mg: 1.7 mg/dL (normal), Cl: 104 mEq/L (normal), HCO: 24 mEq/L (normal) |
| Blood urea nitrogen (BUN) and creatinine: |
| BUN: 29 mg/dL (elevated)<br>Creatinine: 1.1 mg/dL (normal) |
| Complete blood count (CBC): |
| WNL |
| Urine specific gravity: |
| 1.030 (high, indicating dehydration) |

**3. Diagnostic tests:**

- [x] ECG (for detecting cardiac arrhythmias related to electrolyte imbalances)
- [ ] Imaging studies relevant to underlying conditions (e.g., chest X-ray for pulmonary edema)
- [ ] Others:

**Nursing diagnosis**

**1. Risk for imbalanced fluid volume related to:**

Dehydration due to fluid loss (vomiting and diarrhea).

**2. Electrolyte imbalance (specify which below) related to:**

- [x] Hyperkalemia
- [ ] Hypokalemia
- [ ] Hypernatremia
- [ ] Hyponatremia
- [ ] Other:

**3. Other nursing diagnoses:**

**Goals/objectives**

**Short-term goal**

Cam Dunphy will exhibit stabilized fluid levels and improved potassium levels within 24 hours, as evidenced by serum potassium returning to a normal range (3.5-5.0 mEq/L) and improved hydration (normal skin turgor, urine output).

**Long term goal**

Cam Dunphy will maintain balanced fluid and electrolyte levels throughout his hospital stay and post-discharge, with strategies in place to manage potential imbalances (e.g., diet modification, medication adjustment).

**Nursing interventions and rationales**

**1. Monitor fluid status:**

- [x] Measure and record input and output every 4 hrs.
- [x] Assess daily weight at the same time each day.

**Rationale:** Provides data on fluid balance and helps evaluate the effectiveness of interventions in real time.

**2. Manage fluid intake and output:**

- ✔ Administer IV fluids (e.g., isotonic solutions) as ordered.
- ✔ Restrict fluids if indicated (e.g., in cases of fluid overload).
- ✔ Encourage or limit oral fluid intake depending on the patient's condition.

**Rationale:** Helps to restore normal fluid volume and prevent further dehydration.

**3. Electrolyte management:**

- ✔ Administer electrolyte supplements (e.g., potassium chloride) or modify dietary intake as ordered.
- ✔ Monitor serum electrolyte levels every _____6 hours_____ or as specified.

**Rationale:** Ensures timely correction of hypokalemia and promotes long-term management through diet.

**4. Patient education:**

- ✔ Educate the patient and family on the importance of managing fluid intake.
- ✔ Teach them to recognize symptoms of fluid or electrolyte imbalances (e.g., dizziness, palpitations, swelling).
- ✔ Discuss dietary sources of electrolytes (e.g., potassium from bananas, sodium restriction).

**Rationale:** Enhances understanding of his condition and encourages proactive management post-discharge.

**5. Monitor for complications:**

- ✔ Observe for signs of edema, ascites, respiratory distress, and arrhythmias.
- ✔ Adjust treatment plans based on symptoms and lab results.

**Rationale:** Early detection of complications allows for timely interventions and prevents further health risks.

**Evaluation**

- ✔ Reassess the patient’s fluid and electrolyte status through clinical assessment and laboratory tests.
- ✔ Evaluate the effectiveness of interventions (e.g., stabilized lab values, and improved clinical signs).
- ✔ Modify the care plan based on the patient’s response and ongoing assessments.
- ✔ Others: Continued to educate the patient on the importance of adequate hydration and regular follow-up.

**Additional notes**

1. Documented intake and output every 4 hours, noting increased oral fluid tolerance.
2. Recorded daily weight; noted improvement in urine specific gravity.
3. Lab results and patient ’ s improved clinical condition were documented.
4. Education provided to the patient and family on managing fluid and electrolyte intake.

Nurse's signature: **Iris Downey**

Date: October 5, 2024