Electrolyte Imbalance

Patient Profile
E.G. is a 73-year-old woman whose daughter brings her to see the health care provider because she has had a case of the "stomach flu," with vomiting and diarrhea for the past 3 to 4 days and is now experiencing occasional light-headedness and dizziness. Her medical history includes hypertension, hypercholesterolemia, and mild heart failure. She is taking:

- Digoxin 0.125 mg po daily
- Captopril 25 mg po twice dailty
- Furosemide 40 mg po daily
- Potassium chloride 20 mEq po daily
- Atorvastatin 20 mg po at bedtime

Subjective Data
- Has been following a low-sodium diet
- States her abdomen feels bloated and she has been constipated since the onset of the "flu"
- Has been taking her medications except for the potassium chloride pill because it upsets her stomach.
- Occasionally takes an extra "water pill" when her ankles are swollen

Objective Data
Physical Examination
- Temperature 98.2°F, pulse 88, respirations 20, BP 138/86
- Lungs clear to auscultation, breathing regular and unlabored
- +1 edema bilaterally in ankles
- Muscle strength in upper extremities normal and equal and in lower extremities weak
- Sensation to all extremities normal
- Abdomen distended with hypoactive bowel sounds

Diagnostic Studies
- Lab values
  - Sodium 139.0mEq/L
  - Potassium 3.0mEq/L
  - HCO_3^- 25.4mEq/L
  - Chloride 99.5 mEq/L

Discussion Questions
1. What is a possible pathophysiologic cause of E.G.'s muscle weakness and dizziness? What other symptom does E.G. have that may be related to this problem?
   Answer:.
   Rationale:

2. What factors contributed to the development of this electrolyte imbalance?
   Answer:
   Rationale:.

3. What should you be on an alert for in a patient who is on furosemide and digoxin and why?
   Answer:

Rationale:

4. What additional signs and symptoms should you assess E.G. for?
   Answer:
   Rationale:

5. What diagnostic test is indicated and why?
   Answer:
   Rationale:

6. Write three nursing diagnoses that are appropriate for E.G.
   Answer:
   Rationale:

7. What interprofessional care would you anticipate for E.G.?
   Answer:
   Rationale:

8. What instructions should you give E.G. regarding the signs and symptoms of this electrolyte imbalance and how to prevent it?
   Answer:
   Rationale: