caution in elderly clients; those with acute MI, incomplete heart block, and renal insufficiency; or in pregnant or lactating mothers.

Monitor the client for side effects such as fatigue, drowsiness, dizziness, visual disturbances, anorexia, nausea, and vomiting. Advise clients to carry or wear identification describing their medical diagnosis and drug regimen. Monitor potassium levels, because hypokalemia predisposes the client to serious digoxin toxicity. Do not give clients antacids or antidiarrheal medications within 2 hours of cardiac glycoside administration, because they decrease the absorption of digoxin. Cardiac glycosides interact with many other drugs, so be vigilant in observing for drug–drug interactions. Caution must be used when administering nephrotoxic drugs with digoxin, due to the potential for a rapid buildup of digoxin in the blood.

**NURSING PROCESS FOCUS  Clients Receiving Cardiac Glycoside Therapy**

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Potential Nursing Diagnoses</th>
</tr>
</thead>
</table>
| Prior to administration:  
- Obtain a complete health history including allergies, drug history, and possible drug interactions.  
- Assess vital signs, urine output, and cardiac output, initially and throughout therapy.  
- Determine the reason the medication is being administered. |  
- Tissue Perfusion, Ineffective, related to impaired cardiac status  
- Cardiac Output, Decreased  
- Fluid Volume, Excess  
- Knowledge, Deficient, related to drug therapy |

**Planning: Client Goals and Expected Outcomes**

- Report decreased symptoms of cardiac decompensation related to fluid overload.  
- Exhibit evidence of improved organ perfusion, including kidney, heart, and brain.  
- Demonstrate an understanding of the drug’s action by accurately describing drug side effects and precautions.  
- Immediately report side effects such as nausea, vomiting, diarrhea, heart rate below 60 beats per minute, and vision changes.

**Implementation**

<table>
<thead>
<tr>
<th>Interventions and (Rationales)</th>
<th>Client Education/Discharge Planning</th>
</tr>
</thead>
</table>
| Monitor ECG for rate and rhythm changes during initial digitalization therapy. (Digoxin has a strong positive inotropic effect.) | Instruct client to:  
- Count pulse for 1 full minute and record pulse with every dose.  
- Contact the healthcare provider if pulse rate is less than 60 or greater than 100 beats per minute. |
| Observe for side effects such as nausea, vomiting, diarrhea, anorexia, shortness of breath, vision changes, and leg muscle cramps. (These are signs of toxicity.) | Instruct client to report side effects immediately to prevent toxicity. |
| Weigh client daily. (Weight gain could indicate worsening of heart failure.) | Instruct client to report weight gain of 2 lb or more per day. |
| Administer precise ordered dose at same time each day. (Overdose may cause serious toxicity.) | Instruct client to:  
- Take as directed; do not double doses.  
- Not discontinue drug without the advice of the healthcare provider. |
| Monitor serum drug level and report level greater than 1.8 ng/ml. (Serum drug levels help determine therapeutic concentration and toxicity.) | Instruct client to keep scheduled laboratory visits for testing. |
| Monitor levels of potassium, magnesium, calcium, BUN, and creatinine. (Hypokalemia predisposes the client to digoxin toxicity.) | Instruct client to consume foods high in potassium such as bananas, apricots, kidney beans, sweet potatoes, and peanut butter. |
| Monitor for signs and symptoms of digoxin toxicity. (Early assessment may help prevent severe toxicity.) | Instruct client to immediately report visual changes, mental depression, palpitations, weakness, loss of appetite, vomiting, and diarrhea. |

**Evaluation of Outcome Criteria**

Evaluate the effectiveness of drug therapy by confirming that client goals and expected outcomes have been met (see “Planning”).  
- The client verbalizes decreased symptoms of cardiac decompensation related to fluid overload.  
- The client exhibits evidence of improved organ perfusion, including kidney, heart, and brain.  
- The client demonstrates an understanding of the drug’s action by accurately describing drug side effects and precautions.  
- The client reports nausea, vomiting, heart rate less than 60 beats per minute, and vision changes.

See Table 24.1, under “Cardiac Glycosides,” for a list of drugs to which these nursing actions apply.