### NURSING PROCESS FOCUS  Clients Receiving Beta-adrenergic Antagonist Therapy

<table>
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<th>Assessment</th>
<th>Potential Nursing Diagnoses</th>
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| Prior to administration: | • Knowledge, Deficient, related to drug therapy  
| • Obtain a complete health history including allergies, drug history, and possible drug interactions.  
| • Assess vital signs, urinary output, and cardiac output (initially and throughout therapy).  
| • Assess for presence of respiratory disease, including asthma and COPD. | • Cardiac Output, Decreased  
| • Injury, Risk for, related to orthostatic hypotension  
| • Sexual Dysfunction  
| • Noncompliance, related to therapeutic regimen |

#### Planning: Client Goals and Expected Outcomes

The client will:  
• Exhibit a reduction in systolic and diastolic blood pressure.  
• Exhibit stable cardiac output and pulse rate.  
• Demonstrate an understanding of the drug’s action by accurately describing drug side effects and precautions.

### Implementation

<table>
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<th>Interventions and (Rationales)</th>
<th>Client Education/Discharge Planning</th>
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<tr>
<td>• Monitor vital signs and pulse, observe for signs of bradycardia, heart failure, or pulmonary edema. (Beta-blockers decrease heart rate and cardiac output.)</td>
<td>Instruct client to monitor pulse and blood pressure daily.</td>
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| • Monitor for orthostatic hypotension. (Beta-blockers cause orthostatic hypotension.) | Instruct client to:  
| | • Stop medication and notify healthcare provider if pulse falls below 60 beats per minute or blood pressure is 90/60 mm Hg or below.  
| | • Rise slowly from a sitting or lying position to avoid dizziness. |
| • Observe for drowsiness, fatigue, and weakness. (These are side effects of beta-blockers.) | Instruct client to:  
| | • Report side effects such as difficulty in breathing, dizziness, confusion, fatigue, weakness, and impotence.  
| | • Avoid driving or other activities requiring mental alertness or physical coordination until effects of the drug are known. |
| • In diabetic clients, monitor for hypoglycemia. (Some beta-blockers may lower blood glucose levels.) | Instruct the diabetic client to:  
| | • Check finger-stick blood glucose levels at regular intervals and report signs of hypoglycemia and/or consistent fasting blood glucose levels below 70 mg/dl. |
| • Monitor for effects on the heart, especially with exertion. (Beta-blockers can decrease cardiac output.) | Instruct client to:  
| | • Begin exercise or other exertion slowly and to determine tolerance to increased activity.  
| | • Report chest pain, shortness of breath, fainting, or palpitations with exertion.  
| | • Keep all scheduled laboratory visits and appointments for cardiac evaluations such as ECGs. |

### 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’s blood pressure is within normal limits.  
• The client’s cardiac output and pulse rate remain stable.  
• The client demonstrates an understanding of the drug’s action by describing drug side effects and precautions.

∞ See Table 23.7 under “Beta-Blockers” for a list of drugs to which these nursing actions apply.

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**Alpha₂-adrenergic Agonists**

Alpha₂-agonists are centrally acting and have multiple side effects, thus these drugs are usually reserved to treat hypertension uncontrolled by other drugs. Assess for the presence of common adverse effects such as orthostatic hypotension, sedation, decreased libido, impotence, sodium/water retention, and dry mouth. Alpha₂-agonists are pregnancy category C; these drugs are distributed into breast milk.

**Beta-adrenergic Blockers**

Some beta-adrenergic blockers decrease heart rate and affect myocardial conduction and contractility. Assess for signs of respiratory distress, including shortness of breath and wheezing, in clients on nonspecific beta-blocking drugs. These side effects tend to occur at high doses.

Because beta-blockers affect myocardial contractility, monitor heart rate, rhythm, and sounds, as well as ECG.