

- Acid–base imbalances
- Ischemic heart disease (angina pectoris, myocardial infarction)
- Cardiac valvular disease
- Febrile illness
- Respiratory disorders (eg, chronic lung disease)
- Exercise
- Emotional upset
- Excessive ingestion of caffeine-containing beverages (eg, coffee, tea, colas)
- Cigarette smoking
- Drug therapy with digoxin, antidysrhythmic drugs, CNS stimulants, anorexiant, and tricyclic antidepressants
- Hyperthyroidism
- Observe for clinical signs and symptoms of dysrhythmias. Mild or infrequent dysrhythmias may be perceived by the client as palpitations or skipped heartbeats. More severe dysrhythmias may produce manifestations that reflect decreased cardiac output and other hemodynamic changes, as follows:
  - Hypotension, bradycardia or tachycardia, and irregular pulse
  - Shortness of breath, dyspnea, and cough from impaired respiration
  - Syncope or mental confusion from reduced cerebral blood flow
  - Chest pain from decreased coronary artery blood flow. Angina pectoris or myocardial infarction may occur.
  - Oliguria from decreased renal blood flow
- When electrocardiograms (ECGs) are available (eg, 12-lead ECG or continuous ECG monitoring), assess for indications of dysrhythmias.

### Nursing Diagnoses

- Decreased Cardiac Output related to ineffective pumping action of the heart
- Ineffective Tissue Perfusion, cerebral and peripheral, related to compromised cardiac output or drug-induced hypotension
- Activity Intolerance related to weakness and fatigue
- Impaired Gas Exchange related to decreased tissue perfusion
- Anxiety related to potentially serious illness
- Deficient Knowledge: Pharmacologic and nonpharmacologic management of dysrhythmias
- Excess Fluid Volume: Peripheral edema and pulmonary congestion related to decreased cardiac output

### Planning/Goals

*The client will:*

- Receive or take antidysrhythmic drugs accurately
- Avoid conditions that precipitate dysrhythmias, when feasible
- Experience improved heart rate, circulation, and activity tolerance
- Be closely monitored for therapeutic and adverse drug effects

- Avoid preventable adverse drug effects
- Have adverse drug effects promptly recognized and treated if they occur
- Keep follow-up appointments for monitoring responses to treatment measures

### Interventions

Use measures to prevent or minimize dysrhythmias:

- Treat underlying disease processes that contribute to dysrhythmia development. These include cardiovascular (eg, acute myocardial infarction) and noncardiovascular (eg, chronic lung disease) disorders.
- Prevent or treat other conditions that predispose to dysrhythmias (eg, hypoxia, electrolyte imbalance).
- Help the client avoid cigarette smoking, overeating, excessive coffee drinking, and other habits that may cause or aggravate dysrhythmias. Long-term supervision and counseling may be needed.
- For the client receiving antidysrhythmic drugs, implement the preceding measures to minimize the incidence and severity of acute dysrhythmias, and help the client comply with drug therapy.
- Monitor heart rate and rhythm and blood pressure every 4 to 6 hours.
- Check laboratory reports of serum electrolytes and serum drug levels when available. Report abnormal values.

### Evaluation

- Check vital signs for improved heart rate and rhythm.
- Interview and observe for relief of symptoms and improved functioning in activities of daily living.
- Interview and observe for hypotension and other adverse drug effects.
- Interview and observe for compliance with instructions for taking antidysrhythmic drugs and other aspects of care.

## PRINCIPLES OF THERAPY

### Nonpharmacologic Management of Dysrhythmias

Nonpharmacologic management is preferred, at least initially, for several dysrhythmias. For example, sinus tachycardia usually results from such disorders as infection, dehydration, or hypotension, and management should attempt to relieve the underlying cause. For PSVT with mild or moderate symptoms, Valsalva's maneuver, carotid sinus massage, or other measures to increase vagal tone are preferred. For ventricular fibrillation, immediate defibrillation by electrical countershock is the initial management of choice.

In addition to these strategies, others are being increasingly used. The impetus for nonpharmacologic management developed mainly from studies demonstrating that antidysrhythmic drugs could worsen existing dysrhythmias, cause new dysrhythmias, and cause higher mortality rates in