

Tachycardia with a Pulse

Aliases

Atrial fibrillation (A-FIB)	Atrial flutter
Supraventricular tachycardia (SVT)	Multifocal atrial tachycardia (MAT)
Torsades	Ventricular tachycardia (VT)

Patient Care Goals

1. Maintain adequate oxygenation, ventilation, and perfusion
2. Control ventricular rate
3. Restore regular sinus rhythm in unstable patient
4. Search for underlying cause:
 - a. Medications (caffeine, diet pills, thyroid, decongestants)
 - b. Drugs (cocaine, amphetamines)
 - c. History of dysrhythmia
 - d. congestive heart failure (CHF)

Patient Presentation

Patients will manifest elevated heart rate for age and may or may not also present with associated signs or symptoms such as palpitations, dyspnea, chest pain, syncope/near-syncope, hemodynamic compromise, altered mental status, or other signs of end organ malperfusion

Inclusion Criteria

Heart rate greater than 100 BPM in adults or relative tachycardia in pediatric patients

Exclusion Criteria

Sinus tachycardia

Patient Management

Assessment, Treatments, and Interventions

1. Adult Management

- a. Manage airway as necessary
- b. Administer oxygen as appropriate with a target of achieving 94–98% saturation
- c. Initiate monitoring and perform 12-lead EKG
- d. Establish IV access
- e. Check blood glucose and treat hypoglycemia per the [Hypoglycemia Guideline](#)
- f. Consider the following additional therapies if tachycardia with signs and symptoms or hemodynamic instability continues:
 - i. **Regular Narrow Complex Tachycardia – Stable (SVT)**
 1. Perform vagal maneuvers
 2. Adenosine 6 mg IV (proximal site) followed by 10 mL fluid bolus
 - a. If tachycardia continues, give adenosine 12 mg IV
 - b. A third dose of adenosine, 12 mg IV, can be given
 3. Diltiazem 0.25 mg/kg slowly IV over 2 minutes