TACHYCARDIA With Pulses

1. Assess and support ABCs as needed
   - Give oxygen
   - Monitor ECG (identify rhythm), blood pressure, oximetry
   - Identify and treat reversible causes

2. Symptoms Persist

3. Is patient stable?
   - Stable
   - Unstable

4. Perform immediate synchronized cardioversion
   - Establish IV access and give sedation if patient is conscious; do not delay cardioversion
   - Consider expert consultation
   - If pulseless arrest develops, see Pulseless Arrest Algorithm

5. Establish IV access
   - Obtain 12-lead ECG (when available) or rhythm strip
   - Is QRS narrow (<0.12 sec)?

6. Narrow QRS:
   - NARROW QRS: Is Rhythm Regular?

7. Regular
   - Attempt vagal maneuvers
   - Give adenosine 6 mg rapid IV push. If no conversion, give 12 mg rapid IV push; may repeat 12 mg dose once
   - Does rhythm convert?
     - Note: Consider expert consultation
     - Converts
     - Does Not Convert

8. Irregular Narrow-Complex Tachycardia
   - Probable atrial fibrillation or possible atrial flutter or MAT (multifocal atrial tachycardia)
   - Consider expert consultation
   - Control rate (eg, diltiazem, β-blockers; use β-blockers with caution in pulmonary disease or CHF)

9. If rhythm converts, probable reentry SVT (reentry supraventricular tachycardia):
   - Observe for recurrence
   - Treat recurrence with adenosine or longer-acting AV nodal blocking agents (eg, diltiazem, β-blockers)

10. If rhythm does NOT convert, possible atrial flutter, ectopic atrial tachycardia, or junctional tachycardia:
    - Control rate (eg, diltiazem, β-blockers; use β-blockers with caution in pulmonary disease or CHF)
    - Treat underlying cause
    - Consider expert consultation

11. Irregular
    - Irregular Narrow-Complex Tachycardia
    - Probable atrial fibrillation or possible atrial flutter or MAT (multifocal atrial tachycardia)
    - Consider expert consultation
    - Control rate (eg, diltiazem, β-blockers; use β-blockers with caution in pulmonary disease or CHF)
    - Treat underlying cause
    - Consider expert consultation

12. WIDE QRS:
    - WIDE QRS: Is Rhythm Regular?
      - Expert consultation advised
      - If ventricular tachycardia or uncertain rhythm
        - Amiodarone
        - 150 mg IV over 10 min
        - Repeat as needed to maximum dose of 2.2 g/24 hours
        - Prepare for elective synchronized cardioversion
        - If SVT with aberrancy
          - Give adenosine (go to Box 7)

13. If atrial fibrillation with aberrancy
    - See Irregular Narrow-Complex Tachycardia
      (Box 11)
    - If pre-excited atrial fibrillation (AF + WPW)
      - Expert consultation advised
      - Avoid AV nodal blocking agents (eg, adenosine, digoxin, diltiazem, verapamil)
      - Consider antiarrhythmics (eg, amiodarone 150 mg IV over 10 min)
    - If recurrent polymorphic VT, seek expert consultation
    - If torsades de pointes, give magnesium (load with 1-2 g over 5-60 min, then infusion)

During Evaluation
- Secure, verify airway and vascular access when possible
- Consider expert consultation
- Prepare for cardioversion

Treat contributing factors:
- Hypoxia
- Hypo-/hyperkalemia
- Hypoglycemia
- Hypothermia
- Toxicity
- Tamponade, cardiac tamponade
- Tension pneumothorax
- Thrombosis (coronary or pulmonary)
- Trauma (hypovolemia)

*Note: If patient becomes unstable, go to Box 4.