





## Education/Pearls

**If the patient is stable with no symptoms they should be observed and expeditiously transported and monitored with precautionary IV transport. Any unstable patient will need prompt therapy including electrical therapy.**

The evaluation of wide complex tachycardia is based principally on the stability of the patient and evidence of altered mental status or shock. If the patient is unstable, utilize electricity if able; otherwise, medications or vagal maneuvers may be employed.

- Do not administer calcium channel blockers (diltiazem) in wide-complex tachycardias.
- Symptomatic tachycardia usually occurs at heart rates >150 BPM. If symptomatic at lower rates (100-120), consider underlying heart disease, like congestive heart failure.
- Obtaining rhythm strips can be helpful in further diagnosis of the patient's arrhythmia at the Emergency Department. Obtain rhythm strips and/or EKG after therapeutic intervention.
- Monomorphic (Regular) Wide-Complex Tachycardia:
  - Unstable - synchronized cardioversion if possible, otherwise defibrillate.
  - Stable - consider VT or SVT with aberrancy (presence of a bundle branch block). Amiodarone is the first line treatment. Adenosine can be considered if you suspect SVT with aberrancy; the strip must be regular and monomorphic.
    - Defibrillator pads should be in place on the patient when administering adenosine.
  - If there is suspicion of WPW, do not administer adenosine or other nodal blockers (e.g. CCB) and if there is a chaotic wide complex tachycardia greater than 220 bpm they probably will need cardioversion.
    - Administering nodal blocking agents in WPW can cause a paradoxical increase in the ventricular rate.
- Polymorphic Wide-Complex Tachycardia:
  - May be Torsades de Pointes, especially in patients with history of prolonged QTc.
  - Administer magnesium 2 g IV in addition to above treatments and defibrillation.

Local Cardiac Receiving Centers:

- BUMC-T
- NWMC
- SMH
- TMC
- SJMC