

Wide Complex Tachycardia

(Presumed Ventricular Tachycardia)

A guideline for patients with wide complex tachycardia of cardiac origin with QRS > 0.12 seconds & HR > 150. **SYNCHRONIZED CARDIOVERSION GENERALLY PRECEEDS DRUG THERAPY FOR UNSTABLE PATIENTS.** Unstable patients may be defined as those having a wide complex tachycardia with: significant chest pain, significant shortness of breath, decreased level of consciousness, hypotension, shock, or pulmonary edema.

Pre-Medical Control

1. Follow the **General Pre-Hospital Care Protocol**.
2. Identify and treat reversible causes.
3. Determine if patient is stable or unstable.

UNSTABLE

4. For patients that are unstable, cardiovert beginning at 100 J, increasing to 200 J, 300 J, 360 J. (Use clinical equivalent biphasic energy dose.)
5. If time and condition allow prior to cardioversion, sedate per MCA selection.

<p><u>Sedation:</u> (Select Options) (Titrate to minimum amount necessary)</p> <p><input type="checkbox"/> Midazolam 1-5 mg IV/ IO (0.05 mg/kg) titrated slowly may repeat every 5 minutes until maximum of 0.1 mg/kg</p> <p><input type="checkbox"/> Diazepam 5-10 mg IV/ IO (0.1 mg/kg) titrated slowly may repeat every 5 minutes until maximum 0.3 mg/kg</p> <p><input type="checkbox"/> Lorazepam 1-2 mg IV/ IO (0.1 mg/kg, max 4 mg/dose) titrated may repeat every 5 minutes until maximum of 8 mg</p> <p><input type="checkbox"/> Fentanyl 1 mcg/kg IV/IO</p>
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STABLE

6. Obtain 12-lead EKG
7. Administer Amiodarone 150 mg IV over 10 minutes **OR** Lidocaine 1 mg/kg IV push

<p><u>Medication Options</u> (Choose One)</p> <p><input type="checkbox"/> Amiodarone OR</p> <p><input type="checkbox"/> Lidocaine</p>
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Michigan
Adult Cardiac Protocols

WIDE COMPLEX TACHYCARDIA

Date: June 5, 2009

Page 2 of 3

8. If at any point a patient becomes unstable proceed to cardioversion.
9. Administer Magnesium Sulfate 2 gm IV/IO for suspected torsades de pointes.
10. Contact Medical Control

Post-Medical Control

11. Administer additional Amiodarone 150 mg IV over 10 minutes as needed to maximum of 450 mg OR Lidocaine 0.5 mg/kg IV push every 5-10 minutes to maximum of 3 mg/kg.

Adult Cardiac Protocols
WIDE COMPLEX TACHYCARDIA

Date: June 5, 2009

Page 3 of 3

(Presumed Ventricular Tachycardia) A guideline for patients with wide complex tachycardia of cardiac origin with QRS greater than 0.12 seconds & HR greater than 150. SYNCHRONIZED CARディオVERSION GENERALLY PRECEEDS DRUG THERAPY FOR UNSTABLE PATIENTS. Unstable patients may be defined as those having a wide complex tachycardia with: significant chest pain, significant shortness of breath, decreased level of consciousness, hypotension, shock, or pulmonary edema.

Follow **General Pre-hospital Care Protocol**
Identify and treat reversible causes



STABLE

Unstable with serious signs or symptoms
Related symptoms uncommon if HR less than 150

UNSTABLE

- Obtain 12-lead EKG
- Administer additional Amiodarone 150 mg IV over 10 minutes as needed to maximum of 450 mg
 - **OR**
- Lidocaine 0.5 mg/kg IV push every 5-10 minutes to maximum of 3 mg/kg

If time & condition allow consider sedation options (below)

DO NOT delay cardioversion

Synchronized Cardioversion
100 joules
If no conversion, repeat at 200, 300, 360 joules until conversion

Suspected torsades
Administer Magnesium Sulfate
2 gm IV/ IO

Contact
Medical Control

Contact Medical Control

**Medication Options
(Choose One)**

- Amiodarone
- OR**
- Lidocaine

**Sedation : (Select Options)
(Titrate to minimum amount necessary)**

- Midazolam 1-5 mg IV/ IO (0.05 mg/kg) titrated slowly may repeat every 5 minutes until maximum of 0.1 mg/kg
- Diazepam 5-10 mg IV/ IO (0.1 mg/kg) titrated slowly may repeat every 5 minutes until maximum 0.3 mg/kg
- Lorazepam 1-2 mg IV/ IO (0.1 mg/kg, max 4 mg/dose) titrated may repeat every 5 minutes until maximum of 8 mg
- Fentanyl 1 mcg/kg IV/IO

Administer additional Amiodarone 150 mg IV over 10 minutes as needed to maximum of 450 mg

OR

Lidocaine 0.5 mg/kg IV push every 5-10 minutes to maximum of 3 mg/kg