

**REGION I EMERGENCY MEDICAL SERVICES  
STANDING MEDICAL ORDERS  
EMT – Intermediate**

**SMO: Adult Wide Complex Tachycardia**

**Overview:** Wide complex tachycardia is most often ventricular in origin but may be supraventricular tachycardia with aberrant conduction. A widened QRS complex is defined as greater than or equal to 0.12 seconds.

**INFORMATION NEEDED**

- History of arrest:
- Witnessed collapse: time down and preceding symptoms
- Unwitnessed collapse: time down and preceding symptoms if known
- Bystander CPR and treatments, including First Responder, AED or PAD defibrillation, given prior to arrival
- Past medical history: diagnosis, medications
- Scene: evidence of drug ingestion, hypothermia, trauma, Valid DNR form, nursing home or hospice patient

**OBJECTIVE FINDINGS-- STABLE**

- No signs of poor perfusion
- Normal mental status

**TREATMENT**

- See DYSRHYTHMIASOVERVIEW Protocol
  - Routine Medical Care
  - Consult Medical Control for use of **Lidocaine 1 to 1.5 mg/kg IV or IO**; If Dysrhythmia persists, repeat Lidocaine 0.5 to 0.75 mg/kg IV or IO in 5 - 10 min. to a max total dose of 3 mg/kg at Medical Control discretion or **Amiodarone 150mg IV or IO over 10 minutes(150mg Amiodarone added to 100ml bag with 60drip tubing, attach 60drip tubing to main iv line and run 60drip tubing wide open).**
  - Obtain 12 Lead ECG if available when patient is stable.
- \_\_ If at any time the patient becomes unstable proceed to unstable protocol and cardioversion.***

## **OBJECTIVE FINDINGS-- UNSTABLE**

- AMS
- Signs of poor perfusion (chest pain, dyspnea, rales, hypotension-systolic BP<90 related to the tachycardia)

## **TREATMENT**

- See DYSRHYTHMIAS OVERVIEW Protocol
- Routine Medical Care
- Unsynchronized** (for acutely decompensated/near arrest patient) **or synchronized cardioversion** : 100 J, biphasic. Consult Medical Control for permission to give **Versed (midazolam) 2mg** slow IVP or **Valium (diazepam) 5 mg** slow IVP for sedation if patient is awake. Consult Medical Control for subsequent doses.
- Upon successful cardioversion, or if cardioversion fails consult Medical Control for use of **Lidocaine** 1-1.5 mg/kg IV or IO, Repeat 0.5 to 0.75 mg/kg IV or IO **Lidocaine** in 5 - 10 min. to a max total dose of 3 mg/kg at Medical Control discretion or **Amiodarone** 150mg IV or IO over 10 minutes(**150mg Amiodarone added to 100ml bag with 60drip tubing, attach 60drip tubing to main iv line and run 60drip tubing wide open**).
- Obtain 12 Lead ECG if available when patient is stable.

## **Medical Control Contact Criteria**

- For permission to administer Versed or Valium
- For permission to administer Lidocaine or Amiodarone

## **Documentation of adherence to protocol:**

- Stability documented (chart contains the word stable or unstable)
- Correct doses of medications administered if indicated
- If unstable patients receive **cardioversion**

## **PRECAUTIONS AND COMMENTS**

- A widened QRS complex is defined as greater than or equal to 0.12 seconds.
- A wide complex tachycardia is most often ventricular in origin but may be supraventricular tachycardia with aberrant conduction.
- Do not use **Lidocaine or Amiodarone** in the presence of underlying atrial fibrillation, atrial flutter, bradycardia with ventricular escape beats, or other conduction defect (2nd or 3rd degree AV block).
- Repeat **Lidocaine** doses should be reduced by one-half in elderly patients and patients with known liver disease, congestive heart failure, or on dialysis.
- Signs of **Lidocaine** toxicity include seizures, increased agitation and/or irritability, parasthesias or altered mental status.
- **(150mg Amiodarone added to 100ml bag with 60drip tubing, attach 60drip tubing to main iv line and run 60drip tubing wide open).**

**REGION I EMERGENCY MEDICAL SERVICES  
STANDING MEDICAL ORDERS  
EMT – Paramedic**

**SMO: Adult Wide Complex Tachycardia**

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**INFORMATION NEEDED**

- History of arrest:
- Witnessed collapse: time down and preceding symptoms
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- Past medical history: diagnosis, medications
- Scene: evidence of drug ingestion, hypothermia, trauma, Valid DNR form, nursing home or hospice patient

**OBJECTIVE FINDINGS-- STABLE**

- No signs of poor perfusion
- Normal mental status

**TREATMENT**

- See DYSRHYTHMIASOVERVIEW Protocol
- Routine Medical Care
- Consult Medical Control for use of
- Lidocaine 1 to 1.5 mg/kg IV or IO;** If Dysrhythmia persists, repeat Lidocaine 0.5 to 0.75 mg/kg IV or IO in 5 - 10 min. to a max total dose of 3 mg/kg or **Amiodarone 150mg IV or IO** over 10 minutes (**150mg Amiodarone added to 100ml bag with 60drip tubing, attach 60drip tubing to main iv line and run 60drip tubing wide open**).
- If at any time the patient becomes unstable proceed to unstable protocol and cardioversion.*

## **OBJECTIVE FINDINGS-- UNSTABLE**

AMS

Signs of poor perfusion (chest pain, dyspnea, rales, hypotension-systolic BP<90 related to the tachycardia)

## **TREATMENT**

See DYSRHYTHMIAS OVERVIEW Protocol

Routine Medical Care

**Unsynchronized** (for acutely decompensated/near arrest patient) **or synchronized cardioversion** : 100 J biphasic. **Versed (midazolam) 2mg slow IVP or Valium (diazepam) 5 mg** slow IVP for sedation if patient is awake. May repeat to a maximum of 10 mg. Consult Medical Control for subsequent doses.

Upon successful cardioversion, or if cardioversion fails **Lidocaine** 1-1.5 mg/kg IV or IO, Repeat 0.5 to 0.75 mg/kg IV **Lidocaine** in 5 - 10 min. to a max total dose of 3 mg/kg or **Amiodarone 150mg IV or IO** over 10 minutes(**150mg Amiodarone added to 100ml bag with 60drip tubing, attach 60drip tubing to main iv line and run 60drip tubing wide open**).

## **Medical Control Contact Criteria**

For subsequent doses of Versed or Valium

For permission to administer Lidocaine / Amiodarone

## **Documentation of adherence to protocol:**

Stability documented (chart contains the word “stable” or “unstable”)

Correct doses of medications administered if indicated

Unstable patients that receive **cardioversion**

## **PRECAUTIONS AND COMMENTS**

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