

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

SMO: Adult Premature Ventricular Contractions (PVC's)

Overview: A premature ventricular complex (PVC) is a single ectopic impulse arising from an irritable focus in either ventricle (bundle branches, Purkinje fibers, or ventricular muscle) that occurs earlier than the next expected sinus beat. Multifocal PVCs are considered more dangerous than unifocal PVCs, generally because they are a result of increased myocardial irritability.

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, nursing home or hospice patient

OBJECTIVE FINDINGS

LOWER POTENTIAL RISK

- Frequency and pattern of PVC's and underlying rhythm
- No chest discomfort or significant associated symptoms
- Infrequent, single, unifocal PVC's

TREATMENT

- High flow oxygen 15 L/min via non re-breather mask;
- Regular reassessment of vital signs and signs of perfusion
- RMC
- Perform 12 lead ECG if available

OBJECTIVE FINDINGS

HIGHER POTENTIAL RISK OF CARDIAC COMPLICATIONS

- Frequency and pattern of PVC's and underlying rhythm
- Chest discomfort or other significant symptoms
- Frequent (>6 minute) multi-focal PVC's with significant signs/symptoms
- Couplets or runs of V-Tach

TREATMENT

- High flow oxygen, support ventilations as indicated
- Regular reassessment of vital signs and signs of perfusion
- RMC
- Perform 12 lead ECG if available
- Refer to CHEST DISCOMFORT Protocol as indicated (treat the pain first)
- Contact Medical Control for approval to treat PVC's with the following medications (in most cases PVC's do not need to be treated with medications): **Lidocaine** 1 to 1.5 mg/kg IV or **Amiodarone** 150mg over 10 minutes [see PRECAUTIONS AND COMMENTS]
- If needed, repeat 0.5 to 0.75 mg/kg IV **Lidocaine** in 5 - 10 min. to a max total dose of 3 mg/kg.

Medical Control Contact Criteria

- None

Documentation of adherence to protocol:

- Rhythm strip attached to chart
- IV started
- Correct doses of medications administered if indicated

PRECAUTIONS AND COMMENTS

- Do not use **Lidocaine** 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, paresthesias or altered mental status. If seizures or significant mental status changes occur, call medical control for further orders regarding continuation/discontinuation of lidocaine.
- When administering **150mg Amiodarone drip**, add 150mg to 100ml bag of fluid with 60 drip tubing, attach tubing to main line and run 60 drip tubing wide open.