Wearable Cardioverter Defibrillator Vest

History
- SAMPLE
- Known risk for Sudden Cardiac Death
- Risk for life-threatening arrhythmia
- No implanted defibrillator
- Heart failure – cardiomyopathy
- Decreased ejection fraction

Signs and Symptoms
- Chest pain, dyspnea
- Palpitations
- Received shock from vest
- Poor capillary refill / skin color
- AMS or decreased mental status

Differential
- See Reversible Causes below
- Arrhythmia
- Infection/Sepsis
- Hypovolemia
- Cardiac arrest
- Hemorrhage

Conduct standard patient assessment
Primary/Secondary Surveys

Wearable Cardioverter-Defibrillator Vest Alarming?

YES

Device Silent or Single-Tone Gong Alert
Voice: None – silent
Voice: "Treatment given, call your doctor"
See page 2

NO

Device Siren Alert Two-Tone
Voice: "If patient is not responsive, call for help. Start CPR."
See page 2

Device Siren Alert Two-Tone
Voice: "Press response buttons to delay treatment."
"Bystanders, do not interfere."
See page 2

Cardiac Arrest

YES → Cardiac Arrest Protocol AC 3

NO

Condition requires 12-Lead ECG
And/or
Continuous telemetry monitoring

YES

- Airway Protocol(s) AR 1, 2, 3 ***as indicated***
- Chest Pain and STEMI Protocol AC 4 ***if indicated***
- Age Appropriate Protocol(s) ***as indicated***
- IV / IO Access Protocol UP 6
- **Remove cardioverter-defibrillator vest**
  1. Remove the battery
  2. Remove the vest
  3. Place ECG electrodes
  4. Place pads anterior-lateral or anterior-posterior
- AED Procedure CSP 5 ***if available***
- P: Cardioversion - Defibrillation Procedure(s) CSP 2, 6
- P: Cardiac Monitor

NO

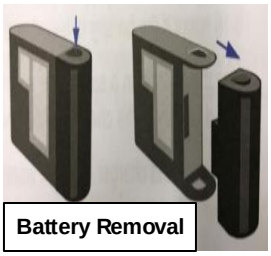
Leave Vest in Place and Operational

Exit to Age Appropriate Protocol(s)

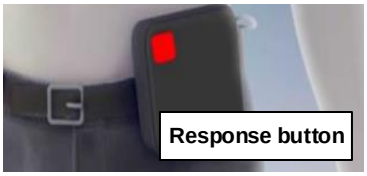
Notify Destination or Contact Medical Control

Adult Cardiac Protocol Section

Wearable Cardioverter Defibrillator Vest



Battery Removal



Response button

Pearls

- **Recommended exam: Mental status, skin color, capillary refill, peripheral pulses, blood pressure.**
- **Wearable Cardioverter-Defibrillator Vest:**
  - **Device is preparing to delivery a shock to the patient:**
  - **Before device delivers a shock, it tests to see if patient is conscious – voice prompt instructs patient to press the "response" button (see diagram above).**
  - **Only the patient should press the "response" button.**
  - **Once a treatable arrhythmia is detected it takes between 25 and 60 seconds to deliver the shock.**
- **Audible and tactile warning system:**
  - **The device will provide a vibration, a siren tone, and voice prompts to check if the patient is conscious and give them an opportunity to press the "response" button to abort a shock.**
  - **See audible warning system above.**
- **Reasons for use:**
  - **Currently only device on the market is the Zoll LifeVest.**
  - **Worn by patients at risk of sudden cardiac arrest or risk of abnormal and/or lethal arrhythmia.**
- **Blue gel on the patient's skin from the device:**
  - **Electrode pads release a blue get prior to treatment to improve shock conduction and reduce burning.**
  - **Do not remove the gel if the vest is left in place during treatment.**
  - **Remove gel if vest is removed for prehospital care.**
- **Shock to providers:**
  - **Do not touch the patient when the device is instructing you that a shock will be delivered.**
  - **Providers can be shocked by the device during energy delivery if provider is touching the patient.**
- Removing the device for prehospital care:
  - The device should only be removed when ECG monitor and defibrillator is available.
  - Continuous ECG monitoring and electrode pads should be in place when vest is removed.
- Defibrillation/cardioversion with vest in place:
  - Disconnect the device from the vest before you deliver a cardioversion or defibrillation
- Transcutaneous Pacing:
  - May be utilized with vest in place – disconnect the device from the vest before you perform transcutaneous pacing.