

Clear Creek EMS

PROCEDURES

Ultrasound - PEA

Description

This protocol will outline the procedure and considerations for assessing the cardiac arrest patient in PEA.

Indications

- Cardiac Arrest with PEA
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Procedures

- **Assessing for Cardiac Wall Motion**
 - The ultrasound should be placed in the cardiac pre-set. During a compression cycle the transducer should be placed inferior to the xiphoid, with the indicator towards the patients right, and angled lightly towards the patient R shoulder. The probe should be angled almost parallel with the floor and pointed towards the patient's heart. Be sure to provide adequate depth and pressure to obtain a cardiac view.
 - Once a view is obtained the operator should begin to record the ultrasound in preparation for a pulse check. The objective is to assess for cardiac wall motion.
 - **Cardiac Wall Motion Without a Palpable Pulse**
 - If cardiac wall motion is observed causes of shock should be evaluated and treated. CPR should be discontinued but the patient needs to be monitored very closely. Consider options for rapid transport to include air-medical services.
 - If cardiogenic shock without hypovolemia or obstruction is suspected administer 40 IU Vasopressin IV/IO push.
 - If pulses are regained refer to vasopressor protocols within DMEMSD protocols for continued treatment.
 - **Termination of Resuscitation**
 - If termination of resuscitation is being considered per standard protocol and the patient is in PEA a final evaluation of cardiac wall motion should be done after compressions have been stopped. If motion is found refer to "Pseudo PEA" for treatment options.
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Considerations

- CPR pauses should never exceed 10 seconds, if the operator is unsure of what they visualized they may watch the recording or reassess at the next pulse check.
- Cardiac leaflet motion is expected during CPR and may still occur during CPR pauses. This should not be mistaken for cardiac wall motion.

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- End-Tidal capnography and SPO2 waveform can help provide additional confirmation of cardiac activity.
 - After administration of 3mg epinephrine and 40 IU vasopressin consider epinephrine infusion at 20mcg/min while enroute to the receiving facility if no pulses are present.
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Special Considerations

- If cardiac wall motion with out pulses is recognized, note that this state will not be prolonged, anticipate rapid degradation of the cardiac rhythm to a ventricular arrhythmia or asystole with the need to resume CPR if treatments do not provide palpable pulses.