Refractory

Analyze Rhythm, Shock #1 as usual

2 minutes of CPR

If able, start the discussion to add a second set of pads, after shock #2 or #3 (before Lucas is placed) Consult with CACC to see if another truck

is close

2 minutes of CPR

Indications

Adult patient (18 & Older)

Refractory VF / VT

Medical Arrest

3 previous failed shocks

Second set of pads are placed after this shock.

Prepare to shock in DSED or VC format

2 minutes of CPR

- All shocks from this point on will be in DSED fashion
- If no 2nd defib available, continue to shock in Vector Change format

Contraindications

Non-shockable rhythms

Paediatric (Less than 18)

Trauma Arrest

Reversible Causes

Environmental

2 minutes of CPR



- Transport after your 6th total shock
- Continue to shock in DSED or Vector Change fashion q2 mins when safe to do so

Continue with CPR





FAQ's





Q: Do I have to patch at all for DSED?

A: No, If your patient meets the refractory VF/VT directive, you do not have to patch

- Q: Can I use another Paramedic Service's defib?
- Yes, our neighboring services gave us permission a while ago to use their defib as our second defib if needed.
- Q: If I do DSED, as a PCP, do I need a separate order to continue to shock q2 mins when safe to do so?
- A: No, you do not need any further orders. You may continue to shock q2 mins when safe
- Q: What if my patient has a non-shockable rhythm and then goes back to refractory VF or VT?
- A: You can patch for an order for DSED if your patient does not meet the initial refractory VF/VT algorithm
- Q: Can I use a fire department AED as my second defib?
- A.: No

- O: Can Luse a Lucas on these cases?
- A: Yes please! Put the second set of pads on BEFORE you attached the Lucas. Do not stop the Lucas to deliver the shocks.
- Q: Does this conflict with any of my ACLS drug administration?
- A: This does not change any medication administration
- Q: When you say "shock when safe" does that mean I have to pull my truck over every 2 minutes while transporting to the hospital?
- A: No. Please don't do that. Once you start driving, there may be times where it is safe to shock. You may be waiting for an elevator, or you might deliver a shock before you start driving. You may be rolling up to a stop sign, or coming up to a red light. As soon as you stop driving, and take your patient out of the truck on the way into the ED. These are all examples of times where it is safe to do so.



- Q: What if the Fire Dept. has a "no shock indicated" before I arrive? What if I have a non shockable rhythm, followed by a refractory VF with multiple shocks? Can I still do DSED or do a vector change if I am the only truck around?
- A: This patient would require a patch to do DSED.
 You do not need a patch for a vector change, if you are the only truck.
- Q: If the Fire Dept. has shocked a few times before I arrived, would I count that as a refractory VF?
- A: Yes! If the Fire Dept. has shocked twice, you can prep for a vector change, and begin the DSED if they remain in a VF. The goal is to have that 4th shock as a DSED or Vector change, regardless of who shocked them first. (Fire, Police, AED, Other EMS)