



LUCAS Device

EMT-Basic

Advanced EMT

Paramedic

PROCEDURE

- Manual CPR should never be delayed or withheld** in favor of LUCAS application - IMMEDIATELY start chest compressions while device is being prepared
- Coordinate with providers on scene when applying the LUCAS to limit interruptions of high quality CPR
- Power on the device, green light should be illuminated next to Adjust Button
- Place back plate behind patient's upper torso
- Ensure the CPR feedback puck is removed from the sternum to allow for adequate seal
- Lock the arms into the back plate and pull up to verify device is locked in
- In Adjust mode – lower the suction cup and verify that the lower edge is immediately above the xiphoid process
- Press the Pause button to lock compressor into position, verify placement
- Start compressions by pressing the Active button
 - Select 30:2 if an advanced airway has not been established
 - Select continuous if an advanced airway has been established
- Compressions should be paused only to adjust device position and for pulse/rhythm checks
- Compressions may continue during defibrillation**
- In case of ROSC, do not remove device in case patient re-arrests
- LUCAS may be used in traumatic arrest, but the **FOCUS SHOULD BE ON LSI's** (life-saving interventions) **FIRST**

REFERENCE GRAPHICS



KEY POINTS

- **AP Defibrillation pad placement preferred**
- Anticipate refractory VF cases early, the device will need to be removed in case the pads vector needs to be changed
- Do not place any device (CPR feedback sensor or defibrillation pad) directly under the LUCAS plunger
 - Move the sensor cushion between the defib pads, slightly to the side, to continue data collection
- All patients may be placed on the LUCAS device EXCEPT:
 - Patients who do not fit withing the device (sternum height of 6.7 inches to 11.9 inches, max chest width 17.7 inches)
 - Patients who are too large and with whom you cannot press the pressure pad down 2 inches
 - Patients who are too small and with whom you cannot pull the pressure pad down to touch the sternum
 - if patient is too small, the device will alert with 3 fast signals when lower suction cup and you will not be able to enter pause or active mode
- **LUCAS MAY BE PLACED ON TRAUMATIC ARREST PATIENTS AFTER LSIs ARE COMPLETED**
- Recommended settings for use:
 - Compression rate: **111** per minute
 - Initial compression/ventilation ratio: **30:2**
 - Once an advanced airway has been placed, switch to **continuous** compressions
 - Suction Cup Start Position: **QuickFit (1.2 in)**
 - Pressure Pad Release: No setting required
 - Audible alerts: **Agency choice**
 - Ventilation in continuous mode: **10** per min
 - Audible timer: **Agency choice**
- Download data from device upon completion of resuscitation attempt (report uploading issues to FD EMS liaison)

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