

CASPER MOUNTAIN SKI PATROL

LUCAS MECHANICAL COMPRESSION DEVICE

(Procedure Guideline)

Approved by: _____ Date: _____ Approved by: _____ Date: _____
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PURPOSE: The LUCAS device is designed to provide automated mechanical external chest compressions.

INDICATIONS: Patients requiring mechanical chest compression in cardiac arrest that the device will fit appropriately.

CONTRAINDICATIONS:

- Patients who do not fit within the device.
 - 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

PROCEDURE:

1. Manual chest compressions should be initiated immediately while the LUCAS device is being prepared and placed on the patient. **If there are not enough patrollers to maintain high quality CPR and assemble LUCAS device, CPR take priority until additional help arrives.**
2. Apply AED and let analyze before applying LUCAS.
 - a. Ensure that AED pads will be clear of the location of the suction pad.
3. Turn the LUCAS device on and remove from the case.
4. Place the yellow back plate under the patient, just below the patients arm pits and centered on the patient's nipples.
5. **Continue manual compressions while attaching the Lucas to the back plate.**
6. Limit interruption of compressions to less than 10 seconds.
7. Press the adjust mode button to position the compression arm to the chest. Align the lower edge of the pressure pad so that the suction cup is immediately above the end of the sternum.
8. Press the pause button to lock in the start position.
9. Press the Active 30:2 button or the Active continuous button to begin compressions.
10. Pause LUCAS when AED is analyzing or when administering shock.
 - a. If no signs of life, immediately resume compressions.
11. Place the neck roll behind the patient's head and attach the straps to the LUCAS device.
 - a. This will prevent the LUCAS from migrating toward the patient's feet.
12. Place the patient's arms in the straps provided.
13. **One crew member should be assigned to monitor the device and ensure that it remains in the correct position throughout the resuscitation.**
14. If disruption or malfunction of the LUCAS device occurs, immediately revert to manual compressions