

SIGN/SYMPTOMS: Return of spontaneous circulation (ROSC)

- Most patients, immediately post resuscitation, will require ventilatory assistance.
- Hyperventilation is a significant cause of hypotension and recurrence of cardiac arrest in the post resuscitation phase.
- The condition of post resuscitation patients fluctuates rapidly and continuously requiring close monitoring.
- A significant percentage of post-ROSC patients will re-arrest. Leave AED pads in place on patient.

Patient Management

Assessment, Treatment, and Interventions

ALL EMS LEVELS

1. Perform general patient assessment/management.
2. Support life-threatening problems associated with airway, breathing and circulation.
3. Monitor closely for reoccurrence of cardiac arrest.

EMR-O; EMT-R.

4. Administer oxygen as appropriate for dyspnea or distress with a target of achieving greater than 93% saturation for most acutely ill patients. Do not hyperoxygenate!
5. Maintain a ventilation rate of 6-8 per minute. Do not hyperventilate.
6. Check blood glucose.
  - a. If hypoglycemic, treat per Hypoglycemia guideline.
  - b. If hyperglycemic, notify hospital on arrival.
7. If patient seizes, treat per [Seizures guideline \[M-12\]](#).
8. Avoid hyperthermia.
9. Consider ALS and transport to hospital which specializes in post-resuscitative care.

EMT-O

10. Acquire 12-lead ECG. Notify receiving hospital of findings.
11. Perform EtCO<sub>2</sub> measure; Maintain EtCO<sub>2</sub> of 35-45 mmHg.

INT-O; PARA-R.

12. Interpret EtCO<sub>2</sub> findings.

INT-R

13. Interpret ECG findings.

PARA-O

14. For hypotension (SBP less than 90 mmHg or MAP less than 65)
  - a. Norepinephrine infusion [0.05–0.5mcg/kg/minute titrated to MAP greater than 65mgHg]
  - OR
  - b. Epinephrine infusion (if bradycardic) [5–20 mcg per 3-5 minutes titrated to MAP greater than 65; by volume, this is 0.2 ml to 1ml].