

Cardiac Arrest – Trauma Discontinuation of Resuscitation at Scene Protocol

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Preamble

Cardiac arrest due to a traumatic injury is associated with a very poor outcome. Unless the underlying condition is identified and corrected, the patient is not likely to be resuscitated. EMS personnel endanger their own safety and that of the general public by transporting traumatic cardiac arrest victims to hospital using lights and sirens. Criteria exist enabling EMS personnel to determine death for a patient who has suffered a traumatic cardiac arrest. This avoids the risk of emergency transport to hospital for a patient who will not survive. This protocol enables EMS personnel to make determination of death under these circumstances.

Requirements

1. Fully licensed Technician-Paramedic.
2. Certification in tracheal intubation or one of the double-lumen airways protocol by the Medical Director.
3. Certification in cardiac arrest – trauma discontinuation of resuscitation at scene protocol by the Medical Director.
4. Certification in other “cardiac arrest” protocols as determined by the Medical Director.
5. Current certification as an advanced cardiac life support provider.
6. Appropriate sensitivity training.

Indications

1. Cardiac arrest secondary to significant trauma.
2. Absence of vital signs.

3. Patient meets standard criteria for determination of death.
4. Asystole confirmed in two leads by two EMS personnel over a period of one minute.

Contraindications

1. Patient under the age of 16 years.
2. Hypothermia where environmental conditions exist to support as a causative factor.

Procedure

1. Perform patient assessment and record vital signs, level of consciousness, and pupil size.
2. Assess that patient meets criteria for this protocol.
3. Ensure there are no contraindications to use of this protocol.
4. Initiate and continue cardiopulmonary resuscitation (CPR).
5. Attach patient to ECG monitor and confirm asystole in two separate leads.
 - assessment of asystole should be done without CPR being performed
6. If at any time, a rhythm other than asystole appears, treat as per the protocol for that rhythm.
7. Repeat vital signs. If asystole is still present and there are not vital signs, patient is determined to be dead.
8. Contact on-line medical control to advise patient's condition and advise on disposition of patient.
9. If on-line medical control is not available, patient may be transported non-urgently ("green") to the nearest appropriate hospital. No further resuscitative efforts are to be carried out.
10. Any return of vital signs or cardiac electrical activity warrants immediate return of resuscitative effort and emergency ("red") transport to hospital.

Documentation Requirements

The following information must be documented on the patient care report form:

1. Patient's presenting signs and symptoms, including vital signs.
2. Indications for protocol use.
3. Dose(s), time(s), route(s), and effect(s) of medications used.
4. All cardiac rhythm strips.
5. Repeat assessment and vital signs, as indicated.
6. Changes from baseline, if any, that occur during treatment or transport.
7. Signature and license number of EMS personnel performing any transfer of function skills.

Certification Requirements

1. Attend in-depth classes and lectures on kinematics or trauma, trauma resuscitation, and static and dynamic rhythm interpretation.
2. Pass a written examination.
3. Pass practical scenarios incorporating variations of the cardiac arrest - trauma discontinuation of resuscitation protocol.
4. Certification is by the Medical Director.

Recertification Requirements

1. Review class and recertification is done every 12 months.
2. Advanced cardiac life support provider certification must be kept current.
3. Basic trauma life support provider certification must be kept current.
4. A record will be kept to document all cases where this protocol is used.

Decertification

1. Decertification is at the discretion of the Medical Director or the Provincial Medical Director, Manitoba Health & Healthy Living.

Quality Assurance Requirements

1. Appropriate quality assurance policies must be in place. The Medical Director or designate must review all instances where this protocol is used. As a minimum, the following must be assessed:
 - i) appropriateness of implementation
 - ii) adherence to protocol
 - iii) any deviation from the protocol
 - iv) corrective measures taken, if indicated
2. Yearly statistics for protocol use compiled and forwarded to Emergency Medical Services, Manitoba Health & Healthy Living.