R02: Discontinuing Resuscitation

Clinical and Medical Programs

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Introduction

This guideline has been designed to provide information to paramedics and EMRs on the holistic aspects of cardiac arrest management: specifically, when to discontinue (or withdraw) resuscitation on medical cardiac arrests. There are two components: the rapid discontinuation and the general discontinuation.

Essentials

For both rapid and general discontinuation criteria, resuscitations led by EMRs or PCPs require a mandatory call to CliniCall as soon as possible after the resuscitation begins. Clinicall paramedics will guide EMRs and PCPs through the discontinuation pathway.

ACP and CCP practitioners can independently follow both rapid and general discontinuation criteria, but must consult with CliniCall for confirmation prior to discontinuing.

Interventions

First Responder

Not applicable for first responders.

Emergency Medical Responder – All FR interventions, plus:

Rapid Discontinuation Criteria

In some instances, CPR may be started when circumstances surrounding the case history are unclear. Rapid discontinuation allows for the cessation of resuscitation in circumstances where resuscitation is ongoing and additional information is obtained.

1. *Prolonged no-flow duration*. All of the following elements must be satisfied prior to discontinuation:
   - The patient was observed to be unresponsive and presumed pulseless for at least 20 minutes prior to the arrival of emergency services, and
   - No CPR was provided during this period, and
   - The patient is not exhibiting any signs of life ('signs of life extinct' - see below), and
   - The patient's cardiac rhythm is asystole, or pulseless electrical activity of less than 30 beats per minute, or an AED does not detect a shockable rhythm.
2. *Terminal illness*. A patient in the final stages of a terminal illness where death is imminent and unavoidable, and where CPR would not be successful, but for whom no formal 'No CPR' decision has been made.
3. *Lawful direction*. When resuscitation is ongoing and a lawful direction to withhold CPR becomes available (including an advanced directive, a medical order for scope of treatment, a 'No CPR' form, or the discovery of a 'No CPR' MedicAlert bracelet or necklace).
4. *Valid direction from a representative*. Paramedics and EMRs who receive a valid direction from a representative who is explicitly named in a representation agreement or an advanced care plan. (Where possible, attach a clear photo of the documentation to the ePCR.)
   - A representation agreement is a document used for substitute decision-making and is different from a power of attorney.

In circumstances where rapid discontinuation is applicable, EMR and PCP staff must consult CliniCall prior to terminating resuscitation efforts and confirmation of ROLE, except for when a lawful or valid direction from a health care representative is present and confirmed.

General Discontinuation Criteria

General criteria apply to most cardiac arrests where the patient is initially considered viable or does not meet the

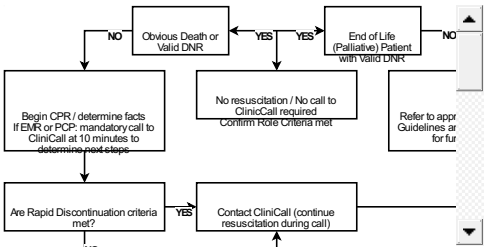
criteria for rapid discontinuation. They involve 20, 30, and 40 minute checks from the time of CPR initiation by either paramedics, EMRs, or FRs, and follow an evidence-based approach to cardiac arrest survival following high-quality resuscitation.

1. 20 minute check: CPR is to be administered by emergency health care providers for no less than 20 continuous minutes, after which CliniCall must be contacted for discontinuation orders where all of the following are present:
    1. The arrest was unwitnessed by paramedics or EMRs/FRs, and
    2. No shocks were delivered, and
    3. There was no return of spontaneous circulation, regardless of duration.

Patients for whom these criteria are true have a 0.12% survival rate.[1,2] If any of these elements are not satisfied, the resuscitation must continue to 30 minutes.

2. 30 and 40 minute checks: The likelihood of meaningful survival for patients still in cardiac arrest at the 30 minute mark is:
    1. Initial non-shockable rhythm: < 1%
    2. Initial shockable rhythm: 11%[3-5]

Termination of resuscitation is appropriate at the 30 minute mark for those patients whose initial rhythm was not shockable. Resuscitation should be extended to 40 minutes for patients whose initial rhythm was shockable, at which point it can be terminated if return of spontaneous circulation has not been achieved.



EMRs are able to apply all elements related to the discontinuation of resuscitation. CliniCall consultation required for decision-supported discontinuation. Call must be made within minutes from time of arrival to determine the next steps.

Advanced Care Paramedic – All FR, EMR, and PCP interventions, plus:

Able to independently apply discontinuation criteria; CliniCall consultation required prior to discontinuation.