

Post-cardiac arrest care

CONTROLLING TEMPERATURE

Aggressive temperature control has consistently been shown to improve outcomes after cardiac arrest.



Two studies in 2002 showed a benefit for inducing mild hypothermia (down to 32–34°C) after cardiac arrest. More recent studies have suggested that actively maintaining a more normal temperature near 36°C may offer the same benefit.

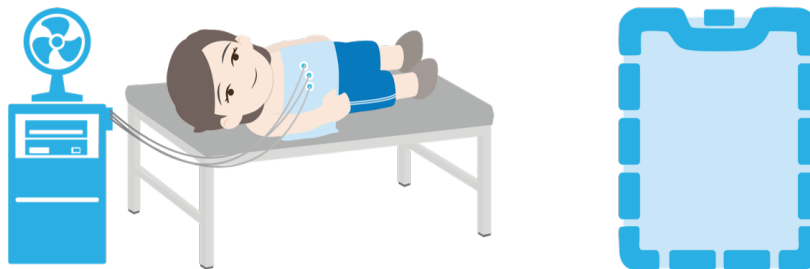
While an exact temperature target may be debatable, it is clear from all of these studies that aggressive avoidance of elevated body temperature for comatose survivors of cardiac arrest is important in improving outcomes.

Who benefits most?

Most of the supportive data available has come from patients with ventricular dysrhythmias, because these types of cardiac arrests have the best outcomes. However, it is plausible that the benefit is similar regardless of the type of arrest, and all patients should be considered for temperature control after cardiac arrest.

Procedure

Cooling can be achieved using commercial devices like intravascular catheters, adhesive pads or blankets, or with more simple cooling measures like ice packs. While no device has demonstrated superiority for patient outcomes, some have pragmatic advantages, such as automatic regulation.



Adjunctive therapies to prevent shivering are important, as this will expend energy and raise the body temperature. Such therapies may include heavier sedation, antipyretics, magnesium, buspirone or meperidine, or ultimately paralysis. An institutional protocol or expert consultation may help guide the exact target temperature or the method for regulation.