Cooling a Patient After Cardiac Arrest: Induced Hypothermia

Information for patients and families

Read this information to learn:

• what cardiac arrest is
• what induced hypothermia is
• what to expect if your loved one needs induced hypothermia

What is a cardiac arrest?
A cardiac arrest is when a person stops breathing and their heart stops beating. It is a medical emergency.

The longer a person’s heart has stopped, the lower their chance of survival.

What is induced hypothermia?
Induced hypothermia is a therapy for some patients who survive a cardiac arrest that lasts 3 minutes or longer.

Hypothermia means having a low body temperature. Induced hypothermia means that the health care team lowers your loved one’s body temperature on purpose. This lower body temperature can help your loved one survive a cardiac arrest.

Please visit the UHN Patient Education website for more health information: www.uhnpatienteducation.ca

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How does induced hypothermia help my loved one?

Hypothermia lowers your body’s need for oxygen and energy. So, there is more oxygen available in your blood for your body and main organs.

Induced hypothermia can decrease brain damage if it is started as soon as possible after a cardiac arrest of more than 3 minutes.

What should I expect?

1. A specially trained medical team brings your loved one to an intensive care unit.
2. They put a special IV catheter (tube) into your loved one’s body so it can be safely cooled.
3. Your loved one receives medicine through a separate IV so they sleep and are comfortable. They are also attached to a breathing machine (ventilator) to help them breath.
4. The team cools their body to a core temperature of 32° to 34° Celsius (about 90° to 93° Fahrenheit) within 4 hours of the cardiac arrest.
5. Your loved one remains cooled for 12 to 24 hours.
6. During this time, the medical team watches them closely on a screen by their bedside and at the nursing stations.

What are the risks?

There are 2 main risks to induced hypothermia:

- It may increase the chance of an infection. When a body is cool, its ability to defend itself (also called immune response) lowers. We will do everything possible to prevent infections from happening.
- It may increase the chance of bleeding. We will watch your loved one closely for any signs of this.
Remember: For many patients, the benefits of induced hypothermia are greater than the risks. If at any time the risk to your loved one is greater than the benefits, the team will stop the hypothermia.

What can I expect after?
The medical team will slowly warm your loved one’s body to normal body temperature. Once they are warm, the team stops the IV medicines and checks your loved one’s recovery.

If you have any questions about induced hypothermia, please talk to your doctor or nurse.