

on ice



cool new technology saves the lives of heart patients by inducing hypothermia

by suzy devers

An innovative cooling device, called Arctic Sun®, is revolutionizing the way comatose heart attack survivors are treated at Littleton, Parker and Porter Adventist Hospitals.

They're literally put on ice.

"The Arctic Sun can improve a patient's chance of leaving the hospital neurologically intact from 30 percent to 50 percent," says Paul Davidson, M.D., an attending physician and the EMS director of emergency medicine at Littleton, Parker and Porter Adventist Hospitals.

Davidson explains that the Arctic Sun circulates near freezing water through gel packs encased within a vest to induce hypothermia and slow the progression of brain damage. The system maintains the patient's body temperature at 91 degrees for 12 to 24 hours followed by gradual warming. The patient is given a paralytic drug to prevent shivering during the treatment, which could increase body temperature.

* safeguarding quality of life

Exactly one week before Kim Herzfeldt was rushed to Parker Adventist Hospital with a heart attack, the hospital had been cleared to use the Arctic Sun. For Herzfeldt, the cooling device most certainly preserved the quality of his life and most likely saved it.

One of Herzfeldt's main arteries was completely blocked, triggering a type of heart attack so deadly it's nicknamed "the widow maker." Herzfeldt says that his heart had stopped 62 times while he was in the hospital, requiring resuscitation each time.

* therapy of choice

When the heart stops, the brain is deprived of oxygen, a potentially life-threatening condition that can result in brain damage and neurological dysfunction, says Lorna Prang, R.N., M.S., CCRN, a clinical nurse specialist in Littleton Adventist Hospital's critical care unit. Inducing moderate cooling as soon as possible after the cardiac

event is believed to delay the rapid release of toxins caused by oxygen deprivation.

Prang has assisted in most of Littleton Adventist Hospital's Arctic Sun cases and says that the American Heart Association now considers induced hypothermia the standard of care for patients older than 18 in a post-arrest coma with a return of circulation after 60 minutes.

* long list of thank-yous

Herzfeldt was an ideal candidate for the procedure and recovered without neurological damage. "I can't say enough about the doctors, nurses, EMTs and everybody at Parker Adventist Hospital," says Herzfeldt, who returned to the hospital to personally thank every person who helped save his life.

Littleton, Parker and Porter Adventist Hospitals received the \$30,000 temperature management system, manufactured in Louisville, Colorado, through their foundations (Littleton, Parker and Porter Adventist Hospital Foundations). [vev](#)



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