

## Saving Victims of Heart Attack:

# NEW Cooling Technology

On a warm day last June, Larry Glenn went for his regular run along Kent's Soos Creek Trail. The sun brought out a quick sweat for the avid runner of 30 years. But on that hot day, it would be a new body-cooling device that would save Glenn's life.



Two miles into his run, the 68-year-old had a massive heart attack.

"There were no warnings," Glenn said. "Just 'lights out.'"

Fortunately, three heroes came along, called 911, and performed CPR on Glenn for 20 minutes. When paramedics arrived, they gave Glenn an electric shock, regained his pulse, and took him to Valley Medical Center's Emergency Room.

# Recognizing Symptoms

## Be on the lookout for heart attack warning signs...

*Call 911 immediately if you have any of the following symptoms:*

Chest pain that does not improve or that gets worse within 5 minutes of stopping activity to rest.

Chest pain or discomfort that is crushing or squeezing and gets worse or lasts more than 5 minutes, especially if accompanied by:

- Sweating
- Shortness of breath
- Nausea or vomiting
- Dizziness or lightheadedness
- Pain that spreads to the neck, jaw, shoulders, or arms
- A fast or irregular pulse
- Mental confusion

At the ER, Dr. John Nemanich, an interventional cardiologist, was concerned. The length of time that had already passed meant Glenn risked severe brain damage from lack of oxygen.

“One of the most frustrating experiences for emergency room staff is when you’ve successfully resuscitated the heart, but the brain doesn’t survive,” says Dr. Nemanich.

Doctors have known for some time that before procedures such as open-heart surgery, cooling a person’s body temperature slows metabolism and helps preserve brain tissue. But recent studies indicate that such cooling is also effective in reducing brain damage in patients who’ve already suffered cardiac arrest.

Ice has been the usual method for cooling the body, from the outside in. But, based on these recent studies, Innercool Therapies created the Celsius Control System, which uses a catheter inserted into the bloodstream to rapidly cool a patient to 33 degrees Celsius (91 degrees

Fahrenheit. Normal body temperature is 98.6 degrees Fahrenheit).

**VMC is the first medical center in the Seattle area to use the Innercool technology for cardiac arrest. Success rates have been**

**dramatic—survival rates with good neurological outcomes have increased threefold.**

One of those success stories was Glenn’s. Now, six months later, he’s back out on the Soos Creek Trail.

