

Difference between heart attack & cardiac arrest

Comparing a cardiac arrest to a heart attack is like comparing a blown fuse box to a clogged drain pipe.

Both can lead to catastrophic effects, but through totally different means according to NEOCS / SPI cardiologist, Dr. Michael Pelini. Pelini is also medical director of Summa's heart rhythm service.

Summa Health System wants to make sure everyone knows the difference between the two cardiac events. "People think cardiac arrest and heart attack are the same thing," said Pelini, "but they're not."

To put it in basic terms, a heart attack is a plumbing problem, which occurs when a blood clot blocks the flow of blood to the heart, said Kaye Reiter, director of Summa's catheterization, electro-physiology and endovascular labs. Sudden cardiac arrest is an electrical problem, in which the heart begins beating too rapidly until it stops beating altogether.

In more than 90 percent of cardiac arrest cases, the patient dies, making it the leading cause of death in the U.S., killing more than 325,000 people each year.

Knowing the difference between a heart attack and a cardiac arrest is not important during initial emergency treatment, Pelini said. Both problems require CPR or an AED, along with a quick trip to the emergency room, to save the victim.

The difference, though, matters in the follow-up care.

For a heart attack patient, it's important to know your blood pressure and cholesterol levels. That's important for cardiac arrest patients, too, but so is another little-known number called ejection fraction, Reiter said.

Using ultrasound, a person's ejection fraction measures how effectively your heart is pumping blood.

Patients with low ejection fractions will be put on medications to keep their hearts on pace, while other testing is done to find the cause of the problem. If medications aren't effective, an implanted defibrillator will be surgically placed near the heart to deliver a shock if it begins to beat too rapidly again.

"I always tell patients it's like having a paramedic with you all the time," Pelini said.

Patients should talk to their doctor about ejection fraction or other heart tests if they: (1) have a family history of early heart disease; (2) faint without explanation; (3) or have chest pain, shortness of breath or fainting during exertion.

[Excerpts from article by Tracy Wheeler at The Beacon Journal, August 5, 2008](#)