

DEVICE HELPS WEAK HEARTS PUMP BETTER -- SO PEOPLE CAN LIVE BETTER

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Just walking across the room was hard for Ella Kindergan last year, when a weak heart kept her from doing almost everything.

But a few months ago, she trekked around Niagara Falls on vacation while an experimental device in her chest pushed her heart to beat more strongly.

The device belongs to a new class of implants for congestive heart failure, a potentially crippling condition that affects millions of people worldwide.

Many stop responding to medication, grow increasingly weak and end up house-bound. Doctors say a portion of those patients -- up to about 650,000 Americans -- are candidates for the devices.

"This is a major advancement in treating patients with congestive heart failure," said Dr. Aurelio Duran, a cardiologist with Orlando Regional Healthcare System who is treating Kindergan. "While you do not see improvement in every patient, those who respond can regain a lot of function. It's wonderful to see."

The unnamed model inside Kindergan is still undergoing trials.

But the federal Food and Drug Administration recently approved another version, called InSync, for widespread use.

Whatever the model, the idea is the same.

In a normal heart, the two bottom chambers of the heart constrict simultaneously to pump blood powerfully. But the chambers fall out of rhythm in some people with congestive heart failure.

The right chamber squeezes first, and the left lags behind. The blood is not pumped as forcefully around the body, and the organs do not get a normal flow of blood.

A variety of symptoms can follow, including shortness of breath, weakness and an enlarged heart.

Many drugs are available to improve the heart's performance, but the new devices are the first to tinker with the actual mechanics of the heart.

SIMILAR TO PACEMAKER

The devices are implanted much like a pacemaker during a hospital procedure, while the patient is put under local anesthesia.

Typically about the size of a pocket watch, the devices are placed in the upper left chest just under the collarbone.

One or more wires then are extended to various locations inside the heart or within a vein on the heart's surface. These wires deliver tiny electrical pulses that orchestrate the heart's movements.

InSync, for example, works with three wires that fire signals to direct the heart's movements.

In tests of the device before its approval, about 60 percent of the patients who received InSync reported a marked improvement in their abilities, said Dr. Scott J. Pollak, a Florida Hospital cardiologist who was involved in testing.

"It's not a cure for heart failure, but it can result in an improvement in quality of life," he said. "The medications we use can improve quality of life, too, but they are limited, and this does seem to help some people go beyond that."

Risks with the implants include perforating a vein in the heart while placing the wires and having the wires fall out of place, which would require an additional procedure.

'I WAS JUST EXISTING'

Ted Romaine of Winter Springs got the InSync device a year ago as part of the early testing.

He went from barely moving to working out three days a week and taking his dog for long walks.

Like many people with heart failure, Romaine, 65, was looking for anything to help him.

"Before this, I was not really living; I was just existing," he said.

Kindergan was in the same situation. She had given up nearly all her activities before learning about the implant from Duran, who has been involved in the first tests of these devices starting in 1998.

"I wanted to be a part of this history, and if it could help me, I thought it was worth trying," said Kindergan, 59, of Ormond Beach. "I'm at a point now where I feel so much better."

Doctors said patients still need to take their medications and visit the doctor every three months for checks of the devices.

The battery must be changed every eight to 10 years.

In time, Duran said, doctors will be able to better predict which patients will benefit from the implants. He thinks more models will follow InSync to the market.

"I expect that you're going to see this technology used more and more in the coming years."

Caption: PHOTO: In Ormond Beach . Ella Kindergan, 59, has congestive heart failure, but a device implanted near her heart helps it beat more strongly. BARBARA V. PEREZ/ORLANDO SENTINEL DIAGRAM: New treatment for heart problems InSync is the 1st device approved to treat congestive heart failure. It works like this 1. The device is placed in the upper left chest, just under the collarbone. 2. Three wires extend from the device into different areas of the heart. 3. The wires deliver electrical pulses that synchronize the heart's constriction, allowing it to pump blood more forcefully. SOURCE: MEDTRONIC MARIANNE KOCH/ORLANDO SENTINEL PHOTO: (device)

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