

Boom

News for the baby boomer generation



Pamela Ham listens as Dr. Arjun Gururaj talks about the world's smallest pacemaker. She received the device during a 25-minute procedure at University Medical Center. BIZUAYEHU TESFAYE/LAS VEGAS REVIEW-JOURNAL @BIZUTESFAYE

WOMAN'S TINY PACEMAKER A FIRST IN NEVADA

As 67-year-old Pamela Ham lay in a University Medical Center hospital bed last Monday morning, she was thankful she's a baby boomer.

Advances in medical care gave her a chance to beat back heart disease, something that killed her father at the same age.

Paul Harasim
COMMENTARY



"It's amazing what they can do now," she said, smiling as her camera-shy husband, Richard Guy, stood nearby, his face etched with concern. "I was born at the right time."

What brought Ham, who retired a year ago from a position with the Las Vegas Convention and Visitors Authority, to UMC was a condition known as atrial fibrillation, an irregular heartbeat that increases the risk of stroke and death.

Her problem was discovered after a walk in her Boulder City neighborhood left her so exhausted she immediately went to the doctor. Her heart also beat slower than normal.

Treatment for people today begins with medication and lifestyle changes — Ham's disorder was discovered soon after her retirement — and increasingly involves a pacemaker, a device to regulate heartbeats.

"All my father could get was medication until his heart gave out,"



The Medtronic miniature pacemaker was approved by the FDA last year. Instead of surgery, the tiny device can be inserted by a catheter through an artery to the heart. When it wears out in 12 years, another can be inserted without the removal of the first.

Ham recalled.

Although external pacemakers had been around since the 1950s, it wasn't until the 1990s that patients received implantable pacemakers with regularity, surgeries adding years to the lives of most recipients.

According to the Food and Drug Administration, implanted pacemakers increased in the U.S. from 95,000 in 1990 to more than 200,000 in 2002, a number remaining steady this century.

Until now pacemakers have been surgically implanted just under the skin in the chest, with wires called leads connected to the heart. A critical weakness of this pacing system is that the leads can wear out, break

or become infected, requiring surgical removal.

And when the wires are being inserted under the collar bone, patients sometimes experience collapsed lungs.

Ham didn't go the traditional route. Instead, Dr. Arjun Gururaj, a specialist in cardiac electrophysiology, performs a procedure never undertaken in Nevada.

Rather than cutting her chest open and creating a surgical pocket in which to implant the pacemaker, he makes a simple incision in her leg and snakes a catheter through an artery to her heart to implant a battery powered pacemaker.

The size of a multivitamin, the

world's smallest pacemaker is docked entirely inside her right ventricle.

A tenth the size of a traditional pacemaker, it is securely attached to the heart wall with the device's prongs and delivers electrical impulses that pace the heart through an electrode at the end of the mechanism.

No wires are involved, and the procedure takes just 25 minutes, less than half the time to surgically implant the standard pacemaker.

"The Achilles heel of pacemakers has always been the wires," Gururaj said after the procedure. "They've created infections. The batteries on these new devices will last 12 years and when it wears out, we'll just implant another device. We don't have to remove the other one."

The physician noted that not all people who need pacemakers can benefit from the Medtronic miniature pacemaker approved by the FDA last year. It stimulates just one chamber of the heart, and more than 75 percent of patients need dual-chamber pacemakers.

However, in the not too distant future, he expects a new generation of pacemakers to cover all patients' needs.

Ham left UMC the day after her procedure with her heart operating properly.

"I wish my dad had had the same kind of medical advances available to him when he was alive."

Paul Harasim's column runs Sunday, Tuesday and Friday in the Nevada section and Monday in the Health section. Contact him at pharasim@reviewjournal.com or 702-387-5273. Follow @paulharasim on Twitter.

Neptune Society
AMERICA'S MOST TRUSTED
CREMATION SERVICES®

Interested in Cremation? Join us for a

**FREE LUNCH
& INFORMATIONAL SEMINAR**
ON THE BENEFITS OF PREPLANNING YOUR CREMATION



www.NeptuneSeminar.com

FIREROCK STEAKHOUSE

5990 Centennial Ctr Blvd
Las Vegas, NV 89149

Tues 3/21, Wed 3/22, Fri 3/24
11:30am & 2:30pm

BUCA DI BEPPO

7690 W Lake Mead Blvd
Las Vegas, NV 89128

Wed 3/22, Fri 3/24, Mon 3/27
11:30am & 2:30pm

CLAIM JUMPER

1100 S Fort Apache Rd
Las Vegas, NV 89117

Thurs 3/23, Tues 3/28, Wed 3/29
11:30am & 2:30pm

CALL TODAY TO RSVP 702-664-8008

RESERVATION REQUIRED. LIMITED SEATING AVAILABLE. FIRST TIME ATTENDEES ONLY PLEASE.