

# Avid runner back in the race with a new heart

*Diagnosis of rare heart disorder elusive because of patient's exercise regimen*

**H**earthache and rejection form the plot for many a Hollywood romance. For Kevin Lue, 49-year old Chicago area resident, heartache had a real-life happy ending — in both health and romance.

An avid triathlete and marathon runner, Lue felt like he was in excellent physical shape. He frequently ran and trained with his life partner, Maureen Meyer.

On Jan. 1, 2009, he chose to run a different training route from Meyer. Midway through his 10-mile run, he waved to a driver who let him cross the street. Moments later, the driver saw Lue in his rearview mirror, buckling at the knees and passing out on the street. The driver turned back to help Lue and gave him a ride home.

answers. Lue was instructed to stay on the treadmill for as long as he could. He ran for the duration of the test and realized that his heart rate was slower than the rate it was during his races. As the test time ended, his vision became blurry. He passed out soon after and his heart rate flatlined — stopped — for 15 seconds.

## Pacemaker not the answer

Lue felt better with the pacemaker and began exercising again. During a business trip to Wisconsin, he noticed that merely walking from one room to another or climbing a flight of stairs left him winded. Still, something was not right.

Back in Chicago, Lue consulted with his cardiologist. Lue says he was told his heart was adjusting to the pacemaker and things would level out soon, and he was advised to exercise on a stationary bike. But while on the bike, Lue could not get a pulse reading. Realizing that this was more than an adjustment to the pacemaker, he called his cardiologist again.

More tests showed that Lue was experiencing atrial fibrillation, an irregular and unusually fast heartbeat. He was prescribed blood thinners to reduce the risk of blood clots in his arteries and was asked not to exercise for a month.

During that month, Lue felt increasingly unwell.

His stomach was bloated, his face was puffy, and his feet were swollen. At this point, he saw gastrointestinal specialists and more cardiology specialists, all to no avail.

Lue and Meyer began to consider Mayo Clinic in Rochester. Late on a Thursday evening, they filled out an online application for an appointment at Mayo Clinic. They received



The marriage of Kevin and Maureen Lue was just one memorable event on July 10, 2009. The second was the call telling Kevin Lue that a heart was available for transplant.

When Meyer arrived home, she took one look at the gash on Lue's forehead and the scrapes on his knees, heard he was nauseated and immediately took him to the hospital. He underwent several cardiac and neurological tests during his two-day hospital stay. The doctors knew something was wrong but the exact cause was not clear. They released him with no diagnosis.

A stress test later provided some

The cardiologist determined Lue was dealing with a third-degree atrioventricular (AV) block — essentially a roadblock in the pathway where electrical impulses travel through the heart. Those impulses are necessary for a healthy heartbeat. A block can cause a dangerously slowed heartbeat. His physician recommended a pacemaker to restore the heart's normal rhythm.

a callback on Friday morning. Lue was scheduled for an appointment the following Tuesday.

They were pleasantly surprised at the ease, efficiency and timely manner in which they were able to make their first appointment at Mayo Clinic.

The couple packed for two days, thinking this would be a short trip. After a rigorous day of tests, Farris Timimi, M.D., a cardiologist who specializes in advanced heart failure, told Lue that he would need to be admitted to the hospital right away for additional tests. Two days later, Dr. Timimi told Lue that the possible diagnoses had been narrowed down and that a heart biopsy would be more conclusive.

“Diagnosing Kevin was no easy feat,” recalls Dr. Timimi. “Kevin, being a triathlete, was in such excellent physical shape that his symptoms were fairly subtle. He did not present in the direct fashion that another patient might have.”

### Elusive diagnosis confirmed

The biopsy revealed that Lue had giant cell myocarditis. The AV block and atrial fibrillation were determined to be symptoms of this underlying disease. Giant cell myocarditis is a rare cardiovascular, autoimmune disorder that occurs for unknown reasons. It is characterized by inflammation of the heart muscle (myocardium), a condition referred to as myocarditis. Inflammation is caused by widespread infiltration of giant cells associated with other inflammatory cells and heart muscle cell destruction. Individuals with giant cell myocarditis may develop abnormal heartbeats, chest pain and, eventually, heart failure. Many eventually require a heart transplant.

Lue went from training for a marathon to needing a heart transplant — at the age of 49.

While waiting for a heart transplant, Lue was outfitted with a left ventricular assist device (LVAD). The LVAD is placed inside the chest, where it helps the heart pump oxygen-rich blood throughout the body.

Unlike an artificial heart, the LVAD doesn't replace the heart. It just helps it do its job. This can mean the difference between life and death for a person whose heart needs a rest after open-heart surgery, or for a person waiting for a transplant.

The pump and its connections are implanted during open-heart surgery. A computer controller, a power pack, and a reserve power pack remain outside the body. The power pack has to be recharged at night.

### A life-changing day

In June 2009, after Lue had been on the LVAD for three months, the couple moved into the Gift of Life Transplant House in Rochester to wait for a heart. Through all of these ordeals, they had become engaged to be married and were waiting to schedule a date when the best man could be present.

They were married July 10, 2009, at the Gift of Life Transplant House. While waiting for their wedding photos to download after the ceremony, they received a call saying Lue's new heart had arrived.

On July 11, 2009, Lue not only had a new bride but a new heart as well. “The coincidence of the wedding and his heart transplant was not only a delightful affirmation of their love for each other, but also a reaffirmation of Kevin's life,” says Dr. Timimi.

Since his transplant, Lue has participated in a few triathlons near his home in Bartlett, Ill., and in the U.S. Transplant Games in Madison, Wis. This event celebrates the life-restoring therapy of organ transplantation.

“At the Transplant Games, I ran my fastest 5K since the transplant,” says Lue. “It was both an exhilarating and humbling experience.”

After months of illness and uncertainty, Lue says he's both lucky and happy. “I feel very lucky. While there are some adjustments we have to make to our lives, I am happy to be healthy again and look forward to improving upon my fitness,” he says. “We are so happy that we decided to come to Mayo. Dr. Timimi's persistence and experience during my initial diagnosis literally saved my life.”



Kevin Lue participated in Transplant Games sporting a T-shirt that reads: *Powered by a donated heart.*