

# SANTA BARBARA NEWS-PRESS

By ADAM SYLVAIN News-Press Correspondent

September 19, 2013 11:16 AM

David Brainard has been a competitive athlete his whole life. He wrestled for San Marcos High School in the 1970s and later became an avid cyclist and surfer.

Then, about six years ago, he started to slow down.

Mr. Brainard began experiencing shortness of breath and chest pain. Physically, he wasn't able to do everything he had been doing his whole life.

Santa Barbara-based cardiologist Dr. Robert McFadden diagnosed Mr. Brainard with arrhythmia, a condition that occurs when a regular heartbeat becomes erratic. For several years, medication treated the problem.

But by the middle of last year, Mr. Brainard's condition worsened.

"It got to a situation where I didn't have the energy to cross the parking lot to get to my car," said Mr. Brainard, who was referred by Dr. McFadden this past spring to UCLA Medical Center, where he underwent a series of tests to determine the strength of his heart.

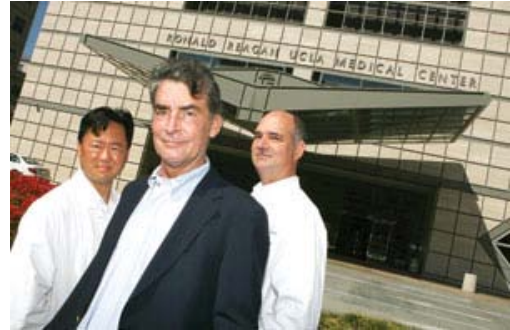
One of the tests was called a VO2 Max test, used to determine how effectively the heart pumps and transmits oxygen through the body.

Dr. Murray Kwon, cardiothoracic surgeon at Ronald Reagan UCLA Medical Center, said a marathon runner's VO2 Max test would be roughly 60. Anyone with a VO2 Max reading in the 12-15 range is a likely candidate for a heart transplant, he said.

Mr. Brainard's test showed 9.5.

Other tests measured the volume of blood his heart was pumping and his decreasing blood pressure. Each test confirmed the critical news for Mr. Brainard.

He was in serious need of a heart transplant.



Transplant recipient David Brainard, center, stands with surgeon Dr. Murray Kwon, left, and Dr. Arnold Baas in front of UCLA Medical Center.

RICH SCHMITT PHOTO

Classified as a "status 1-A" recipient, Mr. Brainard was placed in the group of potential heart transplant recipients with the greatest and most urgent need.

"When you talk about transplants as a kind of spectrum, status 1-A is the sickest patient," said Dr. Kwon, who added that transplant recipients are matched with organs they need based on status, as well as characteristics like blood type and body size.

After entering UCLA to await the transplant in June, Mr. Brainard suffered a heart attack and went into cardiac arrest.

"He was so unstable we had to put him on a device called ECMO," recalled Dr. Kwon, who said the device, called Extracorporeal Membrane Oxygenation, is an artificial circuit that provides support when patient's own heart can't function normally.

Since ECMO can only support a patient for about a week and a new heart was not yet available, Mr. Brainard had to transition to a surgically implanted left ventricular assist device, which uses a mechanical pump to force blood flow throughout the body.

"Once you have the LVAD in place, you buy some time," said Dr. Kwon. "It can go for about two weeks, or as long as two years."

For Mr. Brainard, the prospect of waiting for weeks or months, possibly even years, was difficult to endure.

"There were some dark times," Mr. Brainard told the News-Press. "When you're sitting there not knowing if a new heart is happening or isn't happening. It was really discomfoting."

Since the same incision is made to the patient's chest when installing the LVAD, the transplant surgery is complicated somewhat by scar tissue from the previous surgery, said Dr. Kwon.

"The LVAD is every bit as big in scale as the heart transplant. And when you go back in the second time, there's more scar," Dr. Kwon said. "So the transplant is more difficult because of that."

Surviving only with the help of machines, Mr. Brainard said he remembers feeling helpless at times during the cycle of surgery and treatment.

"There are all the tubes and you're tied down," said Mr. Brainard. "You completely lose your freedom and your self-determination."

If Mr. Brainard experienced difficult moments, Dr. Kwon said it never showed in front of the doctors or nurses.

"He always put his best foot forward and always had a smile on," said Dr. Kwon. "He always seemed remarkably resilient and positive in his whole outlook."

Dr. Kwon said he has performed about 75 heart transplant surgeries and that the survival rate of heart recipients has risen in the past decade, with roughly 95 percent alive after one year.

"Our numbers now are better than they were 10 years ago, mostly because our patient selection is better," said Dr. Kwon, who mentioned that patients who are healthier and receive their transplants sooner impact those numbers.

About a month after the LVAD was installed in his chest, a heart was ready and Dr. Kwon completed the transplant surgery on Aug. 3, Mr. Brainard's 58th birthday.

"When a transplant recipient receives a new heart, everyone celebrates your heart day," Mr. Brainard said. "So now I celebrate my heart day and my birthday on the same day."

Dr. Arnold Baas, cardiologist at Ronald Reagan UCLA Medical Center, is overseeing Mr. Brainard's post-surgery treatment, including making sure his body doesn't reject the new heart.

A little more than a month after surgery, tests show Mr. Brainard's recovery is progressing as expected.

"I've had a lot of support from family and friends," said Mr. Brainard, whose friend, Michael Tokunaga, arrived in July from Hawaii to be at his bedside. His brother, Michael Brainard, has also been close by.

Since surgery, Mr. Brainard has stayed close to UCLA Medical Center, where Dr. Baas is able to monitor his progress and administer a weekly heart biopsy to test the health of his new heart.

In a few weeks, Mr. Brainard hopes to return to Santa Barbara and pick up where he left off, with a return to teaching and writing.

He published his first novel, "The Ides of August," in 2010 and is working on another novel set in Santa Barbara.

"It's an '80s adventure set near the old Laguna Ball Park," said Mr. Brainard, who has also been active in local acting and theater groups over the years.

On Oct. 13, the World War II film "Terezin" debuts at the Bel-Air Film Festival. Mr. Brainard has a supporting role in the film, directed and produced by Nicholas Tolkien.

Dr. Baas said it could still be several weeks before Mr. Brainard is ready to return to Santa Barbara, but he sees a lot of motivation in Mr. Brainard now with surgery behind him.

"Here you are, you're young, and you see your life flash in front of you," said Dr. Baas. "In due time, he'll be ready to get back to living normally again."

<http://www.newspress.com/Top/Article/article.jsp?Section=LOCAL&ID=566778226081398826>

email: [asylvain@newspress.com](mailto:asylvain@newspress.com)