

Minutes matter in surviving a - Brain attack

BYLINE: P. ELIZABETH ANDERSON **PUBLICATION:** Providence Journal Company **EDITION:** All **SECTION:** HEALTH & FITNESS **PAGE:** F-01

Could you have saved Louise Toomey's life? Would you have recognized that she was having a stroke, literally a brain attack?

Would you have called 911 in time for her to get the only treatment that could forestall brain damage?

Probably not. Nationally, only 26 percent of the general population can name the common stroke warning signs.

Toomey, 60, of Providence, had just sat down for lunch with her husband, Tom, when her symptoms began. His decisive action saved her.

"I don't know why I thought stroke. Something just kicked in," he recalled. "It was her facial expression. I could see she was really in distress. What I saw is the little formation in the corner of her mouth as she was trying to put words out."

This reluctant hero with the easy, contagious laugh says that somehow "by osmosis during 37 wonderful years of marriage to a nurse," he had gleaned the life-saving insights.

But he believes it was more than that. "There was a hand of God in there, as far as I'm concerned," he says.

BOTH STROKE and heart attack are caused by a sudden loss of blood flow. Doctors refer to stroke as a brain attack to convey the sense of urgency standard with heart attacks. The brain is even more fragile than the heart and suffers more quickly, which is why time is so critical. Unlike with a heart attack, the person having a brain attack might not be able to recognize or respond to symptoms.

Toomey, a nurse for 42 years, says, "I didn't feel anything. I thought it was a migraine because I had a headache and spots before my eyes. When [Tom] said that we'd better call 911, being the typical nurse, I didn't want to make a big fuss in the restaurant."

Good thing he did. The emergency technicians arrived within 5 minutes. They assessed Toomey and transported her to Rhode Island Hospital, where her stroke was diagnosed within an hour. She received a drug recently approved for stroke, tissue plasminogen activator, or t-PA, and spent a week in the hospital before transferring to Southern New England Rehabilitation, in Providence, for six weeks of therapy.

That was six months ago.

She still gets outpatient rehabilitation to strengthen an arm and her legs and she is blind in one eye. Her husband says she has some "tough days ... but she is doing absolutely fantastic. It's great that she's able to see our grandson," who just turned 2. "We're very happy to be together."

TREATMENT with t-PA, which dissolves blood clots, is called thrombolytic therapy. In 1987, the Food and Drug Administration approved t-PA for use in heart attacks. Approval for use in strokes didn't happen for nearly another 10 years.

"The use for stroke has been delayed for many reasons," says Dr. Arshad Iqbal, a neurologist at Kent County Memorial Hospital, in Warwick, and co-chair of the Medical Subcommittee of Operation Stroke in Rhode Island. "One is the complex functioning of the brain and the different responses of the brain tissue to thrombolytics, as compared to myocardial tissues."

Another is the complexity of treatment. To be safe and effective, t-PA must be administered within a three-hour window according to specific guidelines. To do otherwise can cause or exacerbate bleeding in the brain.

Some physicians are reluctant to take the risk and do not use it routinely. Less than 3 percent of people who might benefit from t- PA ever get the chance.

Part of the problem is that people wait an average of 22 hours before even seeking help because stroke symptoms are easy to dismiss or deny.

"Stroke presents with what are called negative symptoms. You don't have chest pain" or something similar that would distress you. "Maybe your arm is numb, or it doesn't move, and you say, 'Maybe it will be better tomorrow,'" Dr. Iqbal says.

"That has been a killer for us because you lose all that time during which something could have been done."

Iqbal wants people to know that stroke is as preventable and treatable as heart attack. He says that historically, stroke has been considered "a curse upon you from which you could not" return.

"The feeling we have regarding the origin of the word is that it was considered some sort of bad luck, an inevitable, irrevocable loss," he says.

A STROKE of bad luck seems to describe what happened to Richard Lamy. The 56-year-old Providence high school teacher suffered a stroke during heart surgery. He was at Brigham and Women's Hospital, in Boston, having his aortic and mitral valves replaced.

"When I woke up, the doctors told me that I had a stroke. I found it very hard to believe until I tried to get up to use the bathroom and realized that I was completely paralyzed. I could not move either arm or leg. Then I knew they were telling the truth," he says.

Lamy had hoped to return to work in September 1999, a couple of months after his heart surgery. So far, he hasn't made it.

Rehabilitation from the stroke that damaged both sides of his brain was delayed until he recovered from heart surgery. Three weeks after surgery, he was transferred to Southern New England Rehabilitation Center, where he spent 4 months, followed by 10 months of outpatient therapy at Sargent Rehabilitation Center, in Warwick.

It's been tough, but he has come a long way. At the beginning, the staff had to hoist him into a wheelchair and later support him on the parallel bars.

"It was grueling, but I had no choice," he says. "I wanted to get back to as normal a life as I could."

Lamy still wears a brace on his left leg and has problems with his hands and fingers, but he is anxious to return to work. "I am making progress and plan to rid myself of this brace. Hopefully, in September, when the new school year comes along, I can find something," he says.

EXPANDING the window of opportunity to treat all patients is the goal of Dr. Douglas De Orchis, director of vascular and interventional radiology at Miriam Hospital, in Providence.

"I had seen strokes come and go by the hundreds that we were not treating, and I felt it was tragic watching these families," he says. "I was treating clots everywhere else in the body except the head."

Then, about four years ago, a 46-year-old man from Westerly had a massive stroke at home and was taken to the hospital comatose. His CAT scan was perfectly normal, which meant no damage had begun. He was transferred to Rhode Island Hospital, where a repeat scan still showed no damage. De Orchis administered an intra-arterial dose of t- PA.

This involves a tiny catheter with imaging capabilities that is threaded from the groin to the neck at the level of the jawbone. If a clot is seen, an even smaller catheter, not much bigger than a kite string, is threaded through the first catheter directly into the brain. From there, t-PA is delivered right into the clot itself, in minuscule amounts over a couple of hours.

"We saved this guy. Turns out he had a large clot in the back of his brain to his major brain stem, which are his major consciousness and respiratory centers," De Orchis says.

"A fraction of the dose that's given through the IV is used. [The IV technique is] like putting Drano in one end of your house and expecting it to clear the clog at the other end," he says. "I'm putting it into the sink that's clogged."

De Orchis says that since he is able to use between one-fifth and one-tenth of the IV dose, the risk of bleeding is theoretically less.

"We find we can extend your care to six hours . . . and certain vessels can be treated as late as 18 hours later," he says.

THIS MAY be one of the treatments of the future.

Others include imaging techniques that pinpoint damage and circulation.

"Whatever treatments evolve from where we are now, one thing is for sure, time is of the essence," De Orchis says.

In the meantime, as chairman of Operation Stroke Rhode Island, an initiative of the American Heart Association, he works to educate the community and his colleagues about essential stroke care. "I am trying to get more hospitals involved in providing intravenous treatment on a regular basis," he says. "Operation Stroke has a campaign to educate the community on the signs and symptoms of stroke. If we can't get the population to recognize their own symptoms, we can't get them in early, and we'll never treat most of the patients."

De Orchis realizes that t-PA is not a magic bullet, "but it's the only treatment that, when performed early, offers you the opportunity of resolving a stroke," he says.

"There is no treatment that will treat dead brain. It will not happen. You must get in quickly."

* * *

* WHAT IS A STROKE

A stroke occurs when a blood vessel that brings oxygen and nutrients to the brain bursts or is clogged by a blood clot or some other particle.

Nerve cells in the affected area of the brain cant function, and die within minutes.

KRT ILLUSTRATION/

CARL VAUGHAN

Warning signs:

SUDDEN numbness or weakness of the face, arm or leg especially on one side of the body.

SUDDEN confusion, trouble speaking or understanding.

SUDDEN trouble seeing in one or both eyes.

SUDDEN trouble walking, dizziness, loss of balance
or coordination.

SUDDEN severe headache with no known cause.

* * *

RELATED - May is Stroke Awareness Month.

See Health Notes, Page M5, for a list of special programs sponsored by the American Heart Association.

* * *

* REDUCING YOUR RISK OF BRAIN ATTACK

Heart disease and stroke are the principal components of cardiovascular disease and the first- and third-leading causes of death in the United States, accounting for more than 40 percent of all deaths. To reduce your risk:

- * Don't smoke
- * Get regular exercise
- * Eat foods that are low in fat, cholesterol, and sodium
- * Check your cholesterol

* * *

* RECOVERING: Months after suffering a stroke, Louise Toomey, 60, of Providence, is recovering. Her husband, Tom, has been with her every step of the way, including taking quick action when he recognized her symptoms.

JOURNAL PHOTO / BOB THAYER

* SMALL STEPS: Physical therapist Emese Bod helps stroke patient Louise Toomey, of Providence, with her left knee and leg during a rehabilitation session at Roger Williams Hospital, in Providence, last week.

JOURNAL PHOTO / BOB THAYER KEYWORDS: HEALTH