

Neuro-Endovascular Team Brings New Lifesaving Options to Rochester

While Superbowl Sunday started out like any other Sunday for Webster resident Christine Skolnick, by kickoff time, things went from bad to worse for the 42-year-old mother of two. An apparent stomach virus and mild headache at midday became deadly by 6 p.m. as Skolnick's face drooped on her right side and she had difficulty moving her right leg and arm.

A rush to Strong Memorial Hospital confirmed the worst: that Skolnick had suffered a stroke, estimated to have occurred at the onset of her headache—nearly eight hours before. The large time lapse between her initial symptoms and diagnosis severely limited her ability to receive aggressive treatments like clot-busting drugs, which need to be administered within three hours of a stroke. An MRI scan showed that the source of her stroke was a blood clot in a major artery leading to her brain.

At 8 p.m., Skolnick was presented with an option to undergo a procedure which recently became available at the University of Rochester Medical Center (URMC) with the arrival of newly recruited neuro-endovascular expert John Deveikis,

M.D., and his wife, Susan F. Deveikis, B.S.N., R.N., the nurse coordinator for URMC's neuro-endovascular service.

"We told Christine that her opportunity to receive a standard dose of tPA [tissue plasminogen activator] had elapsed nine hours ago, and if we did nothing, she would not regain movement on her right side," Deveikis said. "Or we could try a relatively new procedure that would give her better odds of overcoming her disability from stroke."

Deveikis was referring to a new minimally invasive procedure to remove blood clots in the brain called endovascular thrombectomy. Using a combination of tools, physicians can triple the amount of time stroke patients have to receive this treatment that can potentially decrease or even eradicate the debilitating side effects of stroke.

It works by first feeding a balloon catheter from the groin vessels up to the carotid artery. A micro-catheter is guided into the brain until it reaches the clot, and can be used to inject clot-busting drugs directly into the clot. Then, a thin retractable wire is pushed past the blood clot and curls itself into a corkscrew shape. The physician gently retracts the

micro-catheter, which in its new corkscrew form can effectively pull the blood clot along until it reaches the carotid artery, where it is suctioned out through the balloon catheter.

"It was scary. There wasn't much time to think about it, but I knew I needed to try it. I needed to get better for me, and for my boys," she said.

Her wish came true—almost instantaneously. Awake and alert during the hour-long procedure, Skolnick recalls feeling a tremendous "tug" in her head, and then, "I was able to talk and move."

"Up until recently, we've not had much to offer patients who couldn't get to a hospital immediately. With this newer approach, we can expand the window of time to administer clot-busting medications, and use minimally invasive techniques to remove the blockage, giving stroke patients a fighting chance



Clot retrieval



Christine Skolnick

to return to a normal life," Deveikis said.

Five days later, Skolnick walked out of the hospital, fully recovered from an ailment that is the leading cause of serious, long-term disability in the U.S. and the third leading cause of death.

Christine has now returned to her normal life, with many of her activities revolving around her two boys and her love of gardening. For Christine, it seems almost as though Dr. Deveikis and his wife were brought to Strong just for her. "I feel funny calling it a miracle," she says, "but that's pretty much what it is."

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