



## Freedom from Tremors

Deep brain stimulation at Providence was a “miracle” for patient Beverly Beyer.

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Photographed by MONICA OROZCO

**A** great-grandmother and active octogenarian, Beverly Beyer was not ready to let a diagnosis of Parkinson’s disease threaten her independence. However, over time her tremors became increasingly intense. “Everything was moving—my hands, my eyes, my mouth,” Beyer says. “I was very uncomfortable.”

Her everyday activities, from showering to drinking coffee, became difficult. Soon Beyer felt self-conscious dining with her friends at the independent living residence where she currently resides. “I wasn’t as outgoing,” she says. “I just curled up inside myself so people wouldn’t notice me.”

After consulting with her neurologist, Michael M. Marvi, MD, Beyer decided to consider deep brain stimulation (DBS). Dr. Marvi initiated a series of neurological tests to determine if she was a good candidate. Beyer decided to go ahead with the procedure after consulting with neurosurgeon Ronald Young, MD, who also is medical director of the Movement Disorders Center in the Hycy and Howard Hill Neuroscience Institute at Providence Saint Joseph Medical Center in Burbank.

“Deep brain stimulation was a miracle for me,” Beyer says. “I had two surgeries. The day after the final surgery, nothing shook. The people at the facility couldn’t believe it when I went to dinner the next day. They were amazed.”

Perhaps more amazing is that Beyer’s results are typical. “The success rate is high—as many as 80 to 90 percent of patients see improvement,” says Dr. Young.

DBS treatment involves two separate surgeries. In the first, the patient is awake and kept comfortable through a combination of local anesthesia and intravenous sedation. A tiny incision is made in the scalp, and thin wires—called stimulating electrodes—are placed in precise target areas of the brain. Then a low level of electrical current is passed through the electrode, and the surgical team can assess the effect of the current on the patient’s symptoms and make necessary adjustments.

Several days later the patient receives a second surgery while under general anesthesia. An insulated wire is attached to the electrode’s lead and surgically guided to the area where a permanent electrical stimulator—much like a pacemaker—is implanted in the chest. The patient returns to the doctor about two weeks later to have the stimulator turned on and programmed through a small device similar to a TV remote. “Once we turned the stimulator on, we saw a dramatic improvement in the degree of tremors that Mrs. Beyer had,” says Dr. Marvi.

In general, Dr. Young says he utilizes deep brain stimulation in the treatment of Parkinson’s patients and those with

essential tremor or dystonia. “The symptoms must be bad enough to prevent the patients from doing everyday activities,” he says.

In addition, most patients who undergo DBS have not gotten adequate relief from standard medications for Parkinson’s, or the required dosages result in unwanted side effects. Dr. Young also adds that patients who have cognitive dysfunction or memory issues generally are not good candidates for DBS because their conditions could be significantly worsened.

At the Movement Disorders Center, prospective DBS patients consult with an experienced team that includes the neurologist, neurosurgeon, nurse coordinator and neuropsychologist. This team follows the patient from the initial consultation to follow-up care.

“Unlike some major centers, the patient has contact with the people who are actually going to be performing the procedure,” says Dr. Young. And patients like Beyer appreciate that personal level of attention. “Saint Joseph is a wonderful hospital,” she says. “I love it here because everyone is so very kind and caring.”

“Our center has an excellent track record, and we have been doing this procedure for many years,” says Dr. Marvi.

Two years after her surgery, Beyer still enjoys her independence. She goes to a yoga class twice a week, and on off days she visits the residence’s fitness center, where she works out on a treadmill. Recently she acquired Miss Kitty, a ragdoll kitten, and trained her to walk down stairs on a leash.

Beyer wants prospective deep brain stimulation patients to understand that although the procedure has high success in alleviating certain symptoms, it does not cure Parkinson’s. “My speech doesn’t work like it used to,” she says.

Still she is grateful for the impact the procedure has had on her life. “Before, it was like my body had a mind of its own,” she says. “Today I look around and am extremely grateful for where I am, so I don’t worry about tomorrow.”

**For more information, call 1-888-HEALING (432-5464).** 



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