

Technology provides control of disabling neurological symptoms

Recent technology, using surgically implanted medical devices, helps control a variety of disabling neurological symptoms.

“Deep brain stimulation, or DBS, which can help control essential tremor, dystonia, dyskinesia, and the off times associated with

medications or if they experience intolerable side effects from tremor-controlling medications, this therapy may help.”

DBS is used only for patients whose symptoms cannot be adequately controlled with medications.

“When surgery is indicated, we use the most advanced, state-of-the-art equipment available,” describes the doctor. “The DBS electrode device is similar to a cardiac pacemaker and delivers stimulation to selected brain centers involved in movement. Electrical stimulation of the brain networks

can stop abnormal oscillations and can normalize activity, resulting in cessation of tremor and other troublesome symptoms. The device is powered by an implanted battery and is programmed a few weeks after surgery in the physician’s office along with medication adjustments.”

According to Dr. Schumacher, the DBS procedure usually involves a one-night stay in the hospital.

Sarasota Neurosurgery

James M. Schumacher, MD

Parkinson’s disease, is now available at Sarasota Memorial Hospital,” announces James M. Schumacher, MD, director of neuroscience for the Sarasota Memorial Healthcare System and a pioneer in the field.

Essential tremor is a movement disorder that can affect almost any part of the body. Symptoms of dystonia include muscle contractions that may cause twisting, repetitive jerking movements, or abnormal posture. Dyskinesia is an involuntary movement related to Parkinson’s disease.

Dr. Schumacher and a multidisciplinary team of physicians are ready to help patients with these disabling symptoms. “The key is understanding our patients and properly identifying their symptoms,” says Dr. Schumacher. “Patients are evaluated, and every effort is made to optimize their medications and lifestyles before considering surgery. However, when patients’ symptoms cannot be adequately controlled with



According to Dr. Schumacher, with a DBS device Parkinson’s, tremor, and dystonia patients can enjoy improved activities of daily living with decreased medications.

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Teamwork

Dr. Schumacher, who helped develop DBS technology, has been doing Parkinson’s and movement disorder surgery since the early 1990s and is also actively involved in stem cell research. He works closely with two board-certified movement disorder neurologists, Dean Sutherland, MD, PhD, and Gregory Hanes, MD. They work as a multidisciplinary team to define the disease and to find the best solution for improving the patient’s quality of life.

Another member of the team, Peter Kaplan, MD, a Parkinson’s disease neuropsychologist, works with the team to identify and treat problems with memory and brain function.

“In most cases, DBS can reduce or eliminate tremor and dystonia, and Parkinson’s patients can enjoy improved activities of daily living with decreased medications,” observes Dr. Schumacher. “Unlike previous surgeries for Parkinson’s, DBS does not dam-



James M. Schumacher, MD, is a fellowship-trained neurosurgeon and diplomate of the American Board of Neurological Surgery. He completed his medical degree from the University of Washington, Seattle. Dr.

Schumacher completed the Halsted Internship in General Surgery at Johns Hopkins Hospital, Baltimore, MD, and a residency in neurosurgery with the Harvard Medical School at Massachusetts General Hospital, Boston. He became a research fellow at Harvard Medical School and was awarded a fellowship in functional neurosurgery at the Yale School of Medicine, New Haven, CT. Dr. Schumacher has published numerous professional papers related to neurosurgical procedures and has received many awards. He is a member of the American Association of Neurological Surgeons, Congress of Neurosurgery, Society of Neuroscience, and numerous other professional medical associations. Dr. Schumacher has recently returned to Sarasota after serving as director of functional neurosurgery at the University of Miami School of Medicine and is now director of neuroscience for the Sarasota Memorial Healthcare System.

age healthy brain tissue by destroying nerve cells and therefore offers patients a bridge to the next therapy, which could be a revolutionary medicine or stem cell therapy to replace disease damaged brain circuitry.” **FHCN**—Kris Kline

Expert solution

Dr. Schumacher welcomes your questions regarding persistent back or neck pain or other neurological problems. Sarasota Neurosurgery is located at 1921 Waldemere St., Suite 809, in Sarasota. To schedule a consultation, please call (941) 955-1960.

DBS therapy, which is FDA approved, is covered by Medicare and most insurance plans.