Methodist neurosurgeon first in world to implant next generation device for deep brain stimulation therapy

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Dr. Richard Simpson, neurosurgeon at the Methodist Neurological Institute, in Houston, Texas, was the first physician to implant Medtronic's Activa® SC neurostimulator, a new device for deep brain stimulation therapy.

A 65-year-old woman with Parkinson's disease became the first patient in the United States to receive a new device for deep brain stimulation (DBS) therapy.

Dr. Richard Simpson, neurosurgeon at the Methodist Neurological Institute in Houston, Texas, was the first physician to implant Medtronic's Activa SC neurostimulator. The single-channel Activa SC is the latest addition to the Medtronic's Activa® portfolio of DBS systems, which treat the symptoms of advanced Parkinson's disease and essential

tremor in the United States and Europe. The device is also approved for dystonia in Europe.

“We are excited to be the first institution in the United States to offer Activa SC, an important new technology that greatly enhances our ability to treat and customize therapy for a large group of our patients,” said Simpson. “We have a greater ability to fine-tune stimulation and customize our patients’ therapy, which may help us treat their disease more efficiently and in a shorter amount of time.”

The Activa SC system is comprised of an implantable neurostimulator; a thin, insulated lead that is placed in a specific target within the brain; and an extension to connect the neurostimulator and the lead. The new device is powered by a non-rechargeable battery that does not require maintenance from the patient to provide continuous stimulation for multiple years. Once implanted, a neurologist can program the device, adjusting stimulation based on that patient’s needs.

More than 80,000 patients worldwide have received Medtronic DBS Therapy, which delivers mild, continuous electrical stimulation from a surgically implanted neurostimulator to precisely targeted areas within the brain. Stimulation of these areas interrupts the brain signals that cause motor symptoms associated with common movement disorders, allowing many individuals to achieve greater control over their body movements.

Provided by The Methodist Hospital System