

Advanced Treatment for Movement Disorders

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Symptoms of Parkinson's Disease

Parkinson's disease can be associated with motor and non –motor symptoms

- Motor symptoms can make the activities of everyday life challenging
 - Rigidity, speech problems, tremor, slowed movements, shuffle steps, postural instability
- Even though Parkinson's disease is a movement disorder, the non-motor symptoms can have just as big an impact on your quality of life
 - Decreased sense of smell, depression or mood problems, pain, insomnia, bladder or bowel dysfunction, fatigue

Essential Tremor

The Impact.

- Affects an estimated 10 million Americans.
- People often live with the debilitating tremor and do not seek treatment.
- For those that do, up to 50% do not get satisfactory relief from medications or have intolerable side effects.

The Facts.

- Also referred to as familial, idiopathic or benign tremor.
- Essentially means that there is no known cause of the medical condition.
- In up to 50% of the cases, it is hereditary.
- Can progress to the point that daily activities are difficult and may require assistance.

Advanced Treatment Options

Deep Brain Stimulation (DBS)

- Deep brain stimulation (DBS) is a neurosurgical procedure which may help to manage Parkinson's symptoms which can't be effectively controlled by medication alone.
- It works by surgically implanting a modest medical device typically under the skin in the chest which sends signals to the brain via insulated wires called leads.

DBS Benefits

- Tremor reduction, depending on type and location (typically a 70% reduction in tremor events)
- DBS may give you increased hours of "On time" a day
- You may be able to reduce the amount of medications you take
- Improvements in quality-of-life metrics reported by DBS patients

Potential DBS Candidate

- Has idiopathic PD
- Responsive to dopaminergic therapy
- ON/OFF fluctuations that are increasing in frequency and amplitude
- Troublesome dyskinesia
- Refractory Tremor

No Longer a DBS Candidate

- Suffers from dementia
- Has medical conditions that prevent surgery
- Has progressed to late-stage Parkinson's disease

MR-Guided Focused Ultrasound (MRgFUS)

- Sound waves are directed from a helmet-shaped device with no incisions
- Where the sound waves meet, a lesion about the size of a pea is made to disrupt the abnormal circuit
- The target is the Vim of the thalamus, same as used for deep brain stimulation (DBS) and surgical thalamotomy
- Many patients experience immediate tremor improvement with minimal complications

Who is suitable for treatment?

- Confirmed diagnosis of medication-refractory essential tremor or tremor-dominant PD
- 22 years or older for ET, 30 years or older for tremor-dominant PD
- Can tolerate the procedure with or without some form of sedation
- Able to communicate sensations during procedure
- Can fit in the MRI scanner and activate Stop Sonication button

What To Expect

- Immediate and durable tremor improvement
- Significant improvement in Quality of Life
- Outpatient, home the same day
- Little to no risk of infection
- No implants, probes or ionizing radiation
- No anesthesia
- Minimal complications

Interested in learning more?

Visit www.sharp.com/movementdisorders, email us at movement.disorders@sharp.com or call us at 619-740-3085.

