

Surgery for Parkinson's Disease

Parkinson's disease is a progressive neurodegenerative illness that affects about one percent of men and women over the age of 50. Despite tremendous advances in drugs and techniques to manage the symptoms of Parkinson's disease, not everyone is able to benefit from these improvements. Parkinson's disease is a highly individualized condition that attacks each patient differently. With the promise of stem cell therapy on the horizon, coupled with the general effectiveness of existing drug treatments, including the commonly-administered levodopa, most Parkinson's sufferers are able to cope with their disease. There are, however, a number of cases of rapidly-progressing or unusually severe Parkinson's that necessitate surgery as the best treatment option. Like drug therapy, surgery may decrease the effects of symptoms such as tremors and mobility problems, but is not a cure.

Is surgery for

Parkinson's the best option for you? There is no simple answer. Parkinson's surgery is brain surgery, which by its very nature is highly risky. There is always the very real potential for permanent brain damage. If, however, all other non-invasive treatment options have been ineffective, doctor and patient may determine that surgery is the best available option to manage the Parkinson's symptoms.

A pallidotomy

may be required for Parkinson's patients with an especially aggressive case of the disease. It may also be selected for those among the small percentage of patients who do not respond to medication. If the latter is the case, it might be worthwhile to get a second opinion for your Parkinson's diagnosis before going ahead with surgery. It is worthwhile to note that there are several conditions that have similar characteristics to Parkinson's but that do not respond to ant-Parkinsonian drugs. During the course of surgery, a small hole will be drilled in the skull and an electric probe inserted. The probe is used to destroy a small part of the portion of the brain known as the global pallidus. Parkinson's experts think that an overactive global pallidus affects people who suffer from the disease, and that by destroying it, medication-induced rigidity and dyskinesia may be reduced. Pallidotomies have been used since the 1990s. A similar procedure, called a thalamotomy, is used to destroy cells in the thalamus. This surgery can be helpful in treating debilitating hand and arm tremors. A less destructive, but nonetheless risky, surgical option is called deep brain stimulation. In deep brain stimulation an electrode is implanted into the brain. The electrode transmits electrical pulses to stimulate the brain while also blocking the signals that cause Parkinson's symptoms. Think of it as a sort of pacemaker for the brain. Compared to other surgical options, deep brain stimulation is a relatively new procedure that has been found to be helpful in improving motor function.

Surgery

is not the answer for everyone. It is risky and therefore should be used as a last alternative. In addition to the health aspects and risks, prospective Parkinson's surgical patients may also have to weigh financial considerations when deciding whether or not to have surgery. All of the surgical procedures are costly to administer and may not be covered by all health care insurance plans.