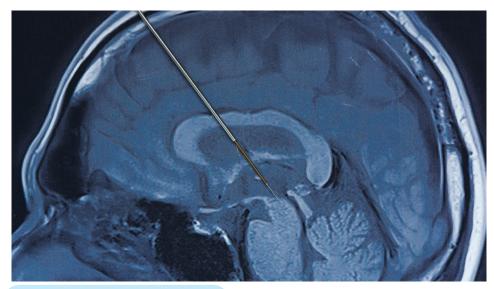


# DEEP BRAIN STIMULATION





**Digital Version** 



#### WHAT IS DEEP BRAIN STIMULATION (DBS)?

DBS is a surgical procedure that works for your brain much like a pacemaker for the heart. It involves placing metal electrodes, or leads, at certain target areas of your brain to produce electrical impulses that block or regulate the abnormal brain messages that cause certain motor symptoms associated with Parkinson's Disease- including tremors, rigidity and bradykinesia (slowed movements).

#### **HOW DOES IT WORK?**

1. Your neurosurgeon places a thin metal electrode atone of the three possible target areas in your brain: The subthalamic nucleus, thalamus or Globus pallidus.

2. The DBS Neurostimulator is placed under the skin of your chest, much like a battery pack.

3. The stimulator and electrodes are connected through wires, or flexible extension cables, underneath your skin.

4. You are given a Patient Programmer.

This device allows you to make adjustments to the stimulator settings. You can turn it on and off and check battery levels.

### WHEN SHOULD I CONSIDER DBS THERAPY?

As it is a surgical procedure, DBS should be considered only when the side effects of your medication are being a hindrance to daily life.

Watch out for:

- Motor Fluctuations
- Dyskinesia (abnormal rhythmic involuntary movements)
- Before deciding, consider:
- Has medication positively impacted your quality of life?
- Have you experienced clear improvement in motor functions with dopaminergic medication?
- Is there a potential contraindication for surgery,possibly due to severe cognitive deterioration and psychiatric morbidity?
- Do you or your family have unrealistic expectations for surgery?

If your answer to most of these questions is "yes",now may not be the right time for you. But it's never too early to consult us.

### HOW DO YOU DECIDE IF IT'S TIME FOR DBS THERAPY?

QUALITY OF LIFE SLOPE



\*Slope indicates decreasing Quality of Life, going from left to right

1. Oral medications are controlling your symptoms: Start thinking about DBS.

2. Oral medications work, but less effectively: You may want to get started on DBS.

3. Symptoms are no longer responding to oral therapies: Unfortunately, DBS is no longer an option for you. Visit us at our DBS Clinic early, so that we can help you take the next step in your treatment.

### HOW CAN DBS HELP PEOPLE WITH PARKINSON'S?



DBS can significantly manage and reduce

the symptoms of Parkinson's for many years, by improving motor function and movements, allowing you to lead a relatively normal life.

## WHAT ARE THE RISKS? SAFETY PROFILE OF DBS THERAPY

DBS has been in use for nearly 30 years. Any possible risks and complications are well known and can be easily predicted. It is a relatively safe procedure with minimal risk. Our DBS Specialty Clinic at the hospital can provide you with detailed information on the potential complications and risks involved in the procedure.

#### **STEPS IN THE DBS PROCEDURE**

1. Consultation with our doctors at Aster.

2. If you are a suitable DBS candidate, extended examinations are conducted.

3. Once it has been established that there are no contra indications, and you have provided consent, we can proceed to admission for surgery.

4. Pre-operative management of medication and preparation are conducted.

5. Surgery is performed, and patients are usually kept awake with light sedation, to better test brain functions, effects and side effects.

6. Patients are then introduced to the DBS neuro stimulator, it's programming, and functional testing.

7. Transfer to a rehabilitation clinic, if required.

8. Regular aftercare for outpatients (at least once a year) and follow-up care for inpatients, if needed.





PLEASE SCAN FOR THE LOCATION



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### DEPARTMENTS

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