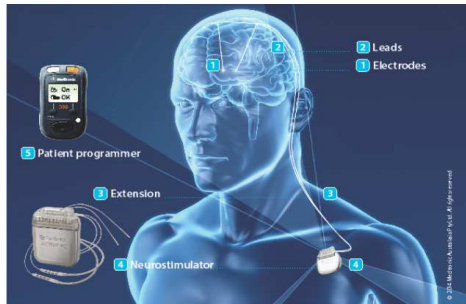


Deep Brain Stimulation (DBS) is a therapy where electrodes are implanted into specific areas of the brain. Electrical stimulation modulates electrical activity in the brain which assists in the management of neurological conditions such as movement disorders.

DBS is a well-established procedure that has been offered to South Australians for the past 10 years.



Our DBS Team

The team comprises of a group of trained professionals to ensure that the patient receives the best possible outcome.

The team includes:

- neurologist
- neurosurgeon
- neuropsychologist
- Parkinson's nurse
- anaesthetist.

What does DBS help with?

DBS has shown to benefit patients with movement disorders such as Parkinson's disease, dyskinesias (a side effect of Parkinson's medications) and other involuntary movement disorders such as dystonia and essential tremors. It is particularly helpful for patients who have difficulties managing their movement symptom with medications alone.

It is important to note that DBS is **not** a cure but a therapy that aims to provide relief of troubling movement symptoms and to improve the patients' quality of life.

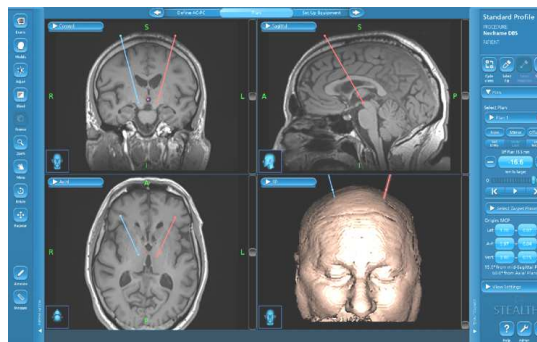
What is involved in DBS?

Pre-operative assessment

Various members of the DBS Team will make an assessment of your baseline function and provide advice on the suitability and likely benefit from DBS. Medicines for Parkinson's, sugar control or blood-thinning may need to be adjusted.

Planning

Planning consist of a MRI prior to surgery where the electrode targets are selected by the Neurosurgeon and Neurologist.

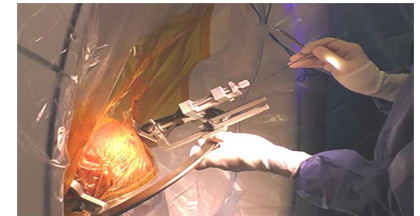


Day of Surgery

A stereotactic frame is secured to the head under light sedation and a local anaesthetic is applied to the scalp. The head is kept completely still during the procedure which allows the surgeon to insert the electrodes with pinpoint precision.

Device Implantation

A microelectrode is introduced into the brain based on the planned target.



The electrode location may be verified by electrical feedback from cells in the brain, functional assessment conducted by the Neurologist or by intra-operative imaging.



The microelectrode is then replaced with the permanent electrode and this process is repeated on the other side. This is a painless process as the brain itself does not have any pain receptors.

With both leads implanted a general anaesthetic is administered. The generator is placed under the skin below the collar bone and the leads connected.

After the procedure

Most patients will be required to stay in hospital for 5-7 days after the procedure. During this time the generator will be programmed and any medication optimised. Education on charging the device will also be provided.

Optimal results from DBS therapy may take up to 12 months or longer as adjustments are made based on recommendations from the DBS team in follow-up appointments.

Risks, complications & side effects

While the DBS procedure is minimally invasive all procedures have risks of complications. The potential risks and complications are listed below.

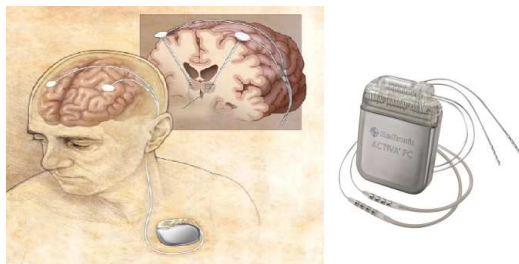
Risks and complications will be discussed extensively with your treating doctor.

Risks and complications related to the procedure:

- stroke, bleeding, seizures, infection, death
- misplaced, displaced or fractured leads
- confusion, cognitive or mood changes.

Side effects related to stimulation: (usually reversible)

- cognitive or mood changes
- speech and/or visual disturbances
- dyskinesias (abnormal writhing movements).



For more information

- > Royal Adelaide Hospital
Parkinson's Disease Nurse
Department of Neurology
9G370
Port Road, Adelaide SA 5000
Telephone: 08 7074 0000

Online Resources & Videos

1. A patient's success story - Ten Eyewitness News

<https://www.youtube.com/watch?v=tFrVwhFHuo4>

2. Parkinson's SA

<https://www.parkinsonssa.org.au/>

C.I.S. – XXXXXXXX

Consumer Endorsement Date: DD/MM/YYYY

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No.	DD/MM/YYYY	DD/MM/YYYY

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Consumer Information Sheet

Deep Brain Stimulation for Movement Disorders

