SO, YOU ARE HAVING DBS SURGERY?

This resource is for Awake Deep Brain Stimulation (DBS) patients.

Welcome to Brigham and Women’s Hospital and the Deep Brain Stimulation (DBS) Program
Serving patients in the Longwood Area, Foxborough and South Shore Hospital.
WELCOME!

We in the Department of Neurosurgery at Brigham and Women’s Hospital are happy you have chosen our DBS Program.

Travis Tierney, MD, PhD is a fellowship-trained functional neurosurgeon specializing in DBS and is here to provide you with the highest level of care and support throughout your DBS experience. Dr. Tierney’s team includes a highly-trained and dedicated physician assistant, Bianca Belcher, MPH, PA-C, who is committed to helping you through the full spectrum of your procedure including pre-surgical evaluation, assisting in the OR, and DBS programming after surgery. We work very closely with specialists from the Departments of Neurology, Psychiatry, and Neuropsychology to coordinate the best possible care for you. Additionally, we have an experienced and competent administrative staff that strives to provide the best customer service for you and your families. Here at Brigham and Women’s Hospital, we have access to the most advanced technology while being surrounded by world-class leaders in the healthcare field. We utilize these resources to ensure truly innovative and high quality care from the DBS Program and the Department of Neurosurgery. We approach our patient care from a patient-centered and multidisciplinary perspective.

This packet will provide you with information to help you through your Brigham and Women’s Hospital DBS experience. We want you to have a healthy and quick recovery, and believe that understanding this material will help you achieve that goal. We are available and happy to answer any questions that you may have. If you do have questions please call the DBS Program Coordinator at 617-732-6858 or visit our website to view surgical and outcomes videos: www.BrighamandWomens.org/DBS.

Again, thank you for choosing the Brigham and Women’s Hospital Department of Neurosurgery DBS Program.

Best,

Travis Tierney, MD, PhD
Director, Stereotactic & Functional Neurosurgery

Bianca Belcher, MPH, PA-C
Deep brain stimulation (DBS) is a type of brain surgery in which electrodes are implanted into specific targets in the brain, in order to manage symptoms of disorders including Parkinson’s disease, essential tremor, and dystonia. The surgery involves the placement of three device parts into the body, below the skin. The first device part is the wire(s) that go into the brain, called leads or electrodes. The second device part is the battery pack/generator, which is placed in the chest just below the collar bone. The last device part is the wires that connect the leads to the generator.

Awake DBS Surgery, as the name suggests, is performed while the patient is awake. The surgeon will determine the appropriate brain targets for DBS by using CT and MRI Image Fusion, physiological mapping and macrostimulation for symptom control. The surgery takes about 4-6 hours, and is performed under local anesthesia.

About 2-3 weeks after your surgery is complete, the medical team will turn on the device, and begin target stimulation. Some symptom relief is immediate (such as tremor control) and some results can take several months to occur.

Unlike other surgical options available, the effects of deep brain stimulation are reversible and do not permanently damage brain tissue. In addition, there is the ability to adjust, or program, the stimulation to better capture symptoms.
MEET THE TEAM!

Your Neurosurgery Team

NEUROSURGEON: The attending physician is responsible for your care, from admission through outpatient follow-up. All members of the Neurosurgery team report to your neurosurgeon. While in the hospital, your neurosurgeon may see you early in the morning, before spending the day in the operating room. Throughout the day, you will be cared for by the rest of your team. There is regular communication between the team and your neurosurgeon. All decisions about your care are approved by your neurosurgeon.

RESIDENTS: Physicians training to be neurosurgeons are an active part of the Neurosurgery team and will provide a large portion of your care, including performing procedures, writing orders, and prescribing medications.

PHYSICIAN ASSISTANTS: Neurosurgery team members that assess your progress, address questions and concerns, and provide care such as procedures and medication prescriptions.

NURSES: The nursing team will provide for your daily needs, administer medication and treatments, provide education, and communicate with the Neurosurgery team about your care.

CARE COORDINATOR: Will locate you and meet with you soon after surgery or admission to assess and plan your discharge options.
BFORE YOUR SURGERY

Getting Prepared

Your preoperative evaluation appointment is very important! Be sure to take a complete list of your medications with dosages and frequency, as well as the vitamins you take on a regular basis with you to this appointment.

At your preoperative evaluation appointment your care team will discuss the medications that you will need to discontinue before surgery – including Coumadin (warfarin) or Plavix (clopidogrel).

Do not take aspirin, Motrin, Advil, ibuprofen, naprosyn or similar products for seven (7) days prior to surgery.

Do not take any medications used to treat your Parkinson’s disease, essential tremor, or dystonia after midnight the night before your surgery.

Do not drink or eat after midnight the night before your surgery. This includes coffee and tea in the morning. You may take the medications that the preoperative evaluation appointment instructed you to take with a sip of water.

You are encouraged to choose one (1) contact person for the neurosurgery team to communicate with about your condition to your family and friends.

The Weiner Center is for Brigham and Women’s Hospital patients who are having surgery at our main Longwood area location only. If you are having surgery at South Shore Hospital or Brigham and Women’s /Mass General Healthcare Center in Foxborough, you will be directed to the appropriate preoperative clinic location.

Weiner Center for Preoperative Evaluation, 45 Francis Street, Boston, MA (617) 732-7484
Foxborough Specialty Clinic, 20 Patriot Place, Foxborough, MA (508) 718-4010
South Shore Hospital, 55 Fogg Rd, Weymouth, MA 02190 (781) 624-8448
You will sign in at the admissions office, located by the main entrance. They will then take you to the pre-operative holding area. You may experience some waiting while you are being prepared for surgery.

You will get the frame placed on your head and get a head CT. This image helps us plan your surgery. After the scan is complete, you will go to the operating room.

You will be awake for the entire procedure, but will be given local anesthetic. You will not be in pain. At times, you will be asked to participate by holding your hand up or counting. This helps bring out the tremor for most people.

After surgery, your nurses will check your status frequently. This is normal. Please discuss your pain medication needs with them.

You may be on IV medications after surgery until you can eat, then you will start oral medications. You will get a dose of your tremor medication as soon as the procedure is over.

You may not feel like eating, but it is important to start taking small bites of soft foods and thick liquids.

We use staples or sutures to close the incision line.
AFTER SURGERY
in the Hospital

Nursing staff will help you out of bed to the chair and walk you to the bathroom several times per day.

You may feel weak and tired for 1-2 weeks after surgery, but will feel stronger each day.

You may experience some mild confusion after surgery. This is not unusual. It will go away in 1-2 weeks.

Most people go home the day after surgery. Please have your family and friends help you prepare for this, including a ride from the hospital.

Before you are discharged from the hospital, a member of the neurosurgery team will provide you with post-operative instructions for care at home. You will be given prescriptions for pain medications. Give these to a family member to fill before you go home.

You will have an appointment for staple/suture removal approximately 10 days after surgery.

You will have an Initial Programming appointment approximately 2-3 weeks after surgery. Your stimulation will be turned on at this appointment. Please do not take any of your tremor medications after midnight the night before this appointment.
AFTER SURGERY
Once You’re Home

Your surgical site will be sore, and may take a few weeks to gradually improve. Have a caretaker keep an eye out for redness, swelling and discharge.

Keep incision clean and dry until your follow up appointment. You may shower with a shower cap, but no tub, baths or pools until instructed.

You should continue taking all of your Parkinson’s, essential tremor, and/or dystonia medications the same way you took them before surgery.

Once you return home, you should be able to get out of bed, walk, and take stairs. Gradually increase your activity.

Make sure you increase your intake of fluids and fiber as pain medicine (narcotics) can cause constipation.

Do NOT smoke and do NOT drink alcohol.

You may return to work when your pain level is minimal and you can perform your employment duties.

Take pain medication as instructed. If you need a refill on your medication, please contact the office three to five (3-5) days in advance. These prescriptions cannot be emailed or called in to the pharmacy, they must be mailed or picked up.

Please contact the office in the event of an unexpected medical problem.