Description of the Procedure:

Deep Brain Stimulator lead placement:

You will need to arrive the day before your surgery for fiducial placement. These are tiny screws that are placed into your skull that will help Dr. Kutz precisely navigate to the area of your brain for stimulation. There are 5 screws total, and you will be given local anesthetic prior to their insertion. These will be placed by Dr. Kutz or his Nurse Practitioner Brad Gillespie. After the fiducials are placed, your head will be wrapped and you will have a CT scan of your head. The images will be saved to disc which will then be used to merge prior imaging with the mapping software for your lead placement.

The evening of your fiducial placement, it is not uncommon to have a headache. You may take Tylenol for the pain, but we ask that you DO NOT use Advil, Aleve, Motrin, Aspirin or Ibuprofen. These medications can increase bleeding. All blood thinning medications need to be discontinued 1 week prior to surgery. Other common blood thinners include Plavix, Ticlid, Coumadin (Warfarin), and Aggrenox.

The following morning you should arrive for your lead placement. **DO NOT TAKE YOUR TREMOR OR PARKINSON’S MEDICATION THE MORNING OF THE PROCEDURE!** It is most helpful that your tremor be present without medications in order to not mask tremor or other motor symptoms. During the procedure, you will be awake but sedated by IV medication. We will let you know what we are doing and explain sounds and feelings you may experience. The accurate placement of the lead (or leads) can take up to several hours to complete. You will be asked to do tasks such as write your name, touch your fingers together, and simulate drinking from a cup.

When the leads are accurately placed, the leads will be secured to the skull. The leads will be coiled and placed under the scalp. Your incision will be closed with staples, and the fiducial screws will be removed. You will spend the night on the Progressive Care Unit. You will not be allowed to eat until the morning after your surgery; however you may have clear liquids and take your usual medications except blood thinners. A head CT scan will be done the morning after surgery to ensure no new bleeding has occurred with lead placement and to confirm lead placement. Once the CT has been reviewed by Dr. Kutz, you will be allowed to begin eating.

You may or may not need a physical therapy evaluation before discharge to ensure that you will be safe at home. It is not uncommon to notice a slight or complete reduction of your tremor after the surgery. Often the manipulation of the target area of the brain with lead placement can reduce your tremor. Please keep in mind that this is almost always only temporary. It is also possible that you may not experience some confusion after the procedure; this generally improves within a couple of days but may last up to a few months.

The hospital stay for Stage I of the DBS procedure is generally 1-2 days.
Following the Procedure:

The following week, you will return to the hospital for battery placement and connection of the lead (leads) to the battery or batteries. This is an outpatient procedure and a general anesthetic will be used (meaning you will be completely asleep). You will go home later the same day. The batteries will not be activated at that time. We ask that you wait about 4 weeks after the leads are placed before programming. This ensures that your tremor is back to its baseline and the swelling around the leads has resolved. Arrangements will be made for your DBS activation on your first post op visit after surgery. This may be performed in the office of your neurologist or our office.

No surgical procedure is without risks. The potential complications include the following: bleeding, blood clots, infection, stroke, loss of motor and/or sensory function of the extremities, loss of bowel/bladder/sexual functioning, scarring and death. Specific risks with this procedure include brain damage, seizures, loss or alteration of speech or memory, stroke and bleeding. The incidence of bleeding after this procedure is 2%. The incidence of symptomatic stroke is 0.5%.

Upon discharge from the hospital, you will be given instructions on things you can and cannot do, and important signs and symptoms to watch for.