

Patient Instructions: Stereotactic Biopsy for Tumor or Other Lesions

Surgical Technique

A stereotactic biopsy is a minimally invasive neurosurgical procedure performed to provide a diagnosis of a tumor or other lesion within the brain or the covering overlying the brain. It is only intended to be a diagnostic procedure. Other modalities, including a full surgical resection, radiation and/or chemotherapy may be required later depending on the diagnosis and the advice of Boulder Neurosurgical Associates' (BNA) medical team.

The day before or the morning of surgery, you will be scheduled for a 'stereotactic' imaging study (either an MRI or CAT scan) at the hospital. You will have several small round stickers applied to your scalp to assist us in surgery with our stereotactic navigation system; similar to ultra-accurate GPS for the brain. It is important not to touch, pick or remove these round stickers once they have been applied to your scalp.

Occasionally, a small amount of hair is shaved to help the stickers affix to your scalp. We then make a small dime-sized hole that creates a corridor and workspace through the skull. Using computer-aided navigation, we place a small biopsy instrument through the skull and into the area of abnormality. Often several passes are taken for a (each) lesion to maximize the outcome for a successful biopsy.

The layers of the scalp are sewn closed, and staples are used for the skin. Although preliminary information about the pathology (diagnosis) may be available at the time of surgical biopsy, the final diagnosis can only be made when the final pathology results are provided to BNA. This can take up to one week after surgery, and almost always after you are home. Please visit www.bnasurg.com for more information.

Before Surgery

- Seven days prior to surgery, please do not take any anti-inflammatory NSAID medications (Celebrex, Ibuprofen, Aleve, Naprosyn, Advil, etc.) as this could prolong your bleeding time during surgery.
- Do not eat or drink anything after midnight the day before surgery. This means nothing to drink the morning of surgery except you may take your normal medication with a sip of water if needed. This includes your blood pressure medicine, which in general should be taken. Consult your surgeon or primary care doctor regarding insulin if you take it.
- Please do not be late to check in on the day of surgery or it may be cancelled.
- Bring your preoperative folder with you to the surgery and have it when you check in.
- If you have a copy of your MRI or x-rays please bring these with you to the surgery even if your surgeon has seen them already or might even have a copy. Surgery may be cancelled if we do not have your radiographic images.

After Surgery Activity Level

- Do not lift more than 5-10 pounds for the first few weeks after surgery. This may be increased to approximately 20 pounds after 4-6 weeks.
- You may drive after approximately one week or as soon as it is comfortable to do so and when no longer under the influence of pain medications. If you have had a seizure or have visual deficits, you may not drive until cleared by a neurologist.

Bandage

- The bandage (if present) may be removed the second day after surgery.
- If anything other than occasional spotting is noted to be coming from the wound (such as clear spinal fluid or pus), your surgeon should be notified. The office should be notified if sustained fevers of greater than 101.5 F are observed.
- Steri-strips or staples if present should be left intact on the incision until returning to clinic or for 14 days following surgery.

Bathing

- You may shower on second day after surgery.
- Try to limit showers to no more than 5–7 minutes.

Diet (Narcotic pain medications are very constipating, be proactive and use stool softeners and laxatives)

- A high fiber diet is advised.
- Avoid straining on the toilet. Keep stools soft with prune juice, Metamucil, Fiber One cereal etc.

Pain Medications

- Do not take NSAID medications (Ibuprofen, Naprosyn, etc.) or Cox-2 inhibitors (i.e. Celebrex) for one week following surgery.
- Tylenol can be taken as needed.
- Narcotic pain medications are prescribed if Tylenol is inadequate
- You should not let pain get out of control before taking medication or it will be less effective.
- We will not refill pain medications over the weekend or after hours. Anticipate the need for medication refills.

Follow-up

- Please call Boulder Neurosurgical Associates' office (303-938-5700) to schedule your routine postsurgical visit for 7-14 days after surgery. Other follow-ups will be scheduled as needed; we generally follow patient for at least 2 years after surgery, often longer. For patients with tumors, life-long follow-up is required and is the responsibility of the patient to ensure that this is scheduled on a regular basis, often annually.
- It is your responsibility to ensure that your final pathology is discussed at a follow-up visit.

When to Call Your Doctor

- Please call your physician's office immediately or go to the emergency room if you have:
 - Ongoing nausea and/or vomiting
 - Severe or worsening headaches
 - Progressive difficulty seeing or speaking
 - Clear fluid leakage from the incision
 - Fever of greater than 101F
 - Seizures
 - Any new neurologic sensory or motor deficits (weakness, numbness)
 - Leg swelling with calf tenderness

Other FAQs

How long will I be in the hospital? Generally, you will go home the same day or day following surgery, unless unexpected medical or surgical complications arise. We have found that patients generally prefer the comforts and support that home offers. The sooner you go home, the lower your risk of complications such as hospital-acquired wound infections, blood clots and urinary tract infections.

How much time off from work? This varies depending your job and you as an individual, but usually one week is sufficient.

Can I drive? Driving is acceptable about one week after surgery depending on pain medication use. We generally recommend that you not drive while taking pain medications following the surgery. If you have had a seizure or have visual deficits, you may not drive until cleared by a neurologist.

What about pain and other medications? We will prescribe pain medications and other peri-operative medications on the day of surgery or prior to your discharge from the facility or hospital. Steroids and/or anti-seizure medications must be filled on the day of discharge.

What kind of follow-up is required? Patients return to our office for routine follow up appointments at intervals that are determined on a case-by-case basis. Your individual needs will be determined by your surgeon at each follow-up visit.