



## Patient Discharge Instructions: Cranial Stereotactic Biopsy

### 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 Olympia Neurological Institute (ONI) medical team.

The day before or the morning of surgery, you will be scheduled for a 'stereotactic' imaging study (either an MRI or CT scan) at the hospital where your surgery will be performed. You may have several small round stickers applied to your scalp to assist your surgeon in surgery using a stereotactic navigation system similar to ultra-accurate GPS for the brain. It is important not to touch, pick or remove these stickers once they have been applied to your scalp. Occasionally, a small amount of hair is shaved to help keep the stickers affixed to your scalp.

During surgery, a small opening is made in the scalp and skull and a small biopsy instrument inserted into the area of abnormality using the computer-aided navigation. Several passes may be required into the abnormality to maximize the outcome for a successful biopsy. The layers of the scalp and skin are then closed. 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 your surgeon. This can take up to one week after surgery, and almost always after you are discharged from the hospital. There are rare circumstances in which the biopsy results are non-diagnostic and may require another surgical procedure.

Please visit [www.olympiadoctors.com](http://www.olympiadoctors.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 in surgery.
- If you are taking any blood-thinning medications (Plavix, Coumadin, etc.), please talk to the prescribing doctor about when you can safely stop that medication before surgery to reduce your risk of bleeding. Usually, these medications are stopped anywhere from 3 - 7 days before surgery.
- Increase your strength and improve your recovery by walking at least 30 minutes a day before your procedure. Exercising before surgery will help you recover after your surgery.
- At least one week before surgery, eat healthy foods rich in carbohydrates and protein to fuel your body with the nutrients that it will need during and after surgery.

### Day of Surgery

- Do not eat or drink anything after midnight the day before surgery. This also means nothing to drink the morning of surgery, except you may take your prescribed medications (e.g., blood pressure medications) with a sip of water if needed. Consult your surgeon or primary care doctor regarding insulin if you take it. Some hospitals are now allowing clear fluids until a few hours before surgery – please follow the directions of the individual hospital protocols (if you do not follow the individual hospital guidelines this may result in your surgery being canceled).
- Be early or on-time to check-in on the day of surgery so that surgery is not delayed or canceled.
- Bring your hospital surgical folder and any related paperwork (consents, etc.) to surgery.
- Bring a copy of all relevant imaging studies (CT, MRI or x-rays) to surgery, even if your surgeon has already seen them in the clinic or may have a copy. Surgery may be canceled if your surgeon cannot view your radiographic images on the day of surgery.

### **Activity Level**

- Walking is the best exercise after spine surgery because it strengthens the muscles, increases endurance, relieves stress, improves blood flow, keeps the bowels moving and prevents fluid from building up in the lungs.
- Immediately after biopsy, patients are encouraged to walk starting with short and frequent walks and gradually increasing distances. The sooner patients can be active, the sooner he/she may be able to resume their routine.
- Do not lift more than 5 -10 pounds for several weeks after surgery. This restriction may be increased to approximately 20 pounds after 4 - 6 weeks. Your surgical team will help guide you with your specific lift- ing restrictions after 6 weeks.
- If you have had a seizure or have visual deficits, you may not drive until cleared by a neurologist.
- Avoid activities with the potential for a fall or physical contact (high energy or high impact activities) until cleared by your surgeon.

### **Bandage**

- If a bandage is present, it may be removed the second day following surgery.
- Depending on your surgeon's preference, you will have either Steri-Strips, staples, a liquid skin adhesive (Dermabond), or external sutures over your incision.
- Scalp sutures may or may not need to be removed (some can dissolve over time). Ask your if your su- tures require removal.
- If anything other than occasional spotting is noted to be coming from the wound (such as clear spinal fluid or pus), notify your surgeon.
- Steri-Strips should be left intact until returning to the clinic for your postoperative follow-up visit 7 - 14 days following surgery.
- Liquid skin adhesive (Dermabond) should be left in place and will eventually fall off naturally over the next 1 - 2 weeks.
- Do not use topical ointments on your incision unless approved or directed to do so explicitly by your surgeon.

### **Bathing**

- We recommend waiting to shower until the third day after surgery.
- We recommend you wash your hair daily with a soft shampoo such as baby shampoo and avoid hair products and conditioners until your wound has healed.
- Try to limit showers to no more than 5 - 7 minutes.
- Do not scrub the incision directly. Instead, let the clean water run over the incision and then pat the inci- sion dry.
- Do not soak in a bathtub, hot tub, or pool until you are cleared to do so by your surgeon.

### **Diet**

- Narcotic pain medications can be very constipating. Be proactive with stool softeners and laxatives.
- A high fiber diet is recommended.
- Avoid straining on the toilet. Keep stools soft with a high fiber diet and/or use of prune juice, Metamucil, Fiber One cereal, etc.
- Drink plenty of fluids, including Gatorade, or any kind of juice to stay adequately hydrated, prevent blood clots, and other problems.

### **Pain Medications**

- Do not take NSAID medications (Ibuprofen, Naprosyn, etc.) or Cox-2 inhibitors (i.e., Celebrex) for 1 week following surgery.
- Tylenol can be taken as needed.
- Stronger pain medications will be prescribed if Tylenol is inadequate.
- Avoid letting the pain get out of control before taking medication or it will be less effective.
- ONI providers will NOT refill pain medications after hours: 5 pm on weekdays or anytime on the week- end.
- It is crucial to anticipate the need for medication refills so that they can be refilled with adequate notifi- cation, which may take anywhere from 24 - 48 hours.

### **Follow-up**

Please call Olympia Neurological Institute (ONI) office (833-940-3733) and schedule your routine post-surgical visit for 7-14 days after surgery (if it is not already scheduled). We generally follow patient for at least 2 years after surgery, often longer.

Your final pathology results will be discussed at your follow-up visit.

Depending on the pathology results, other treatment modalities, including radiation and/or chemotherapy. If another treatment team is needed, such as an Oncologist, your surgeon may help make the appropriate referral.

### **When to Call Your Doctor**

Please call your physician's office immediately with any problems or go to the emergency room if:

- Itching or hives
- Swelling in your face or hands
- Swelling or tingling in your mouth or throat

- Chest tightness
- Trouble breathing
- Ongoing nausea and/or vomiting
- Severe or worsening headaches or neck stiffness
- Confusion or changes in behavior
- Increased drowsiness
- Progressive difficulty seeing or speaking
- Clear fluid leakage from the incision
- Fever greater than 101.4F
- Seizures
- Any new neurologic sensory or motor deficits (weakness, numbness)
- Leg swelling with calf tenderness
- Inability to urinate or burning during urination

#### **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. When can I resume driving? Driving is acceptable, depending on the use of pain medication. We strongly advise against driving while taking narcotic 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 perioperative 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. The follow-up schedule will be determined by your surgeon at each follow-up visit.

***Do I need antibiotic prophylaxis for dental procedures?*** We recommend avoiding routine dental procedures for 3 months following surgeries in which hardware is placed. This includes any dental work. You should brush your teeth as you normally do. If you must have a dental procedure within 3 months, then it would be advisable to use antibiotic prophylaxis. We generally do not make recommendations about the choice of antibiotic when using it for prophylaxis, and we usually defer this to your primary care physician or your dentist. After 3 months, prophylactic antibiotics are not recommended except for specific individuals with extenuating circumstances, such as patients who are at risk for infective endocarditis.