

# NEUROSURGICAL CONSULTANTS, INC.

[www.neurosurgical-consult.com](http://www.neurosurgical-consult.com)

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SPINAL SURGERY  
CRANIAL SURGERY  
MICRONEUROSURGERY  
SPINAL INSTRUMENTATION

## Burr Holes and Craniotomy

The doctors of Neurosurgical Consultants want to keep you informed about your hospital stay and discharge. Please review this information and talk with your doctor(s) or the hospital staff about your progress.

**What are Burr Holes and Craniotomy?** A Craniotomy is an operation that involves opening the skull to correct a problem in the brain or the layer around the brain. Craniotomies are performed for a variety of reasons, such as blood clots causing pressure on the brain, brain tumors, skull defects, etc. Sometimes, blood can be drained from the space between the brain and the skull through small holes, Burr Holes.

Depending on the diagnosis and problem, an operating microscope may be used to facilitate the surgery. The operating microscope provides additional light and magnification, making the surgery safer. Sometimes, a **Neuro-navigation** system is used to precisely localize a lesion in the brain. Neuro-navigation is a computerized system working with CT or MRI scans similar to the way GPS (Global Positioning System) works with roadmaps in automobiles.

**Description of Surgery:** Intravenous antibiotics are administered before surgery to decrease the risk of infection. You will be anesthetized (put to sleep). Exact position on the operating table depends on the area of the skull that needs to be opened. An incision is made. Equipment for opening the skull is then used. After exposing the region, the operation becomes more specific for the problem being treated. If needed, the operating microscope and neuro-navigation are used at this point. After completing the procedure inside the skull, a drain may be placed. If a section of skull was removed, it is repositioned and the scalp incision is sutured. The skin is closed with stitches or staples. A sterile dressing is placed over the incision. Sometimes, a thick head wrap may be applied. You will then be placed on your back in a hospital bed. The breathing tube will be removed (extubated) and you will be taken to the recovery room.

**How will your family know when the surgery is completed?** Your neurosurgeon will speak with your family members in the family waiting area or call them at home when the surgery has been completed.

## **What to Expect After Surgery**

**Day of Surgery:** Following the surgery you will spend one to two hours in the Recovery Room (PACU). From there you will be taken to the Intensive Care Unit (ICU), where you will be monitored by nurses who specialize in caring for surgical patients. The nurses will monitor your temperature, blood pressure, pulse, respirations, and neurological functions. Visitors are not allowed in the Recovery Room, but family and friends can visit when you are in the ICU.

- The nurses will give pain medicine as needed, initially by vein and later by mouth.
- Depending on the reason for the surgery, you may be kept flat in bed or may be allowed to have your head elevated.
- You will not be eating food or taking fluids by mouth until you have been awake and oriented for some time. When you are first allowed to take food and fluid, it may be limited. It is not uncommon to feel nauseous after surgery. Medicine is available to help relieve the nausea and any vomiting.
- There will be a catheter in your bladder to drain your urine. After you have been awake and oriented for a while, it will be removed.
- Activity: Initially you will be kept on bed rest. Later, you will start getting out of bed with assistance and as you are able, you will be allowed to move around and walk on your own. A Physical Therapist may be asked to evaluate you and help you with your recovery.
- You will have special stockings and pulsation sleeves on your legs to prevent blood clots from forming in the legs. These will be discontinued when you start walking.
- Constipation often occurs from the use of narcotic pain medications. Stool softeners and other medications may be needed to help prevent constipation.
- After surgery, it is important to do deep breathing exercises. This prevents pneumonia from developing. You will use a device called an incentive spirometer to help you deep breathe.
- Discharge: Everyone is different. Depending on your needs, diagnosis, neurological function, etc. you may be in the hospital for as few as 3 days, but may need longer. Some patients, especially those who live alone, may need to spend some time in a rehabilitation center for a week or two after surgery.

## **Once You Are Home**

**When to call the doctor?** One of the three neurosurgeons from Neurosurgical Consultants Inc. is on call each day. This means that if needed, your neurosurgeon or his covering associate can be reached 24 hours a day. Call the Norwood office at (781) 769-4640 or the Cambridge office at (617) 492-7559 if there is drainage from the wound, a fever greater than 101 degrees Fahrenheit, new weakness, new numbness, or new drowsiness.

**Pain Medication:** You should only need narcotic medication, such as Percocet or Vicodin, for incisional pain during the first few days after surgery. Extra strength Tylenol should be sufficient to control any pain after the first few days and certainly by the end of the week.

**How do I care for my surgical incision?** There will be a gauze dressing secured with silk or clear plastic tape. This should be removed two to three days after surgery. Under this dressing will be sutures or staples. Your doctor will tell you when your sutures will be removed and when you may shower. Your incision should not be immersed in water.

## **Activity**

The following is a guide to activity levels while you are recovering:

### **Weeks 1 - 2:**

Unlimited walking is permitted. You may walk up stairs. Sitting is alright. Do not lift any object greater than 5 pounds. You should not drive, but you may ride as a passenger. You should avoid straining.

### **Week 3:**

Unlimited walking is permitted. You may walk up stairs. Do not lift any object greater than 10 pounds. If you feel that you have full function of your legs with no impairment, you may resume driving. If there is any weakness or sensory deficit such as numbness you should not drive. When you start to drive, initially stay close to home and avoid peak traffic. Slowly work your way up to more extensive driving. During sexual relations, avoid straining and positions that cause discomfort.

### **Week 4:**

At this point you should have your post-operative visit. Make sure to discuss issues such as physical therapy and returning to work.

## **Your Future**

Depending on your diagnosis, you may need periodic CT or MRI scans and follow up with your neurosurgeon. You may be on medications for an extended time. Your neurosurgeon will discuss this with you.

These instructions are meant to be a guide to recovery from Burr Holds and Craniotomy Surgery for patients in our practice. We hope that you find them helpful. They are not a substitute for medical care by a professional. Also, other neurosurgeons may have different routines. For more information, visit our Web Site, <http://www.neurosurgical-consult.com>.

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