

**Continuum**  
NeuroSciences

WeHealNewYork.org

**Continuum**  
NeuroSciences

A PATIENT'S GUIDE TO  
*Neurosurgery*

**Continuum** Health Partners, Inc.

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University Hospital and  
Manhattan Campus for  
the Albert Einstein College  
of Medicine

**Roosevelt  
Hospital**

University Hospital of  
Columbia University College  
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Primary Clinical Teaching  
Affiliate of SUNY—  
Health Science Center  
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**NY Eye & Ear  
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Affiliated Teaching  
Hospital of New York  
Medical College

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*Continuum Health Partners takes pride in providing the highest quality care to all our patients. This guide to neurosurgery will provide important information on how to prepare for your procedure, what to expect during hospitalization and how to plan for your care after surgery. Your surgeon will talk with you about the type of surgery you are having, and how long you are expected to stay in the hospital.*

*If you have any questions about your upcoming surgery or your hospital stay, do not hesitate to ask your physician or nurse. Our health care team is dedicated to ensuring your experience is a positive one.*

# *Welcome*

### **Pre-Surgical Assessment**

Your physician will perform an examination to help determine whether or not a surgical procedure will be of benefit. Many factors are considered when assessing an individual as a surgical candidate. These include age, mental status and symptoms, as well as findings from the physical and neurological examinations and the results of required tests, such as x-rays and scans. The final decision on whether to proceed with surgery will be made in consultation with the neurosurgeon.

Neurosurgeons have expertise in specific specialities, such as the spine or the brain. Your physician will refer you to the neurosurgeon who specializes in your condition.

### **Neurosurgical Consultation**

Your physician will submit all relevant information, including test results and radiologic studies, to the neurosurgeon prior to your consultation. It is recommended that you arrange to have your films (x-rays, CT scans, MRIs, etc.) sent to the neurosurgeon's office prior to your visit. While an in-person consultation is preferred, it may be possible for the neurosurgeon to make a recommendation based on reviewing your test results. This is particularly helpful to patients who are traveling from out of town.

You are encouraged to bring a family member to your appointment, if possible. It also is helpful to bring a list of questions and concerns about the procedure. If you do not speak English fluently, we suggest that you bring an interpreter with you or ask to have one present. All aspects of surgery will be discussed, including surgical options, length of hospitalization, expected outcomes, and post-operative care.

This discussion will help you make an informed decision about having the procedure.

### **Pre-Surgical Testing**

Medical clearance for surgery will be required. Depending upon your surgical procedure, your pre-surgical testing may include blood work, EKG, urine analysis and a chest x-ray. Your physician will advise you on the need for specific testing. Your tests must be completed a minimum of three working days (72 hours) prior to the date of surgery so your physician can study the results in advance. If test results indicate the need for special attention, your physician will instruct you on any necessary steps.

Your physician's office will schedule your appointment for testing, and direct you through the appropriate testing procedures. On the day of your pre-surgical appointment, you will undergo the tests that have been ordered. Pre-surgical testing will take from two to four hours depending on the tests required.

### **Outside Laboratory Testing**

If you are unable to come to a Continuum facility for the required pre-surgical testing, your physician may be able to arrange for the tests to be performed by an accredited laboratory near your home. If you choose to use an external laboratory, we must receive the written reports at least three working days prior to the day of your surgery. For example, if your surgery is scheduled for Monday, your reports must arrive the Wednesday before your surgery.

**Physician Notification**

It is important for you to provide the following information to your physician prior to surgery:

- Allergies: Do you have any allergies to foods or medications or dyes used in diagnostic tests?
- Latex allergy: Have you ever reacted to latex products, such as gloves, rubber balloons or other rubber items?
- Do you take medications regularly? This includes over-the-counter medications such as aspirin and ibuprofen as well as prescription medication.
- Do you smoke?
- Do you drink alcohol? Do you use non-prescribed medications or drugs?
- Do you have other health problems such as diabetes, heart problems, high blood pressure?
- Have you had surgery before?
- Have you had anesthesia before? How did you react?
- Is it possible you are pregnant?

**Insurance Carrier**

Remember to contact your insurance carrier seven to 10 days prior to the date of surgery to advise them of your scheduled surgery and to confirm coverage.

**Interpreter Services**

If you need an interpreter, both foreign language and sign language interpreters are available. Advise your physician as soon as possible to arrange this prior to surgery.

**Pre-Operative Instructions**

Follow your surgeon's instructions carefully. They are for your safety and will help ensure that your operation goes as planned and you have a rapid recovery. Not following these instructions could result in the cancellation of your surgery.

- Advise your surgeon if you are taking any blood-thinning products. These include, but are not limited to:
  - Coumadin (Warfarin)
  - Aggrenox (Dipyridamole and aspirin)
  - Plarix (Clopidogrel)
  - Persantine (Dipyridamole)
  - Lovenox (Enoxaparin)
  - Nonniflo (Ardeparin)
  - Heparin
  - Ticlid (Ticlopidine)
  - Orgaran (Danaparion)
- Stop taking any aspirin or aspirin-containing medications prior to surgery as follows:

**Seven Days Before the Procedure***Aspirin-Containing Drugs*

Alka-Seltzer	Damason-P
Darvon with aspirin	Daryon Compound
Fiorinal Soma Compound	Percodan

*Aspirin and Brand Name Aspirin*

Anacin	Ancasal	Aspergum
Aspirin	Bayer	Bufferin
Easpirin	Ecotrin	Empirin
Excedrin	Halfrin	Measurin
Relafin	Salicylate	Zorprin

**Four Days Before the Procedure**

*All Non-Steroidal Anti-Inflammatories, including:*

Advil	Aleve
Celebrex	Clinoril
Daypro	Dolobid
Indocid	Indocin
Lodine	Meclomen
Medipren	Midol
Motrin	Nalfon
Naprosyn	Nuprin
Orudis	Rufen
Tandearil	Tolectin
Toradol	Voltaren

- If you take medication regularly for any condition, ask your surgeon whether or not you can take the medication on the day of surgery. These medications include insulin, blood pressure pills, aspirin, birth control pills or heart medications. If you have been told to take your regular medications, swallow them with small sips of water.
- It is safe for you to take the following drugs any time prior to the procedure:
 

Darvocet	Darvon without aspirin
ES Percocet	Percogesic
Soma	Tylenol
Ultram	Vicodin
- Do not smoke, drink alcohol (liquor, beer or wine) or use drugs for at least 72 hours prior to surgery as it will affect your healing and breathing.

- Do not eat or drink anything after midnight the evening prior to your surgery. This includes water, coffee, chewing gum and mints. You can brush your teeth and rinse your mouth, but do not swallow any water.

**Blood Donation**

Your doctor may discuss donating your own blood prior to surgery if there is a possibility you will need blood during your operation. If so, you will be told where and when you can donate.

**If Illness Develops**

If you develop a cold, virus, sore throat or other illness during the week before your scheduled surgery, please contact your surgeon immediately. Your surgeon will determine whether your procedure should be postponed.

**Call to Confirm**

On the day before your surgery, a hospital representative will telephone you to confirm the time of your arrival. If your procedure is scheduled for a Monday, a representative will contact you the Friday before your procedure.

**What to Bring**

*Medical Clearance Reports and Insurance Information*

Please complete and bring with you all medical clearance reports if they were not previously sent (e.g., laboratory work, x-rays, etc.) and your insurance information.

*Medications and Allergies*

Bring a list of any known allergies to medications, foods or other substances. Also bring a list of all your medications, times taken and dosages.

*Advance Directives*

Please bring any documents regarding advance medical directives, such as a health care proxy form and a living will.

*Guardianship*

Legal guardians of minors (children under the age of 18) or of foster children undergoing surgery must bring appropriate documentation verifying his or her legal guardianship of the child.

**Checking In**

Please arrive on time for your procedure. You will be instructed where to go for admission. Before surgery, you will be given a hospital gown and robe to wear and will have a hospital ID bracelet put on your wrist.

**Cancelling a Procedure**

If you find yourself in a situation that makes it necessary for you to cancel your surgery, please call your surgeon's office as soon as possible.

**Personal Items**

When you arrive for surgery, we recommend that you do not wear contact lenses, makeup or nail polish. You may wear eyeglasses, hearing aids or dentures, although you will be asked to remove them before the procedure. Please bring the appropriate containers to store these items.

Wear casual, comfortable, loose-fitting clothing and bring reading material.

Do not bring any valuables or jewelry, as we cannot be responsible for lost, misplaced, stolen or damaged property.

**Anesthesia**

Your surgeon will consult with an anesthesiologist about the anesthesia that is appropriate for you. Prior to surgery, the anesthesiologist will meet with you to discuss your anesthesia. Tell the anesthesiologist what experiences you have had with anesthesia in the past. The anesthesiologist is responsible for your comfort and well-being during, before and after your surgical procedure. In the operating room, the anesthesiologist will regulate your anesthesia and monitor vital functions. In the recovery room or Post-Anesthesia Care Unit (PACU), the anesthesiologist makes sure patients are stable following surgery and is closely involved in pain management.

Most neurosurgical procedures are performed under general anesthesia, which allows you to be asleep during your operation. You will have no awareness or other sensations.

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## AFTER SURGERY

### Recovery

Following the procedure, you will spend time in the PACU or in the Intensive Care Unit (ICU). You will be closely monitored until the anesthesia wears off and you wake up. Your blood pressure, pulse, temperature and breathing, as well as the area of your body where you had surgery, will all be checked.

You may feel drowsy and cold, and you may have some pain, which is normal after surgery. There are many ways to control pain, which will be discussed with you by the anesthesiologist. Tell the nurse immediately if you are in pain. It is easier to treat pain before it becomes too severe.

The PACU or ICU nurses will take care of your needs and make you comfortable. Once you are stable, you will be transferred to the neurosurgical unit. The unit has both private and semi-private rooms. Your length of stay in the hospital will be determined by the medical staff. During your hospital stay, your medications will be adjusted. You also will be helped in adjusting to activities of daily living.

### Visitors

During surgery, family members and friends may wait in a comfortable waiting area on the neurosurgical floor. We strongly recommend that you not bring children, as we do not have facilities or personnel to adequately supervise them. Note that visitors are not permitted in the PACU unless an exception has been made by the PACU staff. Please check with the nursing staff for the visiting hours in the ICU and on the neurosurgical floor.

Following surgery, the surgeon will speak to relatives either by telephone from the operating room or in person to tell them how you are doing.

### Private Duty Nursing

The hospital provides professional staff to meet your clinical needs, but if you would like personal nursing care to supplement the care by our staff during your hospital stay, you may want to arrange for a private duty nurse. Private duty nurses are engaged directly by patients or their families. These nurses are not employees of the hospital, but are hired through us from reputable outside agencies. Please note, they do not provide care in the PACU. To make arrangements for private duty nursing, contact the Patient Care Services Nursing Registry of the hospital.

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## PAYMENT POLICY

Patients are responsible for deductibles, co-payments and any unpaid portion of the bill. It is the policy of the hospital to receive payment at the time of service. You may receive a bill for the unpaid charges. You may pay by credit card (American Express, MasterCard or Visa), check or cash. You will also receive a bill for the anesthesiologist's services. This fee is separate from the surgeon's fee and hospital charges.

**Discharge Instructions**

Discharge time is usually in the morning.

At the time of discharge from the hospital, you will be given instructions that will include guidelines for physical activity and general post-operative care. Be sure to adhere to your physician's instructions regarding diet, rest, medication, hygiene and followup appointments.

If your jaw feels tight, continue to do mouth-stretching exercises as you were shown in the hospital. Facial swelling will continue to decrease upon discharge. Take things slowly until your physician tells you to return to your usual routine or return to work. Contact your surgeon if you are concerned about your discharge instructions. You should also followup with your primary care physician to notify him or her of your progress.

Radiation therapy, chemotherapy, and radiological studies (CT scans and MRIs ) will be discussed at your first post-operative visit.

***Medications***

It is important to continue medications as prescribed by your primary care physician prior to admission, as well as the medication prescribed in the hospital. If anticonvulsant medications (Dilantin, Phenobarbitol, Tegretol) are prescribed, they should be continued for six to 12 months post-operatively. It is necessary to have blood levels drawn to maintain therapeutic levels. This will be discussed in detail by your surgeon.

You will be given a medication schedule to follow upon discharge. This will be re-evaluated at the post-operative followup appointment. For headaches or pain, take Tylenol or Motrin. Do not take aspirin or aspirin products.

***Incision Care***

Do not pick at or scratch the incision. The area around the incision may feel numb, or you may experience a crawling sensation, if superficial nerves were cut. This is part of the normal healing process and will subside.

If you have staples or sutures on your scalp, you can wash your hair the day after staples or sutures have been removed. Use a mild shampoo. Gently massage the incision area. Do not vigorously rub the incision. Pat the area dry. You may dye or perm your hair, as advised by your physician.

If you have staples or sutures on other areas of your body, the area may be washed the day after staples or sutures have been removed. Gently massage the incision area. Do not vigorously rub the incision. Pat the area dry.

***General Activities***

Full recovery takes six to eight weeks. Be patient. Walking is the best form of exercise. Start slowly and gradually increase the distance as tolerated. Do not do aerobics or strenuous activities for the first six weeks. Your energy level should return to normal within one to six months depending on the type of surgery you have undergone. There are no restrictions on sexual activity. Driving will be discussed during the first post-operative visit.

It is important to eat a well-balanced diet. Do not skip meals. Do not consume alcohol until discussed with your physician.

**Questions to Ask**

Ask the following questions before you are discharged. We recommend that you have another person with you so that they will be able to help you remember all the answers.

- What can I eat?
- How do I care for my incision?
- What medications should I take?
- How soon can I take a bath or shower?
- What should I do for pain?
- How much activity/exercise can I do? What about lifting and bending?
- When can I return to work?
- Can I drive a car?
- When can I resume sexual intimacy?

Be sure you know when and where to go for your followup appointment.

**When to Call Your Surgeon**

Some patients experience a slight indentation at the temple, which is normal. Should any difficulties arise following your discharge, call your physician immediately. If your physician is not available, call the hospital's Emergency Department. You should call your physician immediately if you have any of the following symptoms:

- You notice a clear watery discharge from your nose or a sensation of fluid draining in the back of your throat with a salty taste
- You notice any swelling, tenderness, redness or discharge from the incision
- Any seizure activity
- Severe headache or stiff neck
- Vomiting
- Personality or mental status change
- Temperature above 101° F
- Lack of coordination
- Visual changes or speech disturbances
- Chest pain and/or shortness of breath
- No bowel movement for three days
- Pain not relieved by medication
- You feel groggy or dizzy (which may mean that your medication is too strong)

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**PATIENT APPOINTMENT INFORMATION**

Physician's Name: \_\_\_\_\_

Physician's Telephone Number: \_\_\_\_\_

Surgeon's Name: \_\_\_\_\_

Surgeon's Telephone Number: \_\_\_\_\_

Pre-Surgical Testing Appointment: \_\_\_\_\_

Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_\_

Time: \_\_\_\_\_

Date of Procedure: \_\_\_\_\_

Time of Procedure: \_\_\_\_\_

Where to Report: \_\_\_\_\_

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**NOTES**

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