



Pre- and Post-Operative Guide

Gerald J. Glasser
Brain Tumor Center



Atlantic
Health System

Neuroscience

Atlantic 
NeuroSurgical
SPECIALISTS

• The science of medicine. *The power of hope.*

Thank you for entrusting the Gerald J. Glasser Brain Tumor Center and the world-renowned surgeons from Atlantic NeuroSurgical Specialists with your neurosurgical care. We are here to help you and your loved ones navigate every step of your journey.

As part of this guidance, we have compiled answers to questions you may have about your upcoming surgical experience. Please take the time to read through this helpful information, and feel free to contact us at any time with additional questions or concerns.



In Preparation for Your Surgery

How do I schedule my surgery?

Approximately two to five business days after you and your surgeon decide to move forward with surgery, you will receive a phone call from a Surgical Scheduling Representative to begin the scheduling process. In addition to scheduling your surgery, together, you will arrange for pre-admission testing.

Your Surgical Scheduling Representative will also provide you with his/her direct phone extension in case you have additional questions or need to make any adjustments to your surgery schedule. All faxes pertaining to your surgical scheduling should be sent to 973.455.7426.

Do I need to see any other doctor before my surgery?

You generally will need to see your primary care doctor to have your medical clearance physical performed within 30 days of your surgery. Pre-admission testing will be done at the facility where you are scheduled to have surgery. Your Surgical Scheduling Representative will contact you regarding your pre-admission testing and medical clearance appointment.

Do I need to identify a contact person – my “patient coach” – before my surgery?

Yes! Please designate one person to serve as your contact person and “coach” throughout your hospital stay and two to three weeks after your surgery. Your coach will support you through this process. He or she should be present on your discharge day when you receive final post-operative instructions and information from your care team.

How do I manage my medications before surgery?

Aspirin or other blood-thinning medications

(e.g. Aspirin, Plavix/Clopidogrel, Coumadin/Warfarin, Pradaxa/Dabigatran, Xarelto/Rivaroxaban or Eliquis/Apixaban)

You will need to stop taking these medications at least seven days before your surgery date. Your surgeon and your primary care provider will need to work together for optimal management of blood-thinning medications.

Diabetes medication

Please do not take your diabetes medication the morning of surgery. Make sure to speak with your primary care provider about managing your medication prior to your surgery.

Medication for high blood pressure, seizures or cardiac conditions

Please continue to take these medications as prescribed by your doctor – until the day of your surgery. That day, take your morning dose as you normally would with only a sip of water.

Non-steroidal anti-inflammatory drugs (NSAIDs)

(e.g. Aspirin, Ecotrin, Bayer, Excedrin, Advil, Ibuprofen, Aleve, Motrin, Celebrex, Meloxicam)

Stop taking these medications at least seven days before your surgery. Discuss the management of these medicines with your nurse before your surgery as these can interfere with your procedure.

Herbal supplements

(e.g. Echinacea, St. John's Wort, Ephedra, Valerian, Feverfew, Vitamin E, Fish Oil, Vitamin C [large doses above the RDA], Garlic, Ginkgo Biloba, Ginger, Ginseng)

Please restrict herbal supplements for three weeks prior to your surgery.

Multivitamin

You may continue taking your multivitamins as regularly scheduled through your surgery date.

Is there any special skin preparation before surgery?

If your doctor has prescribed an antiseptic skin cleanser liquid – such as Hibiclens – wash with it the evening prior to surgery and again the morning of your surgery. Do not wash your face or genital area with Hibiclens. Wash these areas with your regular soap. Follow any additional instructions provided.

When is the last time I can eat or drink before surgery?

Do not eat anything after midnight the night before surgery. You may have sips of water ONLY as needed to take medications on the morning of surgery. Do not drink any other liquids.

I am a smoker. Do I need to stop smoking prior to my surgery?

If you smoke cigarettes, you must stop smoking at least three weeks prior to having surgery. Research indicates that smoking can delay or even prevent the body from healing. Additionally, inhalation of smoke irritates the breathing passages and may lead to respiratory problems during and after surgery.

The Day Prior to and the Day of Your Surgery

What do I do if I feel sick the day before or day of my surgery?

If you suspect you are becoming ill or may have an infection, please call your Surgical Scheduling Representative or Atlantic NeuroSurgical Specialists nurse immediately to discuss this as your surgery may need to be postponed.

When is the admission check-in time confirmed?

You will receive a phone call from a nurse the business day before your surgery. The nurse will confirm your check-in time at the hospital and provide you with pre-operative instructions.

What do I bring to the hospital?

- Bring a form of photo identification and your insurance card(s).
- To avoid lost or misplaced personal items, bring only essential items such as glasses, dentures and hearing aids with extra batteries. Leave your valuables – such as jewelry (including rings and watches), cash and credit cards – at home or with your family.
- Remove all piercings and jewelry prior to surgery.
- Bring your most recent imaging studies (CT, MRI or X-Rays).
- If you have sleep apnea and use CPAP equipment, please bring your device with you.

When do I meet the anesthesiologist?

Your anesthesiologist will review the material your physician has provided. On the day of your procedure, your anesthesiologist will go over your medical history and the anesthesia plan with you in detail and answer all of your questions.

Your Care Team

Here at the Gerald J. Glasser Brain Tumor Center, an entire team of medical professionals is right by your side. These experts from both Atlantic Health System and Atlantic NeuroSurgical Specialists are dedicated to helping you before, during and after your surgery ... empowering you to recover quickly and with the best outcome. Your care team includes:

Physician Team

Your attending physician leads your team of doctors. He or she is in charge of your care, working closely with residents and fellows and coordinating with specialists. Based on their schedules and rotations, you may see different doctors throughout your stay including neurosurgeons, neuro-oncologists and radiation oncologists.

Nurse Practitioner Team

Our team of nurse practitioners work closely with our physicians both during surgery and in coordinating your recovery. They will be tending to daily medical needs, answering questions and communicating with the rest of the care team.

Nursing Team

In addition to ensuring your comfort and assisting with your personal care and hygiene, registered nurses and nurse practitioners serve as the link between you and your care team. Nurses communicate with doctors on your behalf, coordinate your care and keep you updated on your medications and treatment plans.

Patient Care Technician (PCT)

The patient care technician assists with your daily personal care, takes your vital signs, collects specimens and assists in your mobility. The patient care technician works under the supervision and direction of the registered nurse.

Case Manager

Your nurse case manager collaborates with you, your family members and healthcare team to coordinate your hospital stay. He or she also plans and coordinates your transition from the hospital – whether you are going home or to a rehabilitation, long-term care or nursing facility.

Respiratory Therapist

Your respiratory therapist assesses your breathing – performing tests and talking with you to identify any breathing support you may need. If you require breathing treatments, your respiratory therapist will teach you how to do them and use any necessary equipment.

Speech Therapist

Your speech therapist evaluates your ability to speak, understand, problem solve, remember and swallow safely. If you need assistance, you may receive therapy during your hospital stay. Your speech therapist will also make recommendations for post-discharge services as needed.

Physical and Occupational Therapists

Your physical therapist helps you regain your strength and mobility – and your occupational therapist assists with your daily activities such as dressing and grooming. They design a customized treatment plan that helps you meet your specific goals and provide recommendations for your post-discharge care.

Pharmacist

A pharmacist works with your doctors and nurses to ensure you are knowledgeable about the medications you receive while in the hospital and need to take once you leave.

Registered Dietitian

Your dietitian collaborates with your care team to ensure you are meeting your individualized nutritional needs. He or she will review your doctor-prescribed diet with you, recommend foods that will enhance your recovery, discuss any required nutritional supplements and monitor your need for texture-modified foods if you are having swallowing issues.

Social Worker/Patient Navigator

Your social worker or patient navigator helps you and your family members cope with any personal, emotional and family challenges related to your health. He or she can help you and your loved ones deal with the impact of sudden illness, separation from home and job, bereavement, and more. Individual, family and group support is available.

The social worker offers practical help and advocacy in locating appropriate resources, equipment, referral sources or aftercare facilities and helps coordinate hospital and community services for you. The social worker also provides counseling services to help you and your family.

Spiritual Caregivers

Hospital chaplains are here to support your spiritual needs. You and your family members can talk to them about your concerns, struggles and religious needs. Our chaplains are multi-denominational and, if necessary, can connect you with religious leaders from your faith.

Speeding Up Your Recovery

What you do after surgery really counts. **So, get ready!**
 We'll be by your side every step of the way.

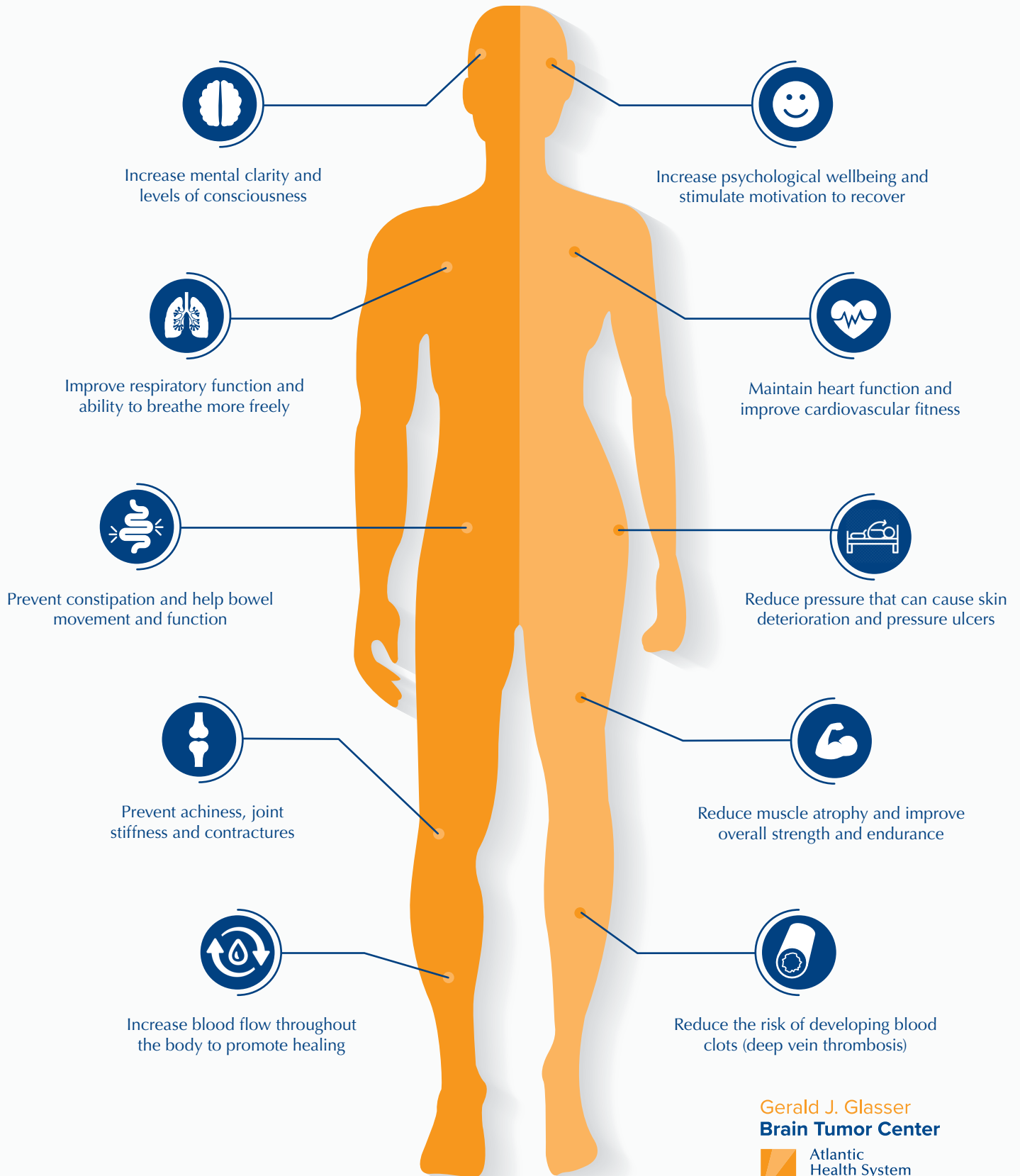
While your individual situation may require some adjustments, here's what you can do to speed up your recovery:

	Day of Surgery	First Day After	Until Discharge
Eating and Drinking	Right after surgery, you'll receive intravenous hydration. Once you are alert and can swallow safely, you'll get ice chips and sips of water. You'll start getting more liquids and solid food once you tolerate these without feeling nauseous or vomiting.	As you are able to take more fluids and food by mouth, your intravenous fluids will be decreased or stopped. You should eat at least 25% of your meals and drink at least 16 ounces of fluids every 12 hours.	You should eat a balanced, healthy diet and drink normally.
Moving Around	Moving around is critical to your recovery – and achieving your best surgical outcome. Four hours after your surgery, the nurse will help you sit at the side of your bed. You can take pain or nausea medication before doing this if needed. If your surgery is done early in the day, the nurse will help you walk to the chair so you can sit there for a few minutes in the evening.	Your nurse will help you walk to your chair so you can eat breakfast there. A few hours later – and again in the evening – you and your nurse will take a walk in the hallway. Be sure to get out of bed and sit in the chair between meals – and eat your meals sitting there. A physical therapist may come to evaluate you.	Be sure to get out of bed and go to the chair for meals and walk the hallway – both with assistance – at least twice a day. Mobility and walking is key to your recovery.
Urinating	You will have a catheter that drains your urine when you awaken from surgery.	The catheter will likely be removed first thing in the morning.	You should be urinating normally.
Managing Your Pain	You will be offered intravenous or oral pain medication once you can safely swallow.	You will be offered oral pain medication – or intravenous medication if your pain does not subside. Relaxation techniques such as deep breathing, massage therapy and music may help ease the pain.	You will be offered oral pain medication and may want to use relaxation techniques such as deep breathing, massage therapy and music to manage any pain.

Get Moving!

Want to Recover from Surgery Faster? **Get Moving!**

Early movement can make a big difference in your recovery speed and your overall outcomes.



Gerald J. Glasser
Brain Tumor Center



Where You'll Go Upon Discharge

The care you receive once you leave the hospital is vital to your recovery. Where you go – whether it's to your home or any of a variety of rehabilitation facilities – is based on your individual situation.

Your case manager will partner with you, your family and your medical care team to create a discharge plan that best fits your needs and determine if you should return home or go to an inpatient rehabilitation facility.

Once the destination is identified, your case manager will handle referrals, share medical records and secure insurance authorization as needed. They will also arrange for transportation to inpatient rehabilitation facilities.

Upon discharge, you'll go to one of these locations:



Your Home

If possible – and provided you can manage your daily living activities on your own or with support from your family and friends – you will return to your home.

If you need equipment such as a walker or commode for safety and comfort, you may return home with it – or you'll be given a prescription so you can secure it. You'll also have prescriptions for any services you may need.

Outpatient Care: If you are able to travel to and from appointments, your case manager will arrange for you to receive physical, occupational and speech therapy as needed at an outpatient facility.

Home Health Services: If you need assistance at home, you may receive services such as skilled nursing, physical therapy, occupational therapy, speech therapy and social work from a home health agency professional. A nurse will visit you at home to assess your needs and coordinate your care. If you receive certain therapy on an outpatient basis, you may not qualify for home health services.

Inpatient Rehabilitation Facilities

If you need additional support and therapy prior to going home, you will be transferred to an inpatient facility that offers 24-hour care provided by skilled professionals. The type of facility will be determined based on the intensity of the therapy you require.

Acute Care Rehabilitation provides comprehensive, highly focused care designed to restore strength, improve physical and cognitive function ... and promote independence in daily activities.

Services are provided by skilled physical and occupational therapists, speech pathologists and other specialized medical staff. A physician visits you three days a week to monitor your progress. You'll receive 15 hours of varied therapy weekly, typically divided into three hours a day over five days – or two hours a day over seven days.

Sub-acute Rehab or Skilled Nursing Facility (SNF) also provide multi-discipline therapies and specialized medical care. Additionally, they offer specialty services such as inhalation therapy, tracheostomy care, tube feeding, infusion treatments and complex wound management. Other services may include two hours of physical therapy, occupational therapy or speech therapy a day, five days per week.



Following Your Surgery

How will I get home?

Same-Day Surgery

If you will not be spending a night in the facility, it is your responsibility to have someone accompany you at the time of discharge. You will not be allowed to drive yourself or take a taxi home from the facility following your surgery.

Overnight Stay

If you are staying overnight at the hospital, please make arrangements to have someone at the hospital before your scheduled discharge time. The discharge planning team will work with you to coordinate the ideal time to be discharged to home.

Please arrange to have your coach at home with you for at least the first 24 hours following your surgery.

Returning Home After Your Surgery

Taking care of yourself after your procedure is critically important. Following is important discharge information that will help you be comfortable and recover quickly.

What do I need to know about my diet?

If you are eating a regular diet when you are discharged from the hospital, continue eating normally when you return home. Your doctor or nurse will let you know if you need a specific regime or food consistency.

Be sure to drink plenty of fluids – especially water – so you stay hydrated. This enables your body to heal quickly.

What should I do if I'm constipated?

Even if you were having regular bowel movements prior to surgery, you are likely to experience post-operative constipation. Exposure to anesthetics and narcotics, alterations in your diet and fluid intake – as well as reduced physical activity – all contribute to this uncomfortable condition. You can help avoid constipation by eating a balanced diet including fruits, vegetables, whole grain foods and fiber – and increasing your water intake.

If you need supplements to help, consider using:

1. Docusate sodium (Colace), a stool-softener that makes stool easy to pass. You can take 100 mg three times a day. If you do not have a bowel movement in three days, add #2 below.
2. Milk of Magnesia, a laxative that works by pulling water into your intestines, helping your stool move along the intestinal tract. You may take one to two tablespoons every 12 hours. Remember to drink plenty of water following each dose. If you still have not had a bowel movement four days after your surgery, use #3 below.
3. An enema or rectal suppository. When the stool softener + laxative combination does not alleviate your symptoms, use a suppository. This will help eliminate heavy straining, which is not good after surgery.

If you try this regimen twice without any results, please call our office at 973.993.7322.

What do I need to know about showering and taking care of my incision?

Keep your incision clean and dry at all times.

- Do not apply any medications, ointments or creams to the wound area without checking with our office.
- Avoid touching your incision with your fingers as this can increase your chance of infection.
- Do not wear hats, helmets, wigs or wraps that may place pressure on the incision or lead to excessive head sweating.

Take care of your incision.

- Your incision was closed with staples or sutures that will be removed at your post-operative clinic visit 10 to 14 days after surgery.
- You may shower 72 hours after surgery, but do not soak the incision in a bathtub or pool for six weeks after surgery.
- You may wash the incision site gently with shampoo and rinse it with water.
- Pat the wound dry with a clean towel.
- You may find a shower chair – which can be purchased at most drugstores – helpful.

Avoid having your hair colored or permed for four weeks after surgery.



What about physical activity?

It's important you get out of bed and move as soon as possible after surgery. But, be careful! When you are doing something for the first time after your surgery – such as taking a walk, going to the mailbox and the like – be sure to use the buddy system and have someone with you.

Here are some more tips:

- Be sure to get up and move around. Do not sit longer than one hour at a time for the first two weeks. This will help you avoid problems such as developing blood clots or pneumonia.
- Try to walk at least three times a day for 15 to 30 minutes.
- You may feel dizzy when standing. This is common the first two weeks after surgery and will resolve with time.
- Avoid getting up from a seated position too quickly – and remain standing for a few moments before starting to walk.
- Walk with assistance if you feel unsteady.
- If you have discomfort, stop what you are doing.
- Slowly increase your distance and activities each day as tolerated. Resume your normal daily activities including going up and down stairs, letting your comfort level and common sense guide your level of activity.
- Avoid heavy house cleaning, lifting over 20 pounds (a gallon of milk weighs 8.5 pounds), going to the gym, playing golf, swimming, running or mowing the lawn until you are cleared by our office during your post-operative visit.
- You may resume sexual activity when you are comfortable. Stop if it's painful.

How long should I plan to be away from work?

Plan to be away from work for four to six weeks after surgery to allow for your recovery. If you can work from home, you may be able to work at a computer or desk sooner. However, you may find it difficult to sit for long periods of time or concentrate.

When can I drive?

You may drive two weeks after surgery provided (1) you are not taking opioid pain medications, (2) you have never had a seizure and (3) you do not have any neurological impairments such as visual problems that may affect your ability to drive. Driving will be discussed at your post-operative visit. If you have experienced a seizure before or after surgery, you must not drive at all until you discuss the plan with your surgeon and/or neurologist.

Can I smoke?

You should not smoke following surgery. Smoking has been proven to limit incision healing and may affect the outcome of your surgery.

What medications should I take?

You will be told which of your current medicines you should resume from home – as well as any new ones you should start. After surgery, you may be prescribed steroids to help reduce swelling and anticonvulsants to prevent seizures. It is very important you take these medications as directed. You do not need to take pain medication unless you need it. If you were taking blood thinners prior to surgery, ask your doctor when you should resume them.

Do not drink alcohol while taking prescription pain medications, anticonvulsants or muscle relaxants.

If you have a sore throat, you may use over-the-counter Cepacol lozenges. Follow the packaging instructions, and do not use them more than directed.

Here's important medication information.

Anticonvulsants

Use: Prevent or treat seizures. While Keppra (levetiracetam) is most commonly prescribed, there are many others. Even if you did not experience seizures before surgery, you will be placed on an anti-seizure medication for two to four weeks post-surgery. If you had a seizure before or after surgery, you may be on one or more of these medications for longer.

Potential Side Effects: Anti-seizure medications may affect your memory and concentration and make you tired. Avoid driving or performing dangerous activities while you are on these medications if you are having these side effects.

Steroids

Use: Decrease swelling in the brain. Decadron (dexamethasone) is most commonly prescribed. This medication is not the same as the anabolic steroids some athletes abuse.

Potential Side Effects: Steroid medications may cause increased appetite, changes in mood, heartburn, insomnia and fluid retention. Steroids can sometimes cause an acne-like rash across the chest. You may also feel tired and emotionally down for a few days. Just rest and know that you will feel better in time. We will gradually decrease and taper your steroid dose and frequency. As steroids help ease daily aches and pains, these symptoms may return when you are tapering off them. Please do not suddenly stop this medication on your own.

To treat any increased heartburn you experience while you are on steroids, you may take over-the-counter Pepcid. Pepcid helps decrease acid production in the stomach and reduce the risk of any damage to the esophagus.

Pain Medications

Use: Provide pain relief.

The first three days after surgery are often the most painful. This is due to swelling and the anesthetic wearing off. You may have a feeling of numbness in the scalp after surgery, which will resolve with time. When you are in the hospital, any pain will be managed with over-the-counter and/or prescription pain medications if needed.

Once you are home your pain should usually be well managed with regular strength or extra strength Tylenol (two tablets every six hours as needed and follow the instructions on the bottle). Do not take more than 4000 mg / day to avoid liver toxicity. One week after surgery, you may also start using over-the-counter non-steroidal anti-inflammatory medications (NSAIDs) such as Advil, Motrin or ibuprofen – 200 mg tablets (take two tablets every six hours as needed and follow the instructions on the bottle). As most craniotomies do not lead to a significant degree of pain, we generally try to avoid prescribing opioid pain medications. If absolutely necessary, you will be given a prescription for Percocet (oxycodone and acetaminophen combination) or an alternative medication, Fioricet, which contains butalbital (a mild sedative), caffeine and acetaminophen. Be sure to take it with food. Do not wait until the pain is greater than seven on a scale of one to 10 to take it. If you wait, the pain medication will take longer to work – and it will not be as effective.

Both of these medications contain Tylenol (acetaminophen). Do not take additional Tylenol while on these medications as taking more than 4000 mg of Tylenol in a 24-hour period can lead to liver damage. Taper the use of opioid pain medications to over-the-counter medication as your head pain eases over the first 48–72 hours at home. However, do not take ibuprofen or aspirin-containing medications until one week after surgery.

Potential Side Effects: Opioid pain medications may cause nausea and constipation.

Blood Thinners

If you were on blood thinners such as Aspirin (325 mg), Heparin, Lovenox, Coumadin, Pradaxa, Eliquis, Xarelto or Plavix, be sure to ask your neurosurgeon when you should resume taking them. While you may take baby Aspirin (81 mg) one week after surgery, you may need to wait an additional week to start taking other blood thinners.



What happens next?

Prior to your discharge, your social worker and navigator will schedule your first follow-up appointment and coordinate visits with your nurse, neurosurgeon, neuro-oncologist and radiation oncologist at the Brain Tumor Center.

Once we have your final pathology report – usually one to two weeks post-surgery – our team of specialists collaborates to design your treatment plan. The team includes experts in brain tumor surgery, radiation oncology, neuro-oncology, neuro-radiology, neurology, neuro-pathology, nutrition, psychiatry and social work. Then, our multi-disciplinary neuro-oncology tumor board reviews your case, ensuring the most effective, safe and holistic plan is designed for you.

At your follow-up visit, you will meet with our multi-disciplinary team, who will evaluate your incision; adjust any pain, seizure or steroid medications as necessary; and answer any questions you may have. We will discuss your diagnosis and recommended treatment plan at this appointment.



Where can I find reliable information?

If you do research on the Internet, please be aware that much of the information published on the treatment and prognosis of brain tumors is outdated. Refer to these reliable sources of information:



The American Brain Tumor Association
<http://www.abta.org>
800.886.2282



The American Association of Neurological Surgeons
<https://www.aans.org/Patients/Neurosurgical-Conditions-and-Treatments/Brain-Tumors>
888.566.2267

When should I call for help?

For life-threatening symptoms, call 9-1-1 immediately.

We are available 24 hours a day, 7 days a week at 973.993.7322. Call us if you are experiencing any of the following:

- A temperature of 101 degrees or higher
- Chills with shivering
- Uncontrollable pain, worsening headaches or neck stiffness
- Increasing drowsiness
- Seizures
- Change in neurological status such as increasing confusion, behavioral changes, weakness or speech difficulties
- New weakness or numbness
- Nausea and vomiting
- Inability to keep food or fluids down
- Inability to have a bowel movement
- Increased redness, soreness or swelling at the incision site
- Drainage of blood or fluid from the incision site
- Pain in your calf

Our goal is to help you feel better as quickly as possible. Please do not hesitate to contact us with any questions or concerns you have. **It is our privilege to care for you.**



Overlook Medical Center

99 Beauvoir Avenue
Summit, NJ 07901

Parking at Overlook Medical Center

Your surgery will be in the main hospital and you will enter through the main entrance. We recommend parking in the West Garage across from the main hospital, for your convenience.

Where to Go for Your Procedure

Enter the hospital through the main entrance and proceed down the main hallway until you reach the orange elevators, numbered 6-9. Take an elevator down to the 4th floor and turn left when you exit. The entrance for "Ambulatory Surgery Waiting" will be on your left just past the yellow elevators.

Main Line

(908) 522-2000

Admitting

(908) 522-2523

Medical Records

(908) 522-2111

Patient Information

(908) 522-2100

Patient Representative

(908) 522-5273

Pre-admission Testing

(908) 522-2042

Neurosurgery

(973) 993-7322

Neuro-oncology

(908) 522-5914

Radiation Oncology

(908) 522-2871

Recovery Room

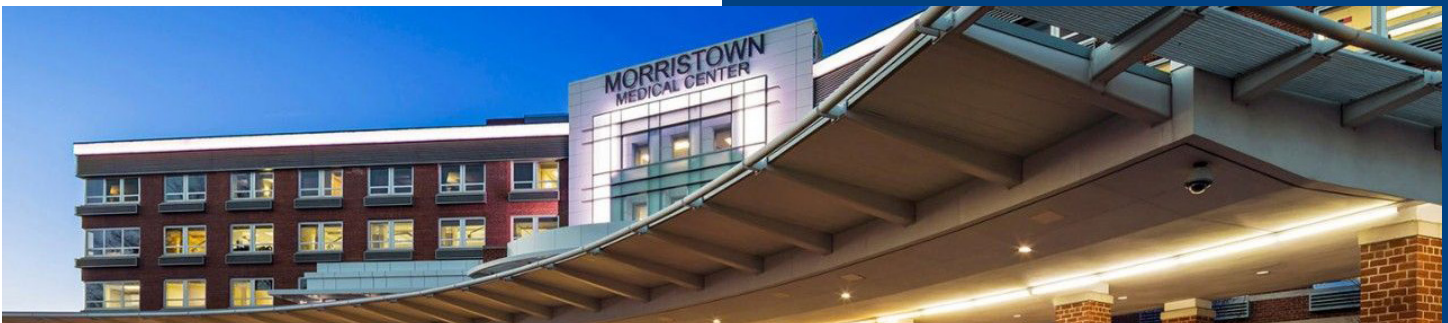
(908) 522-2175

Neuro ICU

(908) 522-5540

Neurology Unit (5AB)

(908) 522-2250



Morristown Medical Center

100 Madison Avenue
Morristown, NJ 07960

Parking at Morristown Medical Center

You may enter the hospital through the Carol G. Simon Cancer Center entrance at 100 Madison Avenue. Valet parking and wheelchair assistance is available. There is additional visitor parking across the street.

Where to Go for Your Procedure

Once you enter the building, you will be directed to the registration area.

Main Line

(973) 971-5000

Admitting

(973) 971-7984

Medical Records

(973) 971-5183

Patient Information

(973) 971-8005

Patient Representative

(973) 971-5142

Pre-admission Testing

(973) 971-6800

Neurosurgery

(973) 993-7322

Neuro-oncology

(908) 522-5914

Radiation Oncology

(973) 971-5329

Recovery Room

(973) 971-5297

Surgical ICU

(973) 971-5565

Oncology Unit (Simon 5)

(973) 971-5035

Neurology Unit (Khan 5)

(973) 971-5080