

Please ask your doctor about any tests that you may need and any medication you should avoid prior to surgery.

A Patient's Guide to Surgery

This information will give you and your family an overview of what will happen before, during and after your surgery at Northwestern Memorial Hospital. Your doctor will provide more detailed information about your specific surgery.

You are an important member of your health care team. Doctors, nurses and other health care professionals will be talking with you to plan your treatment and explain your tests and surgery. It is important that you understand the procedures involved in your stay to make your recovery safe and as speedy as possible. Please keep in mind that the surgical treatment of each person differs. Although you may be having the same operation as someone else, the preparations and procedures before, during and after surgery may vary.

As you review this information, write down any questions you may have. Please discuss these questions with your doctor or nurse.

Before Surgery

Diagnostic Tests

Before surgery, certain tests may be done. Basic tests include:

- Blood work.
- Urinalysis.
- Electrocardiogram (EKG).
- Chest X-ray.

Preparation

Your preparation will depend on what type of surgery you will undergo. If you take any routine medicines, check with your doctor to see if you should continue these prior to and on the day of your surgery.

Your doctor may tell you that for 2 weeks prior to your surgery, you should not take any medicines that contain aspirin or nonsteroidal anti-inflammatory drugs, including ibuprofen (Advil®, Motrin®).

About Your Surgery

If you are unsure about which medicines are included in this group, ask your doctor or pharmacist. Acetaminophen (Tylenol®) can be taken for minor pain, unless instructed otherwise.

During the 24 hours before your surgery, do not shave the surgical area. It is also a good idea to shower and wash your hair the night before or the morning of surgery. All make-up and nail polish should be removed before surgery. The color of the skin and nail beds is an important sign of blood circulation. This is one of the checks done by doctors and nurses during the operation and in the recovery room.

In most cases, you may not eat or drink anything after midnight the day before surgery. This is referred to as NPO, which means nothing by mouth. Please follow your surgeon's instructions regarding NPO and the use of routine medications that you take.

All rings, bracelets and necklaces need to be removed prior to surgery. **This includes body-piercing jewelry and tongue studs.** The hospital is not responsible for lost or damaged personal belongings. You should leave all valuable items at home.

Visits from Doctors

You will probably first meet with a resident surgeon (a licensed doctor in training who is working with your attending surgeon) or a nurse practitioner. The resident works under your doctor's supervision. You will be examined and asked a number of questions about your medical history. The surgery will be explained. You will be asked to sign a legal consent form needed for each operation. Ask the resident any questions you may have. Because Northwestern Memorial Hospital is an academic medical center, medical students under the direction of attending physicians also may be involved in your care.

Anesthesia is a short-term absence of feeling. Anesthetic agents are used to provide relief from pain during surgery. There are 5 types of anesthesia that may be used.

- **Local anesthesia** uses a numbing medicine injected around the incision site. It results in a lack of feeling in that area only. The rest of the body is not affected. You will be awake. The surgeon often gives this type of anesthetic, since only a small part of the body is affected.
- In **Epidural or Spinal anesthesia**, numbing medicine is injected into the mid or lower back. All of the nerves going into the incision area and nearby areas are numbed. This absence of sensation (feeling) is limited to 1 region (localized). With a spinal, you may have a lack of feeling from the waist to the toes. Feeling returns in a few hours. Sometimes, patients have trouble urinating after an epidural or spinal. This is normal and usually lasts only a short time.
- **General anesthesia** may begin with an IV (into the vein) medicine and often also includes breathing anesthetic gases mixed with oxygen. You are not aware of the surgery or your surroundings. A breathing tube may be placed into your windpipe to help you breathe during surgery. (This is why some patients have a slight sore throat on the day after surgery.) Before surgery, be sure to tell the anesthesiologist or a member of your care team about any crowns, bridges, or loose teeth so that extra care can be taken.

- **A Nerve Block** is a type of local (regional) anesthesia used for arm or leg surgery. Numbing medicine is injected close to a nerve. The nerve block numbs the entire limb. Sedation or a light general anesthesia also may be given. This allows you to sleep and to be unaware of what is going on around you during surgery. Depending on the surgery, your limb may be numb for 24 to 48 hours. This numbness is also helpful in managing post-surgery pain.
- **Monitored Anesthetic Care** uses both a local anesthetic at the incision site and IV medicine to relax you (sedation). It produces a sleepy state. You can be aroused but otherwise sleep. Due to the IV medicine, you may not recall your time in the operating room (OR). Once surgery is over, you will be fully awake.

The anesthesiologist and the surgeon will talk with you to plan the type of anesthetic that is best for you. This is based on the surgery and your medical history. Be sure to tell the anesthesiologist if you have had any problems with anesthesia in the past.

In some cases, a nurse anesthetist or other anesthesia health professionals may assist in your care.

Before surgery, a member of the surgery team will come in and:

- Confirm the type of surgery you are having.
- Mark the surgery site, if needed.
- Review the plan for anesthesia.
- Ask about any past problems you may have had with anesthesia.

Your temperature, pulse and blood pressure will be recorded. An IV line will be started in a vein in your hand or arm. The purpose of the IV is to provide fluid and medicines. Based on your specific needs, antibiotics or other medicines may be given. To prevent blood clots, you may also wear DVT (deep vein thrombosis) Prevention Boots. These boots gently squeeze your calves every so often to copy the muscle movement that happens when you walk.

Before going to the OR, you will be asked to remove all hairpins, jewelry, dentures, contact lenses, glasses and bridge work, unless otherwise instructed. The nurse will ask you to empty your bladder and put on a clean hospital gown. All underwear and pajama bottoms must be removed. A mild relaxing medicine may be given to you before going to the OR, where the anesthesia itself is given.

Your Family

Your family or friends may visit with you before your surgery. During surgery, they will be directed to the Surgical Family Waiting Room.

After surgery, the surgeon will talk with your family and inform them of your progress. Your family may not visit you in the Recovery Room, but they can see you when you return to your hospital room or if you are transferred to an Intensive Care Unit. They will be directed to the area to which you are transferred.

The Operating Room

About an hour or so before surgery, you will be taken to a pre-op holding area. In the OR, the surgical team will be wearing hats and masks. The OR may at first seem cold, but you will be covered with a warm blanket. If an IV line has not yet been started, it will be done at this time.

For your safety, the OR Team will verify your:

- Name.
- Allergies.
- Consent forms.
- Type of surgery, including specific site and any special needs.
- Plan for anesthesia.

This process is similar to a pre-flight checklist that airline pilots perform. It is done to make sure that the team and the all equipment for the surgery is in place.

After Surgery

Recovery Room

After surgery, you will go to the Recovery Room, where you will remain for 1 to 2 hours. The nurses will check your blood pressure, pulse and incision frequently. You may have drainage tubes to help remove excess fluid from the surgical site. An oxygen mask over your mouth and nose may be used to aid breathing until you are fully awake. Your nurse will monitor you closely.

The nurse will be asking you questions to see how awake you are. The nurse will assess your pain and make sure you are comfortable. You will be asked to breathe deeply and cough. (Step-by-step instructions for deep breathing and coughing are found on page 5.) When you are alert, you will be taken to your room.

Inpatient Room

Once you are in your room, a member of your care team will take your blood pressure, pulse and temperature. You will be given medicine for pain or discomfort as needed. Do not wait until you are too uncomfortable before asking for pain medicine. Also, tell your nurse how your pain medicine is working. The nurse or care team member will ask you to rate your pain on a scale of 0 to 10, with 0 meaning no pain and 10, the worst pain you can imagine.

1 2 3 4 5 6 7 8 9 10

No Pain

Moderate Pain

Worst Pain



0

2

4

6

8

10

The IV inserted prior to the surgery will remain until you are able to take fluids by mouth. The IV may be attached to a pump that will sound an alarm when the flow is disrupted. Press the call button if you hear the alarm to notify your nurse. Be sure to tell the nurse if the IV is causing discomfort.

In most cases, you will continue to wear DVT Prevention Boots.

Recovering

Walking, deep breathing, coughing, turning, and leg and foot exercises will speed your recovery, improve circulation, promote healing, improve bowel function and prevent complications.

Most patients sit in a chair or begin walking on the day of surgery. A member of your care team will assist you. Do not try this alone the first time. It is important that you gradually increase your activities each day as suggested by your health care team.

Deep Breathing and Coughing

Deep breathing expands the lungs and helps to cough out any mucus that may have collected in your lungs. Usually, the most comfortable position for this activity is to lie in bed with the head of the bed raised. Deep breathing also can be done sitting on the side of the bed, in a chair, flat on your back or even on your side. Relax, especially your neck and shoulder muscles.

Rest your hands on the sides of your rib cage.

Slowly take in a deep breath through your nose and hold for 1 or 2 seconds.

When you breathe in, your hands should be pushed out by your rib cage (Figure 1).

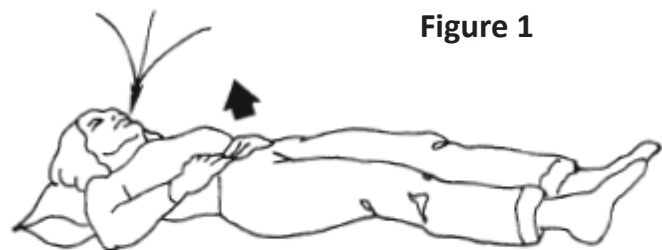


Figure 1

Then, slowly blow it out through your mouth.

As you exhale, you will feel the area under your hands relax (Figure 2).

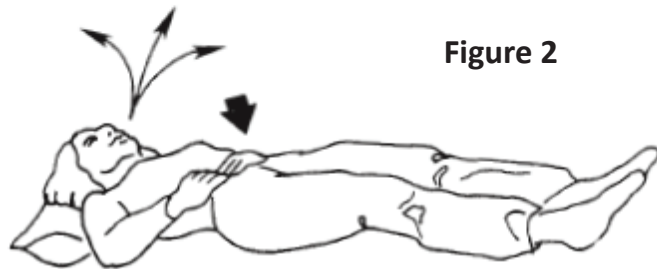


Figure 2

Take 2 or 3 deep breaths, then several normal breaths.

Repeat 10 times each hour while awake for the first 2 days after your surgery.

After several deep breaths, cough deeply to help clear the lungs of mucus. When you deep breathe and cough you may be more comfortable by gripping a pillow, blanket or towel roll over your incision site. Bending the knees may also help take the strain off the incision. Do not be afraid to cough. The incision has been fastened securely with stitches or staples and will not open.

To cough, take 3 deep breaths. Hold the next breath for a count of 3. Support your incision and give a good deep cough. The cough should come from deep in your abdomen, not your throat. Cough only 2 or 3 times, then rest before continuing.

A hand-held device (incentive spirometer) is often used to promote deep breathing. Use the incentive spirometer as instructed by your nurse. You should take 10 breaths every hour that you are awake.

In some cases, a respiratory therapist may assist you with coughing and deep breathing. For best results, follow the therapist's guidelines. The therapist or your nurse can also answer any questions you may have about breathing treatments.

Turning

It is important to turn in bed to improve your circulation and prevent bedsores. You should turn at least every 2 hours unless otherwise instructed. You may need help from a member of your care team, but do as much on your own as possible. Some types of surgery may limit your ability to turn and move in bed. Your doctor and nurse will guide and assist you prior to any exercising.

Figure 3



- Identify the direction you want to turn. Raise the arm above your head on the side you will be turning (See Figure 3).
- Bend the opposite knee, planting the foot firmly on the bed.
- Push off with the bent leg.

Figure 4



- With the opposite hand, reach across your chest and grip the bed railing. Pull yourself over onto your side (See Figure 4).
- To move back, bend the leg again and push off with your hand on the bed.

Lifting the Head

If your surgery was on your neck (e.g., thyroid), move your head by placing the palm of your hand under the back of your head. Lift your head with your hand rather than with muscles of the neck when changing positions.

Leg and Foot Exercises

There are 3 leg and foot exercises that will help improve your circulation. Do each exercise slowly while lying flat. This group of leg exercises can be repeated every 1 or 2 hours. (After you have started walking, the exercises can be stopped.)

1. With your legs out straight, point the toes of both feet toward the end of the bed. Relax. Then point the toes toward your chin (see Figure 5). Repeat 5 times.

Figure 5



2. Move each foot at the ankle, making circles. Do this exercise 5 times.
3. Bend one knee at a time, sliding the foot along the bed. Do this exercise 5 times.

Going Home

Before you leave, your doctor and nurse will review specific guidelines for your recovery at home.

This includes:

- Activity guidelines.
- Medicines.
- Diet.
- Follow-up appointments.
- Wound care.

Always wash your hands before and after touching your wound.

It is important to keep your follow-up appointments with your doctor, even if you are feeling well. Please call if you have any questions before that time. Ask your doctor who to contact if you have questions.

Notify your doctor if there is:

- Change in your incision, such as new or unusual drainage or change in color, odor or amount of drainage.
- Temperature higher than 100° F.
- Increase in temperature, swelling, redness or tenderness around the incision.
- Unusual or severe increase in pain.

Para asistencia en español, por favor llamar al Departamento de Representantes para Pacientes al 312-926-3112.

The entities that come together as Northwestern Medicine are committed to representing the communities we serve, fostering a culture of inclusion, delivering culturally competent care, providing access to treatment and programs in a nondiscriminatory manner and eliminating healthcare disparities. For questions, please call either Northwestern Memorial Hospital's Patient Representatives Department at 312-926-3112, TDD/TTY 312-944-2358 and/or the Northwestern Medical Group Patient Representatives Department at 312-926-1920, TDD/TTY 312-695-3661.

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