



Getting Ready for Colon and Rectal Surgery



THE OHIO STATE UNIVERSITY

WEXNER MEDICAL CENTER



Table of Contents

Colon and Rectal Surgery: Colorectal Resection	3
Preparing for Your Surgery	6
Payment and Financial Aid	8
Planning for Your Recovery	9
Day Before Surgery	10
Getting Your Skin Ready for Surgery	11
Day of Surgery	13
Pain Management Before and Through Surgery	14
What to Expect After Surgery	17
My Notes and Questions	19

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Talk to your doctor or health care team if you have any questions about your care.

For more health information, go to wexnermedical.osu.edu/patiented or contact the Library for Health Information at 614-293-3707 or health-info@osu.edu.

Colon and Rectal Surgery

Colorectal Resection

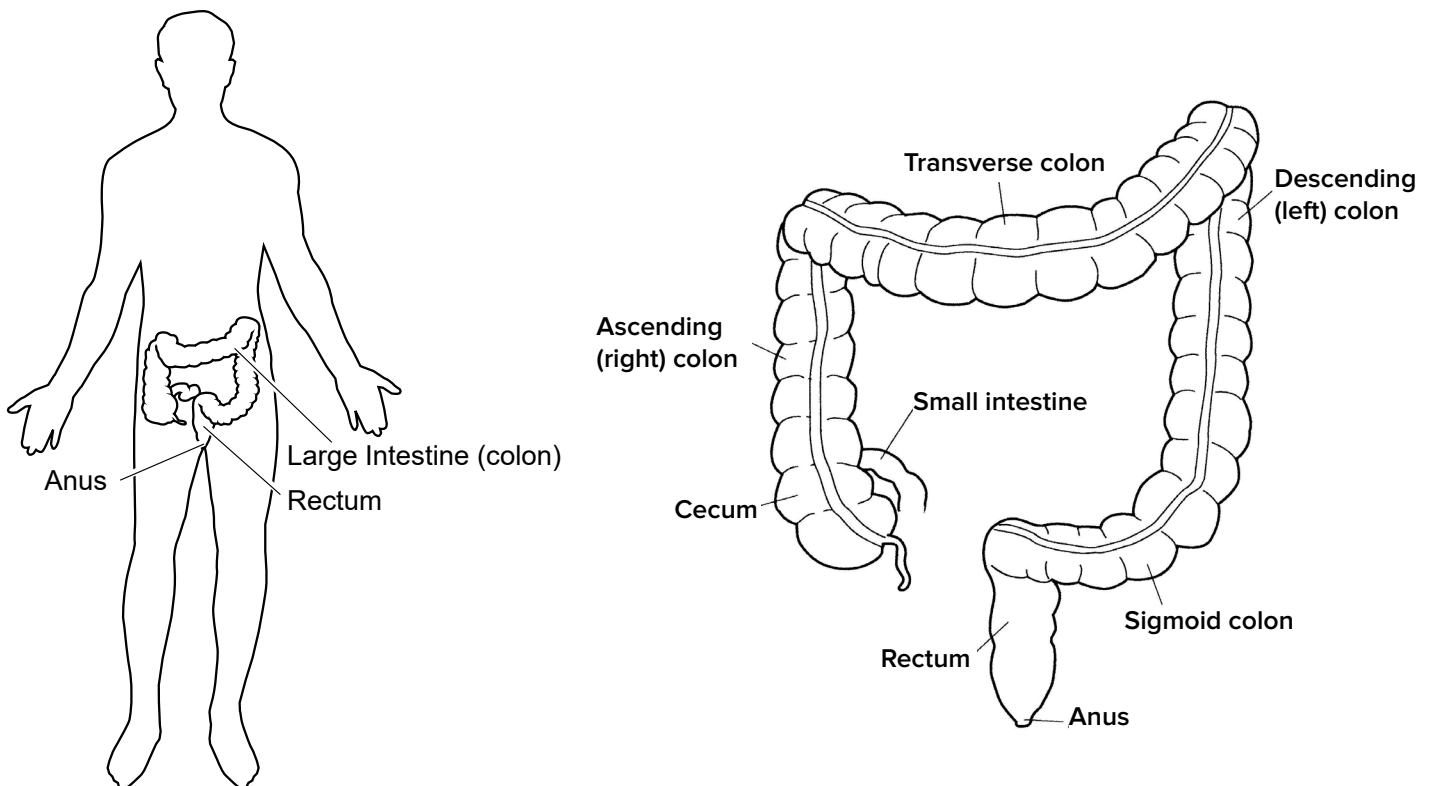
Surgery to remove part of the colon, also called the large intestine, is called a **colectomy**, **bowel resection**, or a **colorectal resection**. This surgery may be used to treat:

- Bleeding from the colon
- Bowel obstruction
- Colon cancer or high risk of colon cancer
- Crohn's disease
- Diverticulitis
- Ulcerative colitis

What is the colon?

The colon (large intestine) is the last part of your digestive tract. This part of the bowel works to soak up water and store food waste. The colon is a tube like muscle. This tube has very smooth lining. The lining is made up of millions of cells. The **colon** in an adult is about 4 to 6 feet long. The **rectum** is the last 6 inches of the colon.

These pictures show you where the colon is in the body and the parts of the colon.



About the surgery

There are 2 ways this surgery can be done. Your doctor will talk with you about which surgery may be the best choice for you.

- **Open surgery:** The belly is cut open, so there is 1 large cut or incision.
- **Laparoscopic surgery:** Several small cuts are made into the belly, and the doctor works with a special camera and tools through the small cuts to do the surgery.

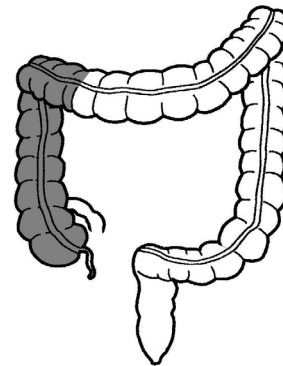
The surgeon will remove the part of the colon or rectum that is the source of the problem. Some normal tissue and lymph nodes may also be removed. The healthy sections of the colon are then sewn together, called the **anastomosis**.

Types of colectomy surgery

There are 5 types of surgery, named for the part of the colon or rectum that is removed. The pictures show the part removed in gray.

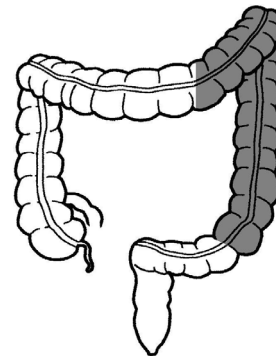
- **Right hemicolectomy**

Part or all of the ascending colon and cecum are removed. The colon is then reconnected to the small intestine.



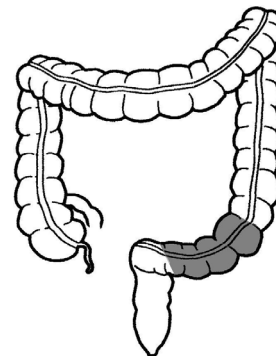
- **Left hemicolectomy**

Part or all of the descending colon is removed. The transverse colon is then reconnected to the rectum.



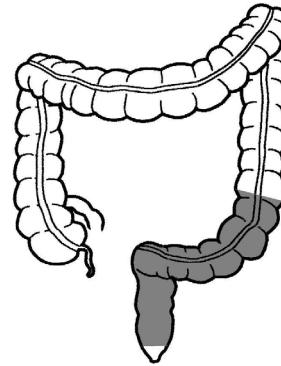
- **Sigmoid colectomy**

Part or all of the sigmoid colon is removed. The descending colon is then reconnected to the rectum.



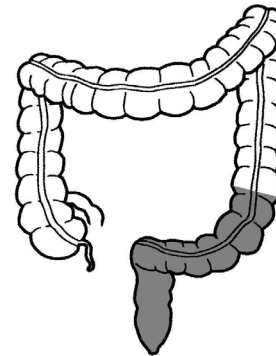
- **Lower anterior resection**

The sigmoid colon and part of the rectum are removed. The descending colon is then reconnected to the remaining rectum.



- **Abdominal perineal resection**

Part or all of the sigmoid colon and all of the rectum and the anus are removed. The descending colon is attached to the belly wall forming a colostomy. A colostomy creates an opening on the outside of the body, called a stoma, that allows stool to drain into a collection device, called a pouch.



If you expect to have a colostomy after your surgery, a specialized nurse will visit you in the hospital and help you learn about how to care for your stoma and pouch.

Your recovery after surgery

Your hospital stay will depend on what kind of surgery you had and your progress. Most patients having this surgery will be in the hospital for 3 to 7 days. To improve your care and the speed of your recovery, we will focus on controlling your pain and getting you up and moving very soon after your surgery.

- We will use several different pain medicines to manage your pain, such as acetaminophen (Tylenol), gabapentin (Neurontin), and ibuprofen (Motrin). These tend to reduce the need for narcotic pain medicines, which may have more side effects.
- You will be helped to sit up in a chair the evening of your surgery, and then you will be helped to walk the following day. Recovery tends to be better and faster for patients who get out of bed and move right after surgery. Each day, the amount of time you spend out of bed and the amount of time you spend walking will increase. We encourage you to walk when you leave the hospital as well.

Preparing for Your Surgery

Review these instructions as soon as you get them, so you are well prepared for your surgery.

- You may need to stop or change certain medicines. You also may need to contact your health insurance provider.
- Your provider will give you prescriptions for medicines that will be needed to prepare for surgery.
- You may be given 2 bottles of a carbohydrate drink.
- You will get chlorhexidine gluconate (CHG) soap to prepare your skin.

You will need these the day before and the day of your surgery.

Being well prepared can help you have a better recovery. Follow these instructions to keep your surgery on schedule. Call your doctor's office if you have any questions.

Weeks before surgery

- If you get sick with a cold, sore throat, cough or fever in the 2 weeks before your surgery, call the office. Your surgery may need to be rescheduled.
- **If you need paperwork filled out for medical leave or disability, bring it with you to your appointment.** If the forms are dropped off, mailed, emailed, or faxed to your surgeon's office outside of your appointment time, there will be a \$25 charge, and you will need to allow 7 to 10 days to get the forms completed. If you have any questions, please call the surgeon's office.
- Arrange to have an adult to take you home after surgery or your hospital stay. You will not be permitted to leave the hospital alone for your safety.

- **Buy a large 64-ounce bottle of Gatorade, Powerade, or other sports drink that is not red, orange, or purple in color. Lemon-lime is best.** You will need this to mix your bowel prep the day before your surgery.
- **For 1 week before your surgery, DO NOT shave near the site** where you will have your surgery. Shaving with a razor can irritate your skin and make it easier to develop an infection.
- **Let your doctor know if you take any antiplatelet medicines, anticoagulants, or blood thinners,** because we may need to adjust these medications before your surgery. Some examples of these medicines are: aspirin, clopidogrel (Plavix), prasugrel (Effient), ticagrelor (Brilinta), warfarin (Coumadin or Jantoven), and enoxaparin (Lovenox).
- **If you have a stent, DO NOT stop taking your medicines until you have checked with the doctor who placed the stent or the doctor who prescribes your anticoagulant medicine.**
- **If you take aspirin** for pain your doctor can give you another pain medicine for a time before and after surgery to prevent this.
- **If your surgery date gets changed,** and you had stopped or changed your medicine to prevent clots, call your doctor. You may need to restart the medicine while you wait for your surgery to be rescheduled.

Exercise to improve your strength before surgery

Being in good physical shape can help you recover from surgery quicker and with fewer problems. The stronger you are before surgery, the easier things will be for you after surgery.

- Exercise for 30 minutes on most days.
- Walking outside or on a treadmill, riding a bike, and strength training using light weights are good options.
- Try to increase the amount of time or how hard you are exercising every few days to build up your strength and stamina.
- If you have a regular exercise routine most days of the week, stay with it until your surgery.

Your surgeon may have you see a physical therapist (PT) before your surgery if you are not very active or you are weak.

Stop tobacco use

If you smoke or use other tobacco products, you need to **stop 4 weeks before the surgery. You also need to avoid tobacco use for up to 8 weeks after surgery to help your wound healing.** Talk to your doctor about a smoking cessation program. You can also get help through:

- Ross Heart Hospital Smoking Cessation Clinic, 614-293-0932
- The Lung Center, Tobacco Dependence Clinic, 614-293-4925
- Ohio Tobacco Quit Line, 800-QUIT-NOW (784-8669)
- Quit for Life program from the American Cancer Society, 800-227-2345
- American Lung Association, 800-586-4872
- BeTobaccoFree.gov Smoking Quit Line, 877-448-7848
- Ohio Partners for Smoke Free Families at ohiosmokefreefamilies.org

Stop alcohol use

- If you drink alcohol, you will need to **stop drinking 4 weeks before the surgery** to reduce your risk of problems after surgery.
- Avoid alcohol up to 8 weeks after your surgery to help reduce your risk of infection and to help your wound heal more quickly.
- Talk to your doctor if you need help to stop alcohol use. You may also find these resources helpful:
 - Alcoholics Anonymous (AA) at www.aa.org
 - Rethinking Drinking at www.rethinkingdrinking.niaaa.nih.gov
 - National Institute of Alcohol Abuse and Alcoholism at www.niaaa.nih.gov
 - Talbot Hall at 614-257-3760 provides inpatient, partial hospitalization, and outpatient services for teens or adults and their families as well as educational programs

Payment and Financial Aid

Call your health insurance before surgery

It is always a good idea to call your insurance company to check for authorization before you have surgery or other procedures, or your insurance may not pay. Check your health insurance card for a phone number to check about your benefits and authorization.

- If your insurance will not pay the full amount, you will be asked to pay a deposit before surgery.
- **You will be expected to pay your co-pay, co-insurance, or deductible amount when you arrive for your surgery.**

Pre-registration

- You should expect a call from the hospital to pre-register for surgery. If you have not been called within 2 days before your surgery date, please call Pre-Registration at 614-293-8200 or 866-312-7846. Our staff will help you understand what fees you may be expected to pay for your surgery, the doctors, and the hospital charges.
- If you have MyChart, you may log on to complete your pre-registration questionnaire.

Financial aid

If you do not have insurance, or you are not able to pay your part of the cost for your care, please call to talk to one of our billing customer service staff at 614-293-2100. They will be able to help determine if you qualify for:

- Ohio Medicaid, if your income meets guidelines
- Affordable Care Act Insurance plans
- Financial aid programs through state or national programs

They can also help you set up a payment plan. Financial help may also be available through the hospitals, based on sliding scale and federal poverty guidelines. We would need to have information about your job, income, resources, insurance, family size, and other information. We want to give you the care you need, so we will work with you to try to help.

If you have questions while you are in the hospital, call the financial counselors at 614-293-0860.

Planning for Your Recovery

Your care after leaving the hospital

You should have help available to you around the clock for the first few weeks after surgery. After surgery, you will not be as strong and will need someone to help you get in and out of bed, prepare meals, take you to appointments, get your medicines, help with your exercises, and care for your incision.

You will not be able to drive while taking prescription pain medicine and until your doctor says that you can return to driving.

Plan for help after surgery

Our goal is to have our colon surgery patients return home from the hospital where they can recover in the comfort of a familiar environment. However, some patients may require home health services or a short stay in a skilled nursing or rehabilitation center.

If needed, we can provide you with a list of recommended care providers for home health services, skilled nursing facilities, or rehab centers close to your home. We work closely with the listed companies to maintain a high level of care as you leave the hospital and continue your recovery. Our goal is to coordinate your care and reduce the chance of problems. By working together with you, your caregivers, and your community care team, we aim to give you the care you need to recover as quickly as possible.

If you do not have benefits for home health services, skilled nursing facilities, or rehab centers, or if you need further guidance, please call your doctor's office and ask to speak to the case manager.

Talk to your insurance provider

Know your options to help you plan for your care after surgery.

If you have Medicare A or B:

- Ask for lists of nursing homes or home health services in your area.
- You can also get the lists online at www.medicare.gov.

If you have private insurance or Medicare Advantage:

- Call the phone number on your insurance card. Tell them you are having surgery, and you want to know about your skilled nursing or nursing home benefits. Ask them for a list for your area.
- Review the list and call the Admissions Director at several locations. If you can, visit the sites to see which you prefer.

Day Before Surgery

Your surgery time

You will receive a call 24 to 48 hours before your surgery date to tell you the time of your surgery. They will tell you when to arrive, review your instructions for your bowel prep, review the medicines you should take before your surgery, and answer your questions.

Clear liquids only the day before surgery

For the 24 hours before your surgery, you are not able to have any solid foods. You should **only drink clear liquids that are not red, orange, or purple**. If you have diabetes, use sugar free options.

Clear liquids include:

- Water
- Fruit juices that you can see through, such as apple, white cranberry, or white grape
- Popsicles or ice chips
- Ginger ale or lemon-lime soda
- Gatorade, other sports drinks, or drink mixes, like Kool-Aid
- Clear broth or bouillon
- Jell-O or other gelatin
- Coffee or tea with no milk or cream added

You may be given a carbohydrate drink by your surgery team:

- **Drink 1 bottle the evening before your surgery.**
- You will need to drink the other bottle the morning of your surgery.

Prep for surgery

You will get an instruction sheet from your health care provider that has this same information, called Pre-Operative Bowel Prep. Check off the steps as you complete them on the sheet and bring it with you when you come for surgery.

You will take some pills and drink a medicine mixture to clear your bowel of any solid matter. You will need to go to the bathroom often, and your stool will get very watery.

Step 1: At 11 a.m.

Take the 4 Bisacodyl or Dulcolax tablets with a **cup of the sports drink** you will use to mix in Step 2.

Step 2: At 11 a.m.

Pour the entire bottle of polyethylene glycol or Miralax powder into the large bottle of sports drink. Shake well to mix. **Drink the entire bottle of this mixture over the next 2 hours.**

Step 3: At 1 p.m.

Take 2 tablets (or 1000 mg total) of metronidazole and 2 tablets (or 1000 mg total) of neomycin with clear liquids. These are medicines to help reduce your infection risk.

Step 4: At 2 p.m.

Take 2 tablets (or 1000 mg total) of metronidazole and 2 tablets (or 1000 mg total) of neomycin with clear liquids.

Step 5: At 9 p.m.

Take 2 tablets (or 1000 mg total) of metronidazole and 2 tablets (or 1000 mg total) of neomycin with clear liquids. **Keep drinking only clear liquids until midnight.**

Step 6: Before Bedtime

Wash with CHG. See instructions on next page.

Step 7: Before Bedtime

Drink 1 bottle of the carbohydrate drink if you were given this.

Getting Your Skin Ready for Surgery

Your surgery involves cutting through the skin. Because germs live on everyone's skin, there is a chance of getting an infection. To lessen your chance of getting an infection, you need to wash your skin with a special soap, called chlorhexidine gluconate (CHG), before your surgery.

You will need to take a **shower with CHG the night before your surgery and then again the morning of your surgery. Use 4 ounces (½ cup) of CHG soap or 4 to 5 pumps of CHG foam each time you shower.**

1 Wash your hair as usual with your regular shampoo and then wash your body with regular soap. Rinse well.

2 Wet a clean washcloth. Turn off the shower.

3 Apply some CHG soap to the wet washcloth.

4 Use the washcloth to wash your whole body **from the neck down**. Keep adding more CHG and continue to wash for **5 minutes**.

5 Turn on the shower water and rinse your whole body well.

6 Pat yourself dry with a clean towel.

7 Put on clean clothes.

8 **Note:** On the **morning of surgery** when you finish showering, **do NOT** put on hair or skin care products, deodorant or make-up. **Do NOT** wear jewelry to the hospital or surgery center.

If you are not able to shower

If you do not have a shower or you are not able to get into a shower, do a sponge bath each time to clean your body. Do not use CHG soap or foam on your hair unless you are told to do so by your health care provider.

How to take a sponge bath:

1. First, bathe with a clean washcloth, water, and regular soap. Rinse well with clean water.
2. Then, get a clean washcloth and wet it with clean water.
3. Apply some CHG soap or foam to the wet washcloth.
4. Use the washcloth to wash your whole body **from the neck down**. Keep adding more CHG and continue to **wash for 5 minutes**.
5. Rinse well with another clean washcloth and clean water.
6. Pat yourself dry with a clean towel.
7. Put on clean clothes.

If you have any questions about cleaning your skin, call your surgeon's office.

Day of Surgery

Finish your prep for surgery

- **Step 8:** Take another shower with the CHG foam wash or soap and put on clean clothes. Do not put on any hair or skin care products, deodorant, or makeup. **Refer to page 11, Getting Your Skin Ready for Surgery.**
- **Step 9:** Drink the last bottle of carbohydrate drink 2 hours before your arrival time.
- Take any medicines you were instructed to take the morning of your surgery with the carbohydrate drink or small sips of water.
- Remove any nail polish, artificial nails, piercings, and all makeup before your surgery.

Things to bring with you

Please bring these items with you:

- Your photo ID and health insurance card(s).
- Co-pay or co-insurance or deductible amount you are responsible for.
- Phone number for the doctors and pharmacy you use.
- List of preferred home health agencies or rehabilitation centers, if needed.
- Current copy of your medicine list. Be sure to include any vitamins, herbals or other over the counter medicines. Also list the last time the medicine was taken.
- Your Living Will and Health Care Power of Attorney forms (if you have them).
- Comfortable clothing, such as a robe, slippers, and toiletries.
- Do NOT bring jewelry, money, or other valuables.
- **Step 10:** Bring the Pre-Operative Bowel Preparation form that was given by your provider, with your check marks showing that you finished each step.

Plan to arrive at Registration 2 hours before your surgery.

Pain Management Before and Through Surgery

Most people have some pain after surgery. It is important to keep pain under control to help with your recovery. Good pain control helps you feel comfortable, so you can take deep breaths, walk, and sleep better. This can help lower your risk of complications after surgery, such as pneumonia or blood clots. Your health care team will use different ways to manage your pain, to help you feel better and recover faster.

Before Surgery

Your doctor may order medicine for you to take before your surgery to help manage your pain during and after surgery. These medicines may include:

- Acetaminophen, brand name Tylenol
- Oxycodone, brand names Oxycontin, Oxecta, or Roxicodone
- Gabapentin, brand names Neurontin, Gralise, or Horizant
- Celecoxib, brand name Celebrex
- Medicines to help with anxiety or nausea

Types of pain relief procedures

Epidural Analgesia

The word analgesia means pain relief. Epidural analgesia is another way to give pain medicine after surgery. A very thin plastic tube called an epidural catheter is put into your back just before surgery. A small pump is attached to the epidural catheter.

The pump gives a small amount of pain medicine continuously through the catheter in your back at a set rate. You may also be given a button to press to request the pump to deliver more medicine, if needed. The catheter is taped to your back and you will be able to move around in bed, walk, and urinate. The epidural can be in place for 24 to 48 hours after your surgery.

Low blood pressure is a common side effect from epidural analgesia. This can be treated by turning down the epidural medicine and giving IV fluids.

Rare side effects may include headaches, bleeding, infection, or allergic reaction to the medicine.

Spinal Analgesia

Spinal analgesia can help to control pain after surgery. After cleaning and numbing the skin, a needle is put into the spinal space below the spinal cord. (It does not go into your spinal cord.) When the needle is in the right place, you will be given an injection of pain medicine and then the needle is removed.

Rare side effects may include: headaches, numbness or tingling in lower legs, back soreness, bleeding, allergic reaction, or infection.

Peripheral Nerve Blocks

Medicine can also be injected to numb just the area of your body where the surgery will be done to help control your pain. This may be given as a single shot or through a catheter over time.

Side effects with a nerve block are rare, but may include infection at the needle site, bleeding, injury to the nerve, or allergic reaction to the medicine.

Your health care team will talk with you about which procedure is best for you.

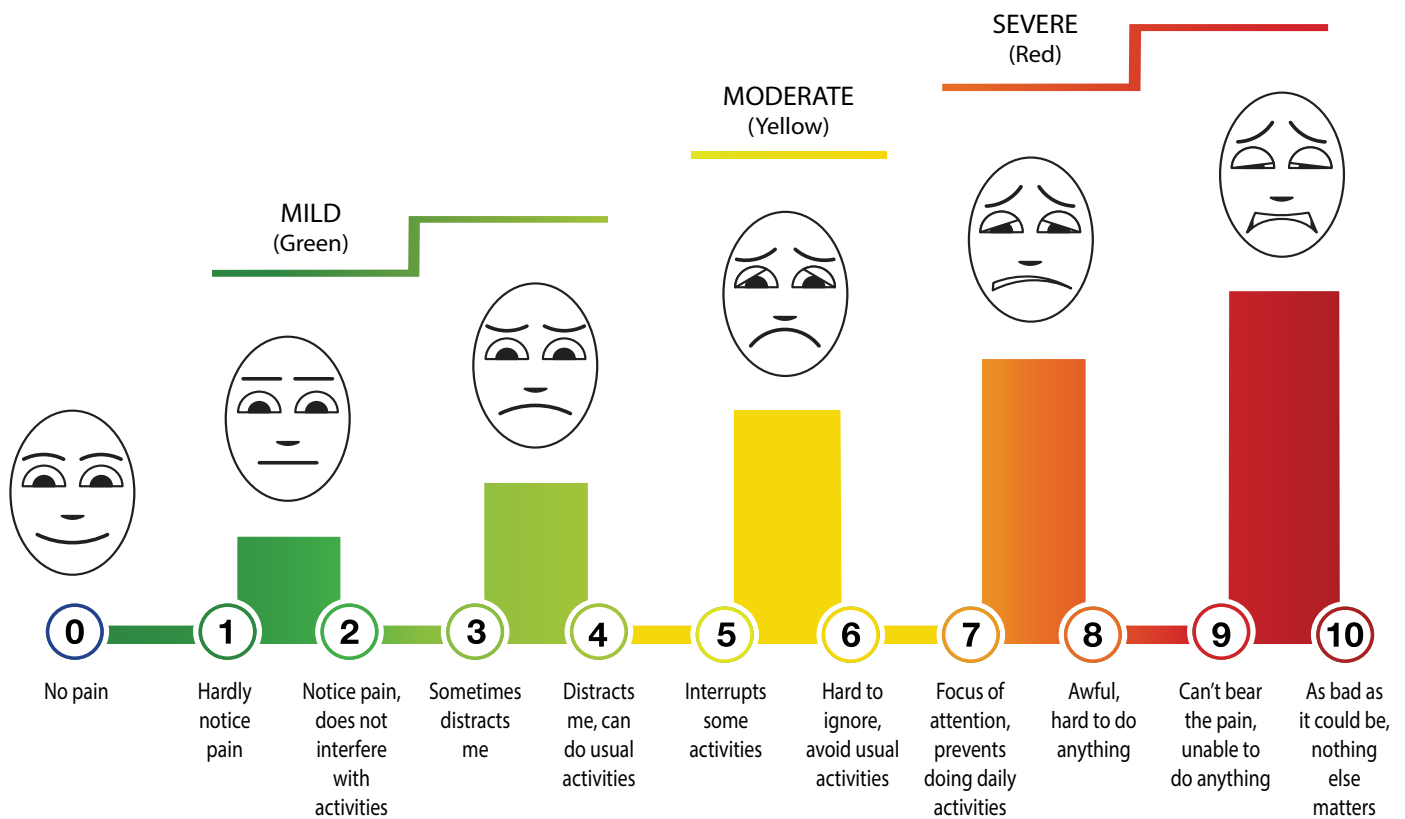
After surgery

Your doctor may order different kinds of pain medicines for you to take to help manage your pain. These medicines may include acetaminophen (Tylenol), gabapentin (Neurontin), and ibuprofen (Motrin). These medicines will often be scheduled "around-the-clock," for you to take even when you are not in pain. Using these medicines helps reduce the need for opioid pain medicines, which can cause more side effects and slow your recovery.

Pain medicine can cause constipation. You will be given a stool softener medicine to help prevent constipation during your hospital stay.

Pain medicine will not get rid of all your pain. It should keep your pain at a level that lets you move around, eat, and breathe easily (4 or below on the pain scale below). Tell your nurse if your pain does not improve or comes back. Your nurse can talk with your doctor to see if your pain medicine can be adjusted or changed.

Pain Rating Scale



Defense & Veterans Center for Integrative Pain Management v 2.0

Other ways to manage your pain

Here are other ways to help manage your pain. Planning ahead or practicing a pain control method can help you when you have pain.

- **Activity:** When your doctor says it is okay, start moving as soon as possible after surgery. Moving helps your breathing and digestion. It can also lessen your pain over time and help you heal faster.
- **Cold and Heat:** Both cold and heat may help reduce some types of pain. Some pain may improve with a cold compress or ice, while other types of pain may get better using moist heat. Talk to your nurse about which treatment is best for your type of pain.
- **Deep Breathing:** Taking slow deep breaths can help you relax and reduce your pain.
- **Distraction:** This method helps you focus your attention on something other than your pain. Playing cards, games, or talking with family may help you not think about the pain. Watching TV or reading may also help you relax.
- **Music:** Listening to music, playing an instrument, or just singing or humming can help you relax and breathe more deeply and slowly. It can also increase your energy and help change your mood.
- **Relaxation Techniques:** Stress and anxiety can make pain worse and may slow your healing. Since it is hard to avoid stress, you may find it helpful to try the following ways to help you relax:
 - › Use extra pillows and blankets to get into a comfortable position.
 - › Make sure the room is the right temperature for you.
 - › Have a massage on your back, hands, or feet.
 - › Place a cool cloth on your hands or face.
 - › Close your eyes and imagine yourself in a place that you find relaxing. Think about sounds or sights that you enjoy.

Resources for Relaxation

- › Ohio State Integrative Health offers complementary resource guides and recordings for guided imagery, mindfulness practices, and relaxation response. Visit wexnermedical.osu.edu/integrative-health/resources.

What to Expect After Surgery

Your plan of care

To help you and your family know what to expect after surgery, we have created this plan. Changes may be made based on your needs and recovery.

You and your family need to learn about your care, so you know what to do after you leave the hospital. Please ask questions and share any concerns with your care team.

Every day

- Ask your nurse and doctor about your progress.
- **Ask for pain medicine before your pain gets out of control.** Your doctor will order several medicines to help control your pain, such as acetaminophen (Tylenol), gabapentin (Neurontin), and ibuprofen (Motrin).
- **Be active.** Staff will help you to sit up in a chair the evening of your surgery, and they will help you to walk starting the day after surgery. The goal is to walk 4 times each day and increase the distance walked every other day.
- **Use your breathing exerciser** (incentive spirometer) 10 times every hour while you are awake.
- **Use a pillow to support your belly incision when you cough and deep breathe** to help control pain. An abdominal wrap may be used to help reduce pain while you sit or when walking.
- **Compression wraps need to be worn on your legs to help prevent blood clots.** You may also be given medicine to help prevent blood clots. This medicine may be given as a shot for 28 days. Your nurses will help you learn how to do this shot, so you can take the medicine after you leave the hospital.

- You will be asked if you are passing gas, having bowel movements, and about your appetite.
- You can chew gum to help get your bowels moving more quickly.

Day of surgery

- The breathing tube and stomach tube will often be removed before you wake up from surgery. Your throat may feel sore or irritated for a few days.
- You will start with a clear liquid diet. Your diet will be advanced to full liquids and then soft foods as you are able to tolerate.
- Staff will help you to sit up in a chair.

Day 1 after surgery

- You will be helped out of bed to sit in the chair for 2 to 4 hours.
- Staff will help you walk 2 to 4 times.
- When you are able to drink clear liquids without stomach upset, IV fluids will be stopped. Your IV site will be capped. It will be removed when you are ready to leave the hospital.

Day 2 until discharge

- You will sit in the chair for 4 to 6 hours.
- Staff will help you walk 4 to 6 times.
- If you have an epidural for pain control, it will be removed by the pain team.
- If you are taking prescription pain medicine, you may need a stool softener. Tell your nurse if you feel you need to have a bowel movement.

Day of discharge

Be sure you understand:

- How to care for your incision.
- Medicines you are to take, how much and when, and any side effects to watch for.
- Follow up appointments.
- When and who to call if you have problems.

You will be given more specific instructions in your After Visit Summary. You may also have prescriptions that you need to have filled at the pharmacy.

If you have questions or concerns about your surgery or care after leaving the hospital, please call:

- **Colorectal Surgery at 614-293-3230**
- **Surgical Oncology at 614-293-7171**

After hours, on weekends, and on holidays, call the hospital operator at 614-293-8000. Tell the operator your surgeon's name, and they will get someone to help you.



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