



PATIENT & CAREGIVER EDUCATION

About Your Endoscopic Retrograde Cholangiopancreatography (ERCP)

This information will help you get ready for your endoscopic retrograde cholangiopancreatography (ERCP) at MSK. This procedure is pronounced:

- Endoscopic (en-doh-SKAH-pik)
- Retrograde (REH-troh-grayd)
- Cholangiopancreatography (koh-LAN-jee-oh-PAN-kree-uh-TAH-gruh-fee)

What is an ERCP?

An ERCP is a procedure that helps your doctor see your bile ducts and pancreatic ducts without surgery.

A gastroenterologist (GAS-troh-EN-teh-RAH-loh-jist) will do your ERCP. A gastroenterologist is a doctor with special training in treating problems with digestion. They're also called a GI specialist.

You may have an ERCP if your bile or pancreatic ducts are narrowed or blocked. This can be caused by:

- A tumor.
- A gallstone (lump that forms when bile hardens).
- Scar tissue.
- Swelling.

When these ducts are blocked, it can make bile build up in your liver. This can cause:

- Infection.
- Abdominal (belly) pain.
- Nausea (feeling like you're going to throw up).
- Vomiting (throwing up).
- Fever.
- Itching.
- Jaundice (when your skin and the whites of your eyes look yellow).

During your ERCP, your GI doctor will use an endoscope. This is a thin, flexible tube with a camera on the end. They will use the endoscope to find the opening where your bile duct and pancreatic duct meet your small intestine.

Your GI doctor will slowly move the endoscope down your throat, through your stomach, and into your small intestine. They will use the camera to guide tools into your ducts. Then, they will inject (put) contrast dye into your bile duct or pancreatic duct.

Your GI doctor may also:

- Do a biopsy to get a tissue sample from a growth in your bile or pancreatic ducts. They will send the sample to a lab to check it for cancer.
- Remove gallstones (hardened bile that forms in your gallbladder).
- Place a stent (thin, hollow tube) in your bile duct to help keep it open.

- **Ducts** are tubes in your body that carry fluids.
- **Bile ducts** carry bile, a fluid the liver makes to help break down food.
- **Pancreatic ducts** carry pancreatic juice, a fluid the pancreas makes to help break down food.

Things you will get the day of your ERCP

Anesthesia

Anesthesia is medicine to make you sleep during your procedure. You'll get anesthesia through a catheter (thin, flexible tube) in your vein before your ERCP. If you have a central venous catheter (CVC), a nurse will use it to give you anesthesia if they can. Not everyone can get anesthesia through their CVC.

Examples of CVCs include:

- An implanted port (sometimes called a Mediport or Port-A-Cath).
- A tunneled chest catheter (sometimes called a Hickman™ catheter).
- A peripherally inserted central catheter (PICC) line.

If you don't have a CVC, you'll get anesthesia through an intravenous (IV) line. A nurse will place the IV line in one of your veins, usually in your arm or hand.

Contrast

You will need to get contrast dye the day of your ERCP. Contrast is a special dye that helps your doctor see your organs. Your GI doctor will inject the contrast directly into your ducts during your ERCP.

Tell your healthcare provider if you have had a reaction to contrast before. You may get medication to lower your risk of having another allergic reaction. If you do, you'll get a resource called *Preventing An Allergic Reaction to Contrast Dye* (www.mskcc.org/pe/allergic_reaction_contrast).

Contrast will leave your body through your urine (pee) in 1 to 2 days.

What to do before your ERCP

Ask about your medicines

You may need to stop taking some of your usual medicines before your procedure. Talk with your healthcare provider about which medicines are safe for you to stop taking.

We've included some common examples below, but there are others. **Make sure your care team knows all the prescription and over-the-counter medicines you take.** A prescription medicine is one you can only get with a prescription from a healthcare provider. An over-the-counter medicine is one you can buy without a prescription.



It is very important to take your medicines the right way in the days leading up to your procedure. If you don't, we may need to cancel your procedure.

Anticoagulants (blood thinners)

You may be taking a blood thinner, which is medication that affects how your blood clots. If so, ask the doctor doing your procedure what to do. Their contact information is listed at the end of this resource.

Whether they recommend you stop taking the medication depends on the reason you're taking it.

Examples of common blood thinners are listed below. There are others, so be sure your care team knows all the medicine you take. **Do not stop taking your blood thinner without talking with a member of your care team.**

- Apixaban (Eliquis®)
- Aspirin
- Celecoxib (Celebrex®)
- Cilostazol (Pletal®)
- Meloxicam (Mobic®)
- Nonsteroidal anti-inflammatory drugs (NSAIDs), such as ibuprofen (Advil®, Motrin®) and naproxen (Aleve®)

- Clopidogrel (Plavix®)
- Dabigatran (Pradaxa®)
- Dalteparin (Fragmin®)
- Dipyridamole (Persantine®)
- Edoxaban (Savaysa®)
- Enoxaparin (Lovenox®)
- Fondaparinux (Arixtra®)
- Heparin (shot under your skin)
- Pentoxifylline (Trental®)
- Prasugrel (Effient®)
- Rivaroxaban (Xarelto®)
- Sulfasalazine (Azulfidine®, Sulfazine®)
- Ticagrelor (Brilinta®)
- Tinzaparin (Innohep®)
- Warfarin (Jantoven®, Coumadin®)

Read *How To Check if a Medicine or Supplement Has Aspirin, Other NSAIDs, Vitamin E, or Fish Oil* (www.mskcc.org/pe/check-med-supplement).

It has important information about medications you must avoid before your procedure, and which medications you can take instead.

Medications for diabetes

You may be taking insulin or other medications for diabetes. If so, ask the doctor who prescribes the medication what you should do the morning of your procedure. You may need to change the dose before your procedure.

Get clearance letters from your doctor, if needed

A clearance letter is a letter from your doctor that says it's safe for you to have a procedure. You may need to get one or more clearance letters before your ERCP. Your MSK healthcare provider will tell you if you do. They must have your clearance letter at least 1 day before your ERCP.

Clearance letter for an automatic implantable cardioverter-defibrillator (AICD) or permanent pacemaker (PPM)

Tell your MSK healthcare provider if you have an AICD or PPM. You will need a clearance letter from your cardiologist (heart doctor).

Clearance letter for other symptoms

You'll need a clearance letter from a doctor if you've had any of these during the last 6 weeks:

- Chest pain.
- Trouble breathing that's new or has gotten worse.
- Fainting.

Arrange for someone to take you home

You must have a responsible care partner take you home after your procedure. A responsible care partner is someone who can help you get home safely. They should be able to contact your care team if they have any concerns. Make sure to plan this before the day of your procedure.

If you don't have a responsible care partner to take you home, call one of the agencies below. They'll send someone to go home with you. There's a charge for this service, and you'll need to provide transportation. It's OK to use a taxi or car service, but you still need a responsible care partner with you.

Agencies in New York

VNS Health: 888-735-8913

Caring People: 877-227-4649

Agencies in New Jersey

Caring People: 877-227-4649

What to do the day before your ERCP

Note the time of your procedure

An endoscopy nurse will call you between 8 a.m. and 6 p.m. the day before your procedure. If your procedure is scheduled for a Monday, they'll call you on the Friday before. If you don't get a call by 5 p.m., please call 212-639-7882.

The nurse will tell you what time to arrive at the hospital and where to go for your procedure. They will review the instructions in this guide with you.

They will ask you questions about your medical history. They will also review your medications and tell you which medications to take the morning of your procedure. Write down the medications to take the morning of your procedure below.

If you need to cancel your procedure for any reason, please call the doctor who scheduled it for you.

What to do the day of your ERCP

Instructions for eating



Stop eating at midnight (12 a.m.) the night before your surgery. This includes hard candy and gum.

If your healthcare provider told you to stop eating earlier than midnight, follow their instructions. Some people need to fast (not eat) for longer before their surgery.

Instructions for drinking

Between midnight (12 a.m.) and 2 hours before your arrival time, only drink the liquids on the list below. Do not eat or drink anything else. Stop drinking 2 hours before your arrival time.

- Water.
- Clear apple juice, clear grape juice, or clear cranberry juice.
- Gatorade or Powerade.
- Black coffee or plain tea. It's OK to add sugar. Do not add anything else.
 - Do not add any amount of any type of milk or creamer. This includes plant-based milks and creamers.

- Do not add honey.
- Do not add flavored syrup.

If you have diabetes, pay attention to the amount of sugar in these drinks. It will be easier to control your blood sugar levels if you include sugar-free, low-sugar, or no added sugar versions of these drinks.

It's helpful to stay hydrated before surgery, so drink if you are thirsty. Do not drink more than you need. You will get intravenous (IV) fluids during your surgery.



Stop drinking 2 hours before your arrival time. This includes water.

Things to remember

- Follow your healthcare provider's instructions for taking your medications the morning of your procedure. It's OK to take them with a few small sips of water.
- Don't put on any lotion, cream, powder, deodorant, makeup, cologne, or perfume.
- Don't wear any metal objects. Remove all jewelry, including any body piercings.
- Leave all valuables, such as credit cards and jewelry, at home.
- If you wear contact lenses, wear your glasses instead, if you can. If you don't have glasses, bring a case for your contacts.
- If you wear dentures, you'll be asked to remove these before your procedure.

What to bring

- Your rescue inhaler (such as albuterol for asthma), if you have one.
- Only the money you may need for the day.
- A case for your personal items if you have one. This includes glasses or contacts, hearing aid(s), dentures, prosthetic device(s), wig, or religious articles.
- Your Health Care Proxy form, if you completed one.
- If you have an implanted pacemaker or automatic implantable cardioverter-defibrillator (AICD), bring your wallet card with you.

Where to go

Your procedure will take place at one of these locations:

- **David H. Koch Center for Cancer Care at MSK**
530 E. 74th St.
New York, NY 10021
Take the elevator to the 8th floor.
- **Endoscopy Suite at Memorial Hospital (the main hospital at MSK)**
1275 York Ave. (between East 67th and East 68th streets)
New York, NY 10065
Take the B elevator to the 2nd floor. Turn right and enter the Surgery and Procedural Center through the glass doors.

Visit www.msk.org/parking for parking information and directions to all MSK locations.

What to expect when you arrive at the hospital

You will be asked to say and spell your name and date of birth many times. This is for your safety. People with the same or a similar name may be having a procedure on the same day.

When it's time for your procedure, you will get a hospital gown to wear. A nurse will place an intravenous (IV) line in one of your veins, usually in your arm or hand.

Inside the procedure room

You will get a mouth guard to wear over your teeth to protect them. If you wear dentures, you will take them out right before your procedure.

You will lie on your back or left side for the procedure. Once you're comfortable, you will get anesthesia through your IV.

Once you're asleep, your doctor will put the endoscope into your mouth and do your ERCP. They may also do a biopsy, remove gallstones, or place a stent, if needed.

In the Post-Anesthesia Care Unit (PACU)

When you wake up after your procedure, you'll be in the PACU. You will get oxygen through a thin tube that rests below your nose called a nasal cannula. A nurse will monitor your body temperature, pulse, blood pressure, and oxygen levels.

You will stay in the PACU until you're fully awake. Once you're awake, your nurse will bring you something to drink. Your doctor will talk with you about your procedure before you leave the hospital.

Your nurse will teach you how to care for yourself at home before you leave the hospital.

What to do after your ERCP

It is safe to eat as you normally would as soon as you leave your ERCP. Your doctor will tell you if you should limit your diet after your procedure. If they do, follow their instructions.

Do not drink alcohol, such as beer or wine, for 24 hours (1 day) after your procedure.

You can go back to doing your normal activities 24 hours after your procedure. This includes driving and going to work.

Your throat may feel sore after your ERCP. This will go away in 1 to 2 days. Your doctor may prescribe antibiotics (medicine to treat infections caused by bacteria). Follow the directions for how to take them safely.

When to call your healthcare provider

Call your doctor if you have:

- A fever of 101° F (38.3° C) or higher.
- Severe (very bad) stomach pain or hardness (your stomach feels hard when you touch it).
- Swelling in your abdomen.
- Severe nausea or vomiting.
- Blood in your vomit.
- Bloody or black bowel movements (poop).
- Feeling weak, like you're going to faint, or both.

If you have questions or concerns, contact your healthcare provider. A member of your care team will answer Monday through Friday from 9 a.m. to 5 p.m. Outside those hours, you can leave a message or talk with another MSK provider. There is always a doctor or nurse on call. If you're not sure how to reach your healthcare provider, call 212-639-2000.

For more resources, visit www.mskcc.org/pe to search our virtual library.

About Your Endoscopic Retrograde Cholangiopancreatography (ERCP) - Last updated on July 1, 2024

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