

ERCP (ENDOSCOPIC RETROGRADE CHOLANGIOPANCREATOGRAPHY)

△ GENERAL INFORMATION

ERCP stands for *endoscopic* (passing a tube into a cavity) *retrograde* (doing it against the main stream) *cholangio* (the bile ducts) *pancreato* (the pancreas duct) *graphy* (a picture). ERCP is a way to look at your bile ducts, pancreatic ducts, and pancreas. First, look at the illustration and you'll understand things better (Fig. 1).

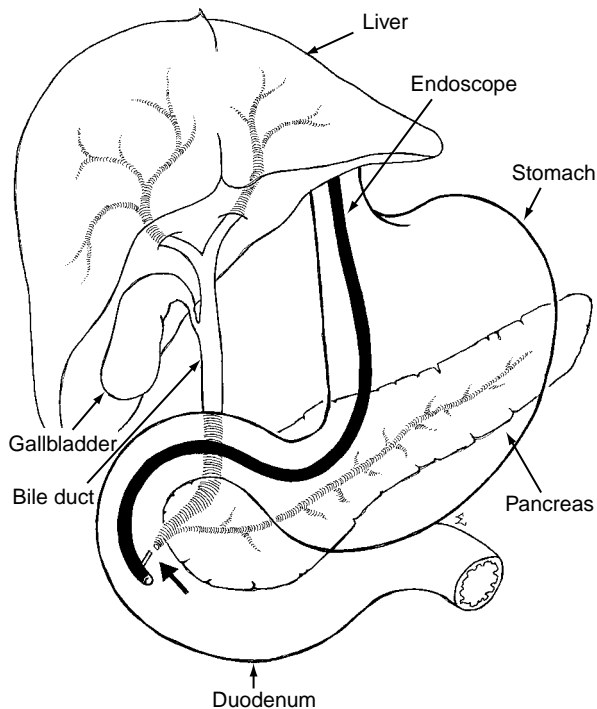


Figure 1. The endoscope is placed in the mouth and advanced down the esophagus into the stomach and then to the duodenum. The tip of the endoscope is positioned just opposite the opening of the bile duct, and a short side arm is extended from it, facing the opening. A very thin plastic tube coming from the side arm (**bold arrow**) can then be placed into the bile duct. Dye is injected through this tube into the bile ducts, and x-rays are taken as it flows throughout the duct.

The bile ducts start inside the liver, and when they reach the outside they combine as a main duct (the *common bile duct*) that is about as big around as a pencil. This duct goes down about another inch and gives off a small side duct that connects with the gallbladder. The common duct continues along about 2 more inches and empties into the first part of the small intestine called the *duodenum*. Just where the common bile duct enters the duodenum is a circular muscle (*sphincter of Oddi*) that acts as a valve.

Nearby is the *pancreas*. One thing the pancreas does is make juices to help you digest the fats and proteins you eat. These juices empty from the pancreas through a tube or duct that also drains into the duodenum. The duct that drains the pancreas and the bile duct join and enter the duodenum at the same spot.

CONDITIONS THAT MAY NEED ERCP

- There is some type of blockage of the bile duct.
- There is a stone in the bile duct that needs to be removed.
- There is a certain type of jaundice (yellow skin and eyes).
- The sphincter of Oddi at the end of the bile duct is too tight.
- The common duct is blocked by some type of growth.
- There is some type of blockage of the pancreas duct.
- There might be leakage of fluid from the bile duct or pancreas duct.

After careful consideration of all the factors relating to your problem, it is recommended that you have an ERCP.

PREPARATION FOR ERCP

- You will have an examination of your blood.
- Do not eat or drink anything for 8 hours before the procedure.
- Shower as usual on the morning of the procedure.
- You will be given medicine that will make you feel drowsy before you are brought to the procedure room.

□ OPERATION

- The ERCP is done with an *endoscope*. This is a long, smooth, flexible, instrument about as big around as the tip of your little finger. It has lenses as well as a light at its tip. Also, very thin cables with tiny instruments attached to them can be passed through the endoscope to come out at its tip. These instruments can be used to work on the tissue in front of the tip of the endoscope.
- Your mouth and throat will be sprayed with an anesthetic to make them numb. Also, you will be given some medicine to make you relaxed and sleepy just before the procedure is started. The endoscope will be lubricated and then gently inserted into your throat and passed down the esophagus into the stomach. There, the endoscope will be passed into the duodenum just to the spot where the common bile duct and pancreas duct empty into it.
- A very thin tube will then be pushed out of the end of the endoscope and advanced up the common bile duct or pancreas duct. Dye will be injected through this thin tube and x-ray pictures taken of the ducts. Sometimes it may not be possible to get pictures of the ducts this way.
- A number of things can now be done, depending on what is found to be the problem:
 - Stones can be removed.
 - The sphincter of Oddi can be cut to loosen it.
 - Sometimes a tube can be left in place to make it possible for juices to get past a blocked area or to fix areas of leakage.

- Some problems that might be found cannot be corrected with the endoscope.

The entire procedure takes about 1 hour. However, because of the medicines given, many patients remember little of the procedure and think it took just a few minutes.

POSTOPERATIVE CARE

- You will wake up in a recovery room. When your blood pressure, pulse, and breathing are stable and you are completely alert, you should be able to go home that same day with a responsible adult. If it is necessary to cut some muscle fibers to loosen the sphincter of Oddi, you may need to stay overnight.
- Wait until the numbness in your throat is gone completely (about 1–2 hours) before you eat anything. Otherwise, fluid or food might go down your windpipe and lungs.

- You will have some pain in the back of your throat with swallowing for several days.
- As with any operation, complications are always possible. Although they are uncommon with this type of operation, they can include damage to your esophagus, stomach, intestine, or bile duct. There may be a flare-up of your liver, pancreas, or bile duct problem. There can be bleeding or infection.

⊕ HOME CARE

- Resume your usual activities.
- You may eat as you did before the operation.

📞 CALL OUR OFFICE IF

- You develop abdominal pain, feel nauseated, or vomit.
- You develop any unusual signs or symptoms.
- You develop a temperature higher than 100°F.
- You have any questions.