

ERCP

Endoscopic retrograde cholangiopancreatography



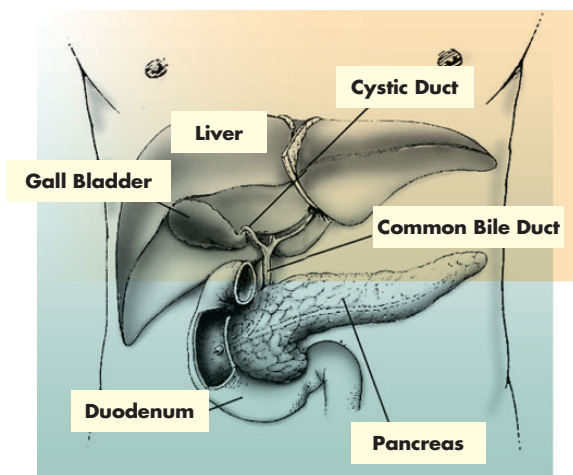
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ERCP

Endoscopic retrograde cholangiopancreatography



An ERCP procedure is known as endoscopy of the drainage ducts of the gallbladder, pancreas and liver. Although other diagnostic tests are valuable and still play an important role in some cases, endoscopy is an awesome tool. It even allows the physician to perform biopsies and certain procedures to treat problems. The physician can also take color photographs of the inside of the GI tract.

Endoscopy is simply the best diagnostic tool available to GI physicians.

What is an endoscope?

Endoscopes let physicians see directly into the inside of the GI tract. Before endoscopes, physicians had to use other types of tests and make educated guesses about the nature of the problem inside the GI tract, unless surgery was done.

An endoscope (as shown in the illustration), consists of a hollow tube that contains thousands of glass fibers called fiberoptics. The bundle of fiberoptics allows light to be transmitted to the tip of the endoscope, to literally “light up” the inside of the GI tract. A lens system also allows digital

images to be transmitted back to the other end of the endoscope, so the physician can see the inside of your GI tract.

During an endoscope procedure, the GI physician can view the entire journey of the endoscope on a computer monitor, which greatly enhances the physician’s ability to see changes in the GI tract.



Endoscopy is a safe, effective diagnostic tool that is more accurate than X-ray examination. In addition to being able to inspect the inside of the GI tract, endoscopy helps the physician find sources of bleeding, identify lesions (such as tumors or ulcers) and also allows the physician to actually treat some problems during the procedure.

A small open channel within the endoscope tube allows the physician to use accessory instruments that can cauterize bleeding areas, remove small growths or inject solutions. Other tiny instruments can collect biopsy specimens that can be sent to a laboratory for further tests.

Since endoscopy is usually an out-patient procedure, a tremendous amount of time and money is saved by avoiding hospitalization. Surgery is also avoided in some cases. Another major plus of the

endoscope is that it literally saves lives, through early diagnosis and treatment of various GI problems.

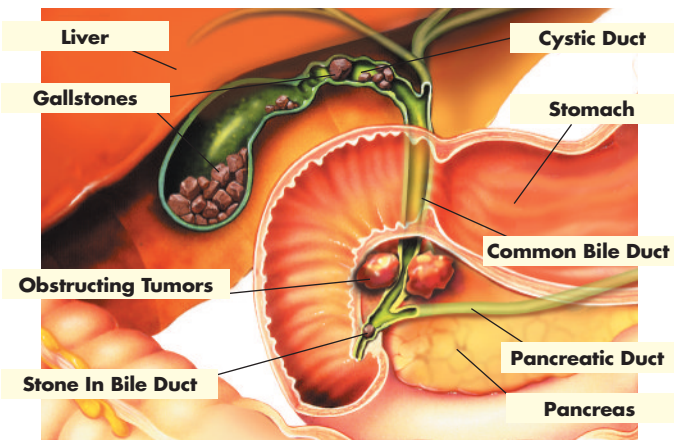
ERCP (Endoscopic retrograde cholangiopancreatography)

ERCP is a special endoscopic examination that focuses on viewing the ducts (drainage tubes) of the gallbladder, the pancreas and the liver.

Why is it needed?

ERCP is used to diagnose many diseases of the pancreas, gallbladder or liver. Your physician has ordered this test because your symptoms, history, laboratory tests or x-rays suggest that you might have a problem in this area. ERCP can help your physician find out if any of the drainage tubes are blocked and can help determine whether or not surgery or additional treatment is needed for your problem.

Blockage of any of the small ducts can cause major problems. The *common bile duct* carries *bile* from the gallbladder and other enzymes from the pancreas to the *duodenum*, the first section of the small intestine. When these ducts are blocked, pain and infection can result. The most common causes of blockages are *gallstones*, but blockage can occur from narrowed sections of the tube that occur because of abnormal growths or other reasons.



Preparation

For a successful ERCP, careful preparation by the patient is very important. First of all, the GI tract must be very clean. When your procedure is scheduled in the morning, you should not eat or

To clearly see the lower GI tract, it must be very clean.

drink anything after midnight. If your procedure is scheduled for the afternoon, you may have a clear liquid breakfast early in the morning, and nothing else after 8:00 a.m. Clear liquids include: water, clear juices (like apple), black coffee, tea, broth, Jell-O, soda pop and popsicles. Avoid anything red and avoid dairy products.

Tell the physician:

- *If you are pregnant.*
- *If you are taking any of these medications: Coumadin, Aspirin, Lovenox, Plavix or Persantine (Dipyridamole) or insulin.*
- *If you are allergic to any medications or anesthetics.*
- *If you have any major health problems, such as heart or lung problems.*

Take your heart and blood pressure medicine the morning of the procedure with a small amount of water.

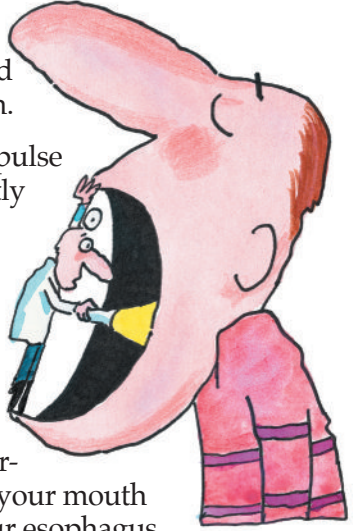
If you are taking other medicine that you think is very important, please ask your physician about taking them also prior to the procedure.



What happens during the procedure?

It is normal to be anxious before a procedure. The following description will help you understand what to expect. It is our belief that an informed and cooperative patient is the most important part of a successful procedure!

- You will be given a gown to wear and placed in a comfortable position.
- Your blood pressure and pulse will be checked frequently during the procedure.
- A sedative will be given to you through your vein (I.V.), so you will probably sleep through the entire procedure.



The endoscope will be inserted gently and slowly into your mouth and passed slowly into your esophagus, stomach and duodenum. A small catheter will then be passed into the common bile duct. Dye can be injected to make the ducts show up better. X-rays can also be made then to help the physician locate any blockages that may be present.

If gallstones are found, they may be removed during ERCP.

If gallstones are found, they may be removed during ERCP. Also, sometimes *stents* may be placed in narrow places to keep them open. Stents are small plastic tubes that can be inserted inside of ducts during the procedure.

The procedure usually takes about 30-45 minutes to complete.

After the Procedure

Afterwards, you will rest until the effects of the sedative subside. If your test is done as an outpatient, you will need to have someone there to drive you home. In some cases, overnight observation after the procedure is needed.

You may have some discomfort of your throat after the procedure and the physician or nurse will tell you what diet to follow after the procedure.

Some patients notice soreness or a tender bump at the site of the I.V. That irritation is caused by the medications that are given. It will slowly disappear, but may take weeks and rarely, months. Notify your physician if you have increased pain, redness or fever associated with this.



ARE THERE ANY COMPLICATIONS OF ERCP?

This procedure was recommended because it is the best and safest option for your situation.

However, as with all procedures, there is a small chance of complications. The following complications may occur, but are relatively rare:

- Bleeding may occur at the site of any biopsies or small incisions that were done during the procedure. Usually it is a very small amount, but in rare cases, it might require a transfusion or surgery.
- A tear or perforation of the area examined might occur, but this is also very uncommon. The tear might seal itself, or might require hospitalization and emergency surgery to repair the tear.
- *Pancreatitis* (inflammation of the pancreas) or other infections might occur, but this occurs in less than 5% (1 in 20) of patients. If pancreatitis does occur, hospitalization may be required for several days, sometimes longer. Pancreatitis can be life threatening.
- Other general risks include unexpected drug reactions or severe complications related to sedation or related to another disease, such as pre-existing heart or lung disease. Death, disability or loss of limbs as a complication of ERCP is extremely rare.

Getting the results of your ERCP

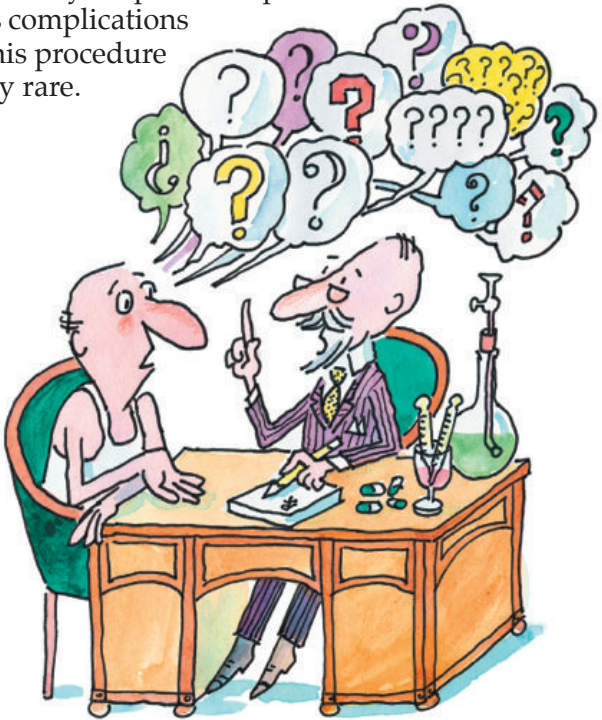
Often you will be told the results as soon as the sedation wears off. But, the results of some tests that may have to be done during the procedure will require a wait of several days. Your physician or nurse will tell you when the results can be expected.

Summary

ERCP is an extremely valuable tool for the diagnosis and treatment of many GI conditions. It is safe and usually causes minimal discomfort to the patient.

Your GI physician has recommended this procedure for you because it will contribute to the diagnosis or treatment of your particular problem.

Serious complications from this procedure are very rare.



Please ask us about any additional questions that you may have. Working as partners in your care, we can expect the best possible procedure and treatment outcome.

