

# Endoscopic Retrograde Cholangiopancreatography (ERCP)

ERCP stands for endoscopic retrograde cholangiopancreatography. As hard as this is to say, the actual exam is fairly simple. A dye is injected into the bile and pancreatic ducts using a flexible, fiber-optic endoscope. Then X-rays are taken to outline the bile ducts and pancreas.

The liver produces bile which flows through the ducts, passes or fills the gallbladder, and then enters the intestine (duodenum) just beyond the stomach. The pancreas, which is six to eight inches long, sits behind the stomach. This organ secretes digestive enzymes that flow into the intestine through the same opening as the bile. Both bile and enzymes are needed to digest food.

## Reasons for Exam

The bile ducts, gallbladder and pancreas are involved in numerous disorders. ERCP helps in diagnosing and often in treating these conditions. ERCP is used for:

- Gallstones, which are trapped in the main bile duct.
- Blockage of the bile duct.
- Jaundice, which turns the skin yellow and the urine dark.
- Undiagnosed upper abdominal pain.
- Cancer of the bile ducts or pancreas.
- Pancreatitis (inflammation of the pancreas).

## Preparation for the Exam

The only preparation needed before an ERCP is to not eat or drink for eight hours prior to the procedure. If you are taking aspirin or blood thinners, please notify your doctor as the use of these drugs may need to be modified or discontinued temporarily.

A companion must accompany you to the examination. You will be given medications to sedate you during the procedure and you will need someone to take you home. Driving an automobile is not allowed after the procedure. Even though you may not feel tired, your judgment and reflexes may not be normal.

## What to Expect During the Exam

An ERCP uses X-ray films and is performed in an X-ray room. For most patients, deep sedation, where the patient is completely asleep, is utilized. For others, the throat is anesthetized with a spray or solution and the patient is comfortably sedated. The endoscope is then gently inserted into the esophagus. You will be able to breathe easily throughout the exam, with gagging rarely occurring. A thin tube is inserted through the endoscope to the main bile duct entering the duodenum. Dye is then injected into this bile duct and/or the pancreatic duct and X-ray films are taken. You will be placed in a comfortable position on your left side and then turned onto the stomach to allow complete visualization of the ducts. If a gallstone is found, steps may be taken to remove it. If the duct has become narrowed, an incision (papillotomy) can be made using electrocautery (electrical heat) to relieve the blockage. Additionally, it is possible to widen narrowed ducts and to place small tubing (stents) in these areas to keep them open.

The exam takes from 20 to 90 minutes, after which you are taken to the recovery area. If a papillotomy is performed, you may be admitted to the hospital overnight for observation and discharged the following morning provided no complications are identified.

## Results of the Exam

After the exam, the physician explains the results. If the effects of the sedatives are prolonged, the physician may suggest an appointment for a later date when the patient can fully understand and remember the results.

## Benefits of ERCP

An ERCP is performed primarily to identify and/or correct a problem in the bile ducts or pancreas. This means the test enables a diagnosis to be made upon which specific treatment can be given. If a gallstone is found during the exam, it can

often be removed, eliminating the need for major surgery. If a blockage in the bile duct causes jaundice or pain, it can be relieved.

### **Alternative Testing**

Alternative tests to ERCP include certain types of X-rays (CAT scan, CT) and sonography (ultrasound) to visualize the pancreas and bile ducts. In addition, dye can be injected into the bile ducts by placing a needle through the skin and into the liver. Small tubing can then be threaded into the bile ducts. Study of the blood also can provide some indirect information about the ducts and pancreas.

### **Risks of the Procedure**

A temporary, mild sore throat sometimes occurs after the exam. Serious risks with ERCP, however, are uncommon. Inflammation of the pancreas also can develop in about seven percent of cases. There is approximately a one percent risk of excessive bleeding and perforation, or tear in the intestinal wall, especially when electrocautery is used to open a blocked duct. These complications may require hospitalization and, rarely, surgery. Complications from ERCP can, in extremely rare circumstances, lead to death.

For more information, please visit [arizonadigestivehealth.com](http://arizonadigestivehealth.com)