

## What is ERCP?

Endoscopic retrograde cholangiopancreatography (ERCP) is a specialized type of endoscopy used to evaluate the bile ducts and pancreatic ducts. The ducts that drain bile from the liver into the small intestine are known as the bile ducts. The pancreatic duct drains digestive enzymes from the pancreas into the small intestine. Both of these drainage systems can be evaluated with ERCP. ERCP can also be used to evaluate the region of the small intestine where both of these ducts drain. This area is known as the ampulla.

ERCP requires use of x-ray and therefore is performed in a hospital setting. After receiving sedation, the doctor will pass a thin, flexible tube known as an endoscope into your mouth. This tube is passed through the mouth into the first portion of the small intestine known as the duodenum. After the opening of the bile duct and pancreas duct is identified, a thin plastic tube called a catheter is passed through the endoscope and into the duct. Contrast material is injected in order to visualize the ducts using x-ray.

The most common reason a patient would need an ERCP is to evaluate a blockage of one of these ducts. The bile duct may be blocked from gallstones or may have a narrowed area known as a stricture. A tumor of the bile duct or pancreas may also block this drainage system. A blockage of the bile duct is dangerous because an infection may occur in the bile if it is not adequately drained. In some cases it may be necessary to enlarge the opening where the ducts join the intestine in order to improve the flow of bile. This is known as a sphincterotomy. An ERCP may also be used to place a small tube known as a stent to open the bile duct. This may be a plastic temporary stent or a permanent metal stent.

## Preparation for ERCP

The patient undergoing an ERCP needs to fast overnight before the procedure. It is important to tell your doctor if you have an allergy to iodine. It is also necessary to stop the use of aspirin, nonsteroidal medications and blood thinners prior to the procedure. Antibiotics may be given prior to the ERCP.

## What to expect in the endoscopy unit

Before the ERCP you will be asked questions about your medical history and medications you are taking. A nurse will

start an intravenous line to administer medications. You will be given sedation for the procedure. Sedation may be conscious sedation or general anesthesia depending on the reason for the ERCP and your medical issues. Your anesthesiologist will discuss the type of sedation with you. You will be asked to remove your eyeglasses or contact lenses and dentures.

## Complications of ERCP

Although ERCP is a well-tolerated procedure complications may occur. Pancreatitis (inflammation of the pancreas) is the most frequent complication of an ERCP. This occurs in 5-20% of people undergoing ERCP. It causes abdominal pain and nausea. When it occurs it is usually mild and resolves within a day or so.

Pancreatitis may be more severe and require surgery. Your doctor may need to extend the opening of the ampulla which is the area where the common bile duct and pancreatic ducts join the small bowel. Bleeding can occur from this part of the procedure. This can usually be controlled during the procedure. The ERCP endoscope or other instruments can cause a hole (perforation) in the intestine or bile duct. This may be serious and may require surgery. This is a rare complication.

Other complications include bleeding and reaction to medication. Deaths from the procedure are rare but have been reported. Failure to enter the bile duct may occur in some patients.

### **Recovery after an ERCP**

If you are having an ERCP as an outpatient you will be monitored while the sedative medications wear off. You will be advised not to return to work or drive that day. The most common discomfort after the examination is bloating. This occurs because of air introduced during the examination. You may also have a sore throat. You may be admitted into the hospital for observation following an ERCP. This may occur if the procedure is prolonged or if you develop pain after the procedure.

Your doctor will discuss the results of your ERCP as soon as you wake up from the sedation. If biopsies were taken they will need to be sent to the lab for analysis. This usually takes several days. If you are discharged from the hospital after an ERCP, someone must drive you home. You should call your doctor immediately if you develop severe abdominal pain, fever or chills, difficulty swallowing or a firm distended abdomen after ERCP.

As with all endoscopic procedures, the risks and benefits of ERCP will be discussed with you. You are encouraged to ask any questions you may have about the ERCP examination.



Pennsylvania Gastroenterology Consultants  
899 Poplar Church Road  
Camp Hill, PA 17011