

Fact Sheet – ERCP

ERCP (Endoscopic Retrograde Cholangiopancreatography) is a specialized technique used to study the pancreas, gallbladder and the ducts of the liver. An endoscope, which is a flexible thin tube, is passed through the mouth, esophagus and stomach into the duodenum. After the common opening to ducts from the liver and pancreas is visually identified, a catheter (a narrow plastic tube) is passed through the endoscope into the ducts. Contrast material is then injected gently into the ducts (pancreatic or biliary) and x-rays are taken.

ERCP is a valuable tool that is used to diagnose many diseases of the pancreas, bile ducts, liver and gallbladder. Structural abnormalities suspected due to symptoms, physical examination, laboratory tests, or x-rays can be shown in detail and biopsies of abnormal tissue can be obtained if necessary. ERCP can make the important distinction between whether jaundice (yellow discoloration of the eyes and skin) is caused by diseases that are treated medically, such as hepatitis, or structural diseases, such as gallstones, tumors or strictures (obstructing scar tissue), which are treated surgically or endoscopically.

In patients who are not jaundiced but have pain or laboratory abnormalities suggesting biliary or pancreatic disease, ERCP may also provide important diagnostic information. ERCP can be used to determine whether or not surgery is necessary and is helpful in providing the anatomic detail the surgeon needs to plan an operation when surgery is needed.

The information provided by an ERCP is far more detailed than that provided by standard x-rays or scans. Several conditions of the biliary or pancreatic ducts can be treated by therapeutic ERCP techniques that can open the end of the bile duct, extract stones and place stents (plastic or metal drainage tubes) across obstructed ducts to improve their drainage.

For the best-and safest-examination, the stomach must be completely empty. You should have nothing to eat or drink, including water, for at least six hours (and preferably overnight) before the procedure. Your doctor will be more specific about the time to begin fasting, depending on the time of day that your test is scheduled. It is best to inform your doctor of your current medications as well as any allergies several days prior to the examination. You should alert your doctor if you require antibiotics prior to undergoing dental procedures since you may need antibiotics prior to upper endoscopy as well. You will probably be sedated and will need to arrange to have someone accompany you home from the examination because sedatives may affect your judgment and reflexes for the rest of the day.

Your physician will discuss why ERCP is being performed, potential complications from ERCP and alternative diagnostic and therapeutic tests that are available.

On the day of the procedure, a local anesthetic may be applied to your throat and an intravenous sedative may be given to make you more comfortable during the test. Some patients also receive antibiotics before the procedure. The test begins with you lying on your left side on an x-ray table. The endoscope is passed through the mouth, esophagus and stomach into the duodenum. The instrument does not interfere with breathing. Air is introduced through the instrument and may cause temporary bloating during and after the procedure. The injection of contrast material into the ducts rarely causes discomfort.

ERCP is generally safe when performed by physicians who have had special training and experience in this technique. Localized irritation of the vein where medication was given may

cause a tender bump that can last for weeks. The application of heat packs or hot moist towels to the area may ease discomfort.

Major complications requiring hospitalization can occur but are uncommon during diagnostic ERCP. They include serious pancreatitis, infections, bowel perforation and bleeding, with each occurring in less than 1% of patients. Another potential risk of ERCP is an adverse reaction to the sedative used. Your physician will discuss the likelihood of your having complications before undergoing the test.

After the test, you will be monitored in the endoscopy area until most of the effects of the medication have worn off. Your throat may be a little sore for a while, and you may feel bloated immediately following the procedure because of the air introduced into your stomach during the test. You will be able to resume your diet after you leave the procedure area unless you are instructed otherwise.

It is important for you to recognize the signs of any possible complications. If you begin to run a fever after the test, have trouble swallowing, or have increased throat, chest, or abdominal pain, let your doctor know about it promptly.

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