

# ERCP

## Endoscopic Retrograde Cholangio Pancreatography

*Patient Education*  
*Towards Digestive Health*

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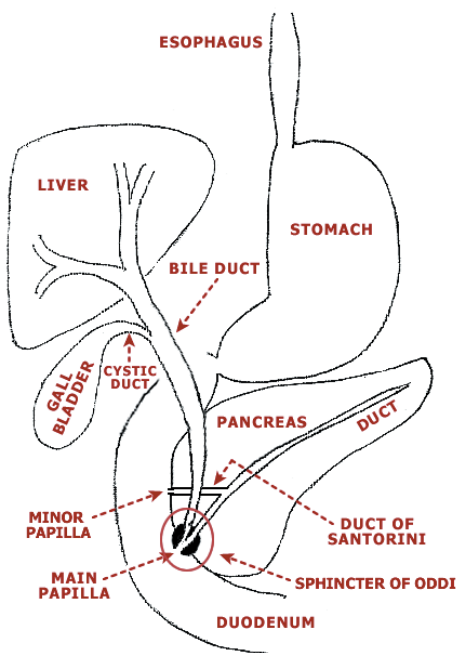
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### What is ERCP?

ERCP stands for Endoscopic Retrograde Cholangio Pancreatography. The doctor uses a flexible endoscope to get access to the bile duct and the pancreatic duct, which drain your liver, gallbladder and pancreas. Photographs and X-rays are taken to clarify the diagnosis, and treatments can be applied. This brochure explains how to prepare, what to expect, and what to do afterwards. It reviews the possible risks. We want you to be as comfortable as possible with the procedure. Most ERCP's are done on an out-patient basis. Some patients need to be admitted for observation overnight after ERCP, and some are already in hospital when the need arises.



### How Do I Prepare for ERCP?

- Make sure you understand what is being recommended and what is involved.
- Tell your doctor if you:
  - have any allergies, heart or lung problems
  - are or think you may be pregnant
  - have had endoscopy in the past and if you had problems with the medicines
  - have allergic reactions to iodine or X-ray contrast dye
  - take antibiotics before having dental work

- take medicine to thin your blood (e.g. Coumadin, Plavix or aspirin compounds). They may need to be stopped.
- are diabetic. You may need to adjust your insulin or pills.
- Do not eat or drink for 8 hours before your test. Your stomach must be empty (but you can take blood pressure and heart medicines and other important medicines as usual the morning of your test, with a few sips of water). Do not take any antacids.
- Bring with you:
  - all prescription and over-the-counter medicines you are taking.
  - medical records and x-rays that relate to your current problem.
- Make sure an adult can take you home. The medicines used during the procedure will not wear off for several hours. You will NOT be able to drive. If you travel by public transportation, you will still need an adult to ride home with you.

### What Happens During ERCP?

1. The nurse and doctor will talk to you about the test and answer any questions you have. You should know why you are having an ERCP and understand the potential benefits and risks, as well as the limitations and alternatives. You will be asked to sign a consent form.
2. You will put on a hospital gown. You will be asked to remove any eye glasses, contact lenses or dentures. An IV will be started and blood may be drawn for lab studies. You may receive antibiotics through the IV at this time.
3. You will be taken by stretcher to the procedure room. The nurse will help you get into the correct position, usually on your side, and make you comfortable. A clip on your finger and cuff on your arm will help the nurse monitor your pulse, blood pressure and oxygen level.
4. ERCP is done under sedation or anesthesia, depending on the complexity of the case, your past experiences with endoscopy procedures, and mindful of your wishes. Sedation makes you relaxed and sleepy. Anesthesia means deep sedation supervised by an anesthesiologist, or full anesthesia with a temporary breathing tube.

5. If sedation is used:

- You will be given medicine through the IV to make you relaxed and sleepy.
- A medicine will be sprayed onto the back of your throat to make it numb. The medicine may taste unpleasant but it will stop any coughing during the test.
- A plastic guard will be placed between your teeth to protect them.
- When you are sleepy, the doctor will place a thin, flexible endoscope through the tooth guard and into your mouth.
- The doctor will then ask you to swallow. When you swallow, the endoscope will gently move down your esophagus, the same way food goes down when you are eating. You may feel like gagging, but you should not feel any pain. The endoscope will not interfere with your breathing.

6. If anesthesia is used you will not be aware of the passage of the endoscope, or of the treatments.

7. The doctor will guide the endoscope through your stomach, and look for the opening of the bile and pancreatic ducts at the papilla of Vater, which is located in the upper small intestine (duodenum). The doctor will then place a small plastic tube (catheter) through the endoscope into the papilla. Contrast material (dye) will be injected into the ducts, and x-ray pictures are taken.

8. The doctor may take samples or pressure measurements from these areas, and can provide treatment for many of the problems. Details are given below.

9. ERCP usually lasts between 30 and 90 minutes.

### **If there is a blockage...**

If ERCP shows a stone or blockage in the ducts, the doctor may be able to treat the problem during the procedure. Common treatments are sphincterotomy and stenting.

- Sphincterotomy involves making a small cut in the papilla of Vater with cautery to enlarge the opening to the bile duct and/or pancreatic duct. This improves the drainage and/or removes stones in the ducts. Removed stones are usually dropped in the intestine, and pass through quickly.
- Stenting is placing a tube in a blocked or narrowed duct to improve drainage. The narrowing may need to be stretched

(dilated) before the stent is placed. A few stents are designed to pass out into the intestine after a few weeks when they have done their work. Other stents have to be removed or changed after 3-4 months. There are also permanent stents made out of metal mesh.

Other treatments are used occasionally. Your doctor will explain these if necessary.

### **After ERCP...**

1. You will be taken on a stretcher to the recovery area to relax. Your blood pressure and heart rate are watched while you rest. You will be fully awake in about 30 minutes.
2. If treatments are done during your test, you may need to be observed in the hospital overnight.

### **For patients going home...**

- After removing your IV, the nurse will give you written instructions to follow when you go home. If you have any questions, please ask. The doctor will talk to you about your test and treatments before your leave.
- Even if you feel awake, your judgment and reflexes will be slow. You will not be allowed to leave unless an adult takes you home. You will NOT be able to drive.
- If specimens (biopsies) were taken during endoscopy, the results of laboratory analysis will be available in about 3 working days.
- If you had a temporary small stent placed in your pancreas, you will need to get an Xray done in 3-4 weeks to check that it has passed out as planned.

### **For the rest of the day...**

- Rest quietly.
- Do not drive, operate machinery, sign legal documents or make important decisions.
- Do not drink alcohol or take sleeping or nerve pills.
- Drink plenty of fluids, and take your medications unless otherwise instructed.
- You may feel bloated and pass gas. This is normal and will

go away in a few hours.

- Your throat may be a little sore for a few days.
- Resume normal diet next day

### **Potential problems/risks...**

You should know that there are some drawbacks to ERCP. Your doctor will discuss these with you, and answer your questions. Make sure that you understand why ERCP is being recommended, as well as the potential risks, limitations and any alternatives.

- ERCP is not perfect. Occasionally, important lesions may not be seen, and treatment attempts may be unsuccessful.
- The medicines may make you sick. You may have nausea, vomiting, hives, dry mouth, or a reddened face and neck. A tender lump may form where the IV was placed. Call your doctor if redness, pain or swelling appears to be spreading.
- You will receive a low dose of radiation from the x-rays.
- Complications: ERCP can cause pancreatitis (swelling and inflammation of the pancreas). This occurs in about one patient in twenty, starting a few hours after ERCP, and results in the need to stay in hospital for IV fluids and pain medicines. Pancreatitis usually lasts for one to three days, but can be much more serious. Rarer complications (about 1 in 100 cases) include bleeding (after sphincterotomy), infection in the bile duct (cholangitis), and a tear in the intestine (perforation). These problems may require surgery, and prolonged stays in hospital. Other complications, such as problems with the chest and heart function, have occurred.
- Fatal complications are extremely rare.

### **Call the doctor if you....**

- have severe pain.
- vomit.
- pass or vomit blood.
- have chills and fever above 101 degrees.

If you have any problems, call your specialist. If it is after regular business hours, page the "GI Doctor on Call" through the MUSC paging operator at (843) 792-2123.