

## What is ERCP?

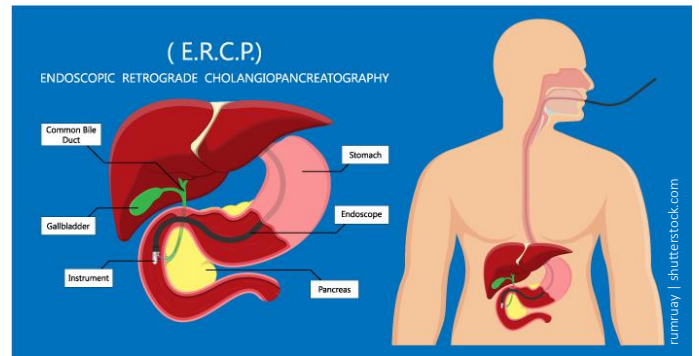
Endoscopic retrograde cholangiopancreatography, or ERCP, is a specialised procedure used to examine the ducts, or 'drainage tubes', of the gall bladder, pancreas and liver.

During the procedure, an endoscope (a thin, flexible tube) will be passed through your mouth into the oesophagus (food pipe) and stomach, then into the first part of the small intestine. This is where the drainage tubes (the bile duct and pancreatic duct) connect to the bowel. A small plastic instrument will then be passed through the endoscope into the bile duct and/or the pancreatic duct, and x-ray dye is injected to help obtain a picture of these ducts. Sometimes a small cut is made into the muscle around the opening to the bile duct (a 'sphincterotomy') to help the bile duct drain better or to perform other procedures. This may be to remove stones, take samples, place stents (metal or plastic tubes that keep the duct open) or stretch a narrowing of the bile duct.

## What preparation is required?

You should not eat or drink for at least 6 hours before an ERCP to make sure you have an empty stomach, which is necessary for a safe examination.

Generally, you should take all your regular medications with a sip of water, even on the morning of the procedure. If you are taking blood-thinning medicine, your doctor will need to discuss whether you should stop taking this in the days or weeks before your procedure. Some common blood-thinning medications are clopidogrel (Plavix®), ticagrelor (Brilinta®), warfarin, rivaroxaban (Xarelto®), apixaban (Eliquis®) and dabigatran (Pradaxa®). Let your doctor know about any allergies you have to medications (especially antibiotics), iodine or intravenous contrast material. If you have diabetes, your doctor may need to make special arrangements to ensure that your blood sugar is



managed well around the time of the procedure. It is essential to tell your doctor if you could be pregnant because x-rays are used as part of the procedure.

## What can I expect during ERCP?

You will usually be given a sedative to make you more comfortable. Most people remember little or none of the procedure. You may also be given an anti-inflammatory medication (indomethacin), usually as a suppository (into the rectum), as the procedure begins. This is to reduce the risk of irritation of the pancreas (pancreatitis), which can sometimes occur after ERCP. Some patients also receive antibiotics before the procedure. You will usually be lying on your stomach on an x-ray table. The endoscope does not interfere with your breathing, but you might feel a bloating sensation because of the air introduced through it. If you have a heart defibrillator, special precautions may be needed.

## What are the risks of ERCP?

ERCP is safe and well tolerated when performed by doctors who are specially trained and experienced in the technique. Although complications requiring hospitalisation can occur, they are uncommon. Complications can include pancreatitis (inflammation of the pancreas), infections, bowel perforation (a hole in the wall of the bowel) and bleeding. Some patients have a reaction to the sedative used.

Sometimes the procedure cannot be completed for technical reasons. Risks vary, depending on why the ERCP

is being done, what is done during the examination, what it finds and whether a patient has major medical problems. Pancreatitis is the most common serious complication and causes pain in the abdomen (belly). It is usually mild and settles within a couple of days in hospital with pain relief, bowel rest and intravenous fluids. However, pancreatitis can occasionally be more severe and very rarely can even result in death. As the risks vary for each patient, you should have a detailed conversation with your doctor about the risks to you.

## What can I expect after ERCP?

If you have ERCP as a day-only procedure, you will be observed in the endoscopy unit until most of the effects of the medications have worn off. You might experience bloating or pass gas because of the air introduced during the examination. Your doctor may recommend dietary restrictions for 1 to 2 days after the procedure. Someone must accompany you home afterwards because of the sedatives you have been given. Ideally, a responsible adult should stay with you overnight. Even if you feel alert after the procedure, the sedatives can affect your judgement and reflexes for the rest of the day.

**You must not drive until the next day.**

Contact your doctor or the hospital promptly if you are having any problems after the procedure. The main complication after going home is pancreatitis, which can sometimes occur up to 48 hours after the procedure. Occasionally an infection can occur, which may cause pain, fevers or chills. If a sphincterotomy was performed, there is a small chance of bleeding. This can occur up to 3 weeks after the procedure. Symptoms of bleeding include dizziness, fainting or passing bloody or black bowel movements. If you have any of these symptoms, you should let your doctor know immediately or go to the emergency department.

## Who can I contact if I have any questions?

If you have any questions or need advice, please talk to your doctor before having the procedure.

### Acknowledgements

This resource was reviewed and updated by the following health professionals in 2022:

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