Understanding Endoscopic Retrograde Cholangio-Pancreatography (ERCP)

Capital & Coast District Health Board
ŪPOKO KI TE URU HAUORA

Patient Information

Gastroenterology Service

Your doctor has recommended an ERCP to further evaluate or treat your condition. This information brochure has been prepared to help you understand the procedure.

ERCP can be a very useful procedure but complications can occur even when the ERCP is otherwise successful. Medical staff will discuss the benefits and risks with you. Please ask questions at any point.

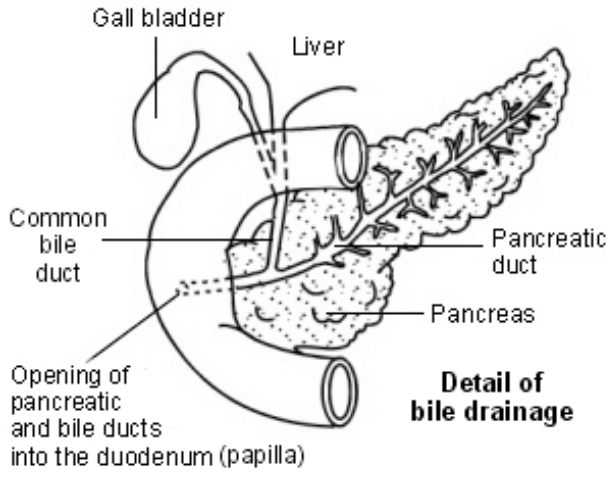
ERCP anatomy

ERCP is a procedure targeting either the bile ducts or sometimes the pancreas. The tubes that drain the liver are called bile ducts. Bile is a body fluid that is produced in the liver and stored in the gallbladder. When you eat, bile is excreted through the cystic bile duct into the common bile duct. The pancreas produces digestive enzymes that flow through the pancreatic duct. The bile and pancreatic ducts join and pass through a valve called the papilla into the duodenum, allowing both bile and pancreatic enzymes to help digest food. Bile helps you digest fat while pancreatic enzymes help digest fat, protein and carbohydrate.

The opening to the bile and pancreatic ducts can be reached with an endoscope (flexible thin tube, with a video camera at the tip that allows us to see inside), passed through your mouth and stomach. This is like a gastroscopy but takes longer and sedation is needed.

If you have had some surgery, for example a gastric bypass, then ERCP may not be possible. Please ask your doctor.

If you have any swallowing problems or a history of a narrowing or stricture in the oesophagus please let us know.



Why am I having an ERCP?

Before an ERCP is recommended you will usually have had scans that show a problem the ERCP is intended to solve. Your team will explain the goal of an ERCP for you.

Common reasons for having an ERCP include blockage of the bile duct due to stones, cancer or scar tissue. You may be jaundiced (yellow) or have an infection (cholangitis).

Less commonly ERCP is performed to treat a bile leak after gallbladder or liver surgery, or to treat a pancreatic duct leak or obstruction.
During the ERCP we may:

- Remove the obstructing gallstones by cutting the valve (papilla) at the lower end of the bile duct (sphincterotomy) and using a balloon or basket to pull them out. Sometimes more than one procedure is needed for complete removal.
- Place a stent to re-establish the flow of bile blocked by stones, cancer, or scar tissue. Stents can be plastic or metal tubes.
- Obtain tissue biopsies.

Sometimes we perform an EUS (endoscopic ultrasound) along with the ERCP, which can help us work out what is going on or allow us to perform different kinds of therapies.

What preparation is required?

Do not eat for at least 6 hours before the procedure so your stomach is empty. You can drink water up to two hours before, and take your usual medications with a sip of water. If you are diabetic we will give you further instructions.

You should not stop aspirin. If you are on any other blood thinners such as warfarin please let us know so we can plan to stop these. Please also tell us if you have an iodine allergy.

You will need up-to-date blood tests, and may need antibiotics and/or medicines to help your blood clot.

As x-ray films will be taken, it is important that women of childbearing age tell us if there is any chance they are pregnant.

You will be given sedation, so you must have someone to accompany you home after the procedure, and stay with you that night. You cannot drive yourself home. Even if you feel alert your judgement and reflexes will be impaired by the sedation, making it unsafe for you to drive.

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If a complication occurs, you may need to be hospitalised until it resolves.

What happens during the procedure?

A local anaesthetic is sprayed on your throat and medication is given to make you relaxed and sleepy. Additional oxygen will be directed up your nose and your pulse and blood oxygen level will be monitored. You can breath normally during the procedure. Sometimes you may have an anaesthetist to look after you.

You will be positioned on the X-ray table. An endoscope (flexible thin tube, with a video camera at the tip that allows us to see inside) is passed through your mouth, oesophagus and stomach into the duodenum (first part of the small intestine). Gas (carbon dioxide) is introduced through the endoscope to give a better view.

After entering the duodenum, a catheter (a narrow plastic tube) is passed down a channel in the endoscope and placed into the papilla. Contrast is injected into the ducts (pancreatic or biliary) and x-ray films are taken. Treatments can then be performed through the channel of the endoscope.

ERCP is not a painful procedure. The throat spray makes it easy for the endoscope to go down without gagging, but you may feel it moving into the correct position. During the procedure you may feel a bloating sensation because of the gas. The medication can wear off a bit during the procedure, however there will be a nurse watching you closely and we will give you more medication if needed.

We will do our best to look after you and keep you comfortable and safe.

What can go wrong?

ERCP is performed by doctors who are specially trained and experienced in the technique.

Risks vary and are dependent on your age and pre-existing medical problems as well as your particular diagnosis.

Your doctors will discuss your individual likelihood of complications as part of the consent process before you undergo the test.

Complications can include:

- Pancreatitis – the most common complication, in about 1:20 cases. Usually experienced as pain that keeps you in hospital for a day or two but severe pancreatitis can be very serious, and rarely can even be fatal.
- Bleeding from the cut at the bottom of the bile duct – about 1:200 patients. Rarely a second procedure or blood transfusion may be required.
- Infection – treated with antibiotics.
- Perforation (very rare).
- Failure to cannulate the bile duct or successfully perform the intended therapy. A second procedure may be required.
- Failure to complete the procedure due to a sedation or medical issue. A second procedure may be required.

A suppository (a medication placed in your rectum) of an anti-inflammatory medication called Voltaren may be given during the procedure, to reduce the chance of pancreatitis. To be effective it must be given rectally.

What happens afterwards?

After the procedure, you will be observed for between 4-6 hours to watch for any complications. You may experience mild abdominal pain or bloating because of the gas introduced during the examination. This should settle down quickly and you can usually eat two hours after the procedure unless you develop significant abdominal pain which can be a sign of pancreatitis.

Many patients have ERCP performed as a day case and are able to go home with an accompanying person after the effects of the sedation have worn off. Some patients are admitted to the hospital overnight.

You will not be able to drive a vehicle of any sort, drink alcohol, operate machinery or make important decisions for 18 hours following the procedure.

After you go home, if you develop severe abdominal pain, fever/chills, continuous nausea, vomiting or pass any blood, you should go to your nearest Emergency Department.

If you are planning to go overseas following your ERCP please let us know, as there is a risk of bleeding for up to ten days and it may be better for your ERCP to be rescheduled.

Resuming your normal medication at home

You should be able to resume most of your usual medicines immediately.

You may be asked to withhold any medicines that reduce blood clotting while the internal cut heals. You may also need to take antibiotics for a specified number of days. We will give you instructions before you leave hospital and please ask questions if you are unsure.

Contact us

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