

Endoscopic Retrograde Cholangiopancreatography (ERCP)

ERCP is a procedure performed under sedation using an endoscope (a thin, flexible telescope) and X-Ray screening to investigate or treat problems of the bile duct, liver, gall bladder or pancreas. Because of the X-Rays it is important that there is no chance that you could be pregnant. You should also tell the doctor or the nursing staff if you are sensitive or allergic to any drugs, especially iodine, antibiotics, sedative or anaesthetic drugs, or sticking plasters. If you take aspirin, fish oil, Clophidogrel, Warfarin or other blood thinning treatments, this should be discussed well before the ERCP as usually these medications have to be stopped first.

ERCP Indications

ERCP is used for investigation or treatment of

- Gallstones trapped in the main bile duct or blockage of the bile duct causing yellow jaundice
- Undiagnosed upper abdominal pain
- Cancer of the bile duct, pancreas, or lymph nodes near the liver
- Leakage of bile from the liver or bile duct
- Pancreatitis (inflammation of the pancreas)

Preparation

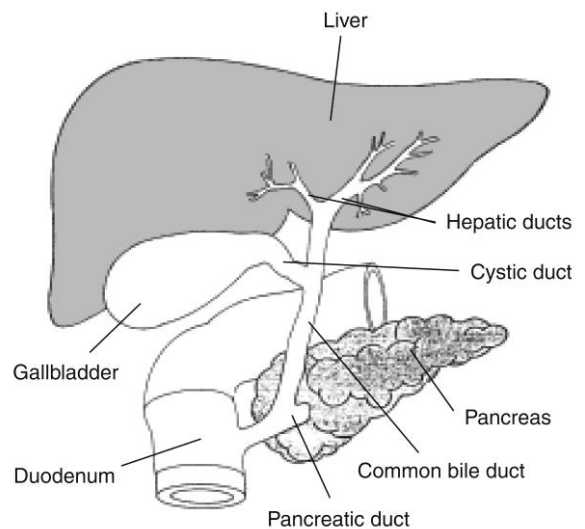
To allow a clear view of your stomach you should be completely empty and should not have anything to eat or drink for **6 hours** prior to the procedure. If you do have to take important medications during this fasting period, drink only small sips of water. Before the ERCP, a series of blood tests may be necessary to assess your blood clotting and liver and kidney functions. These tests will usually be arranged ahead of time. You will also have to read this information form and will be asked to discuss any questions about the test done before signing a consent form, which will give your specialist permission to perform the ERCP test and discusses any possible risks.

ERCP Procedure

You will change into a hospital gown and will have to remove any dentures, jewellery, glasses or hearing aids. You will then be asked to lie on a special X-Ray bed and the nursing staff will assist you into the correct position (lying on your front facing to your right with your left arm placed behind your back besides your thigh). A mouth guard and nasal catheter delivering oxygen will be placed. After you are sedated, the endoscope is passed through your mouth into the stomach and duodenum. The drainage hole for the bile duct and pancreas (major papilla) is then located in the duodenum. Using a fine plastic catheter, X-ray dye is injected into the bile duct and pancreatic duct as required. The X-ray machine is then used to assess what is going on. Certain accessories, like special wires and cutting devices may be used to complete the ERCP. Sometimes prosthesis is placed in the bile duct or pancreas duct (called a stent) and another ERCP may need to be scheduled for a future date to remove this (usually in 4 weeks time). The whole procedure can take as little as 15minutes or as long as an hour or more depending on how complicated the problem is

Post Procedure

Your condition will be monitored for up to 6 hours or even over night in the hospital depending on the estimated risk of any complications. Your throat may feel sore and dry for a while and you may burp up any remaining air from your stomach. You may be drowsy or dizzy for a time after the test due to the sedation. After 6 hours you will be allowed to drink water and if you are pain free you can have clear fluids over night. A blood test may be taken about 2 hours after



the ERCP as well. If you are able to go home on the same day as the ERCP, please arrange for someone to pick you up and take you home. Rest and ensure you drink plenty of fluids and contact your specialist, endoscopy unit, or mater private emergency if you have any problems after you are discharged. You may not drive a motor vehicle or operate machinery for 24 hours after the sedation. Follow up will be arranged either through your specialist or referring doctor depending on the circumstances

Risks

ERCP can result in complications. In about 4-6% of people, the plastic catheter cannot be passed into the required duct for various reasons and may require a repeat ERCP, alternative procedure, or even surgery. The main complication is irritation of the pancreas (pancreatitis) that occurs in about 1 in 20 patients. Pancreatitis results in pain in the upper abdomen and can be severe, or even fatal in about 0.2% of patients who develop pancreatitis. Usually you will have to remain in hospital until the pancreatitis improves.

You may have a sore throat that can last for a few days, and there is a small chance of aspirating saliva during the procedure that can cause a chest infection in about 1% of patients. Sometimes the duct opening has to be enlarged by making a cut (sphincterotomy) to allow gallstones to be removed or insert other devices into the duct. This carries a risk of bleeding and occasionally this can be severe and may require transfusion or other surgery. Rarely, ERCP can result in injury to the lower bile duct or duodenum creating a hole (perforation) that may require antibiotic therapy in hospital or even major surgical repair.

If you have a complicated problem, it is not unusual to need a repeat ERCP procedure, usually a few weeks apart. This is often the case if multiple large gallstones are stuck in the bile duct and cannot be cleared in one go, or if cancer is present.

In most cases, the only alternative to ERCP is a major operation or a procedure through your chest wall called percutaneous transhepatic drainage (PTD) that has at least similar risks to ERCP. Rarely, injury to nerves, lungs, heart, brain, long term disability, or death can occur. Given these risks, alternative investigations (such as MRI or EUS scans) may be required if an ERCP is not suitable or not likely to result in a positive or better outcome for a patient.

Some patients are at higher risks of pancreatitis depending on the nature of the ERCP procedure and patient factors. Serious complications from ERCP can result in death (ERCP is quoted as having a ~0.8% risk of death overall). If you have any questions about this information, discuss these with your specialist before you attend your procedure.

Contact Details

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For urgent enquiries during the weekend please call the Mater Switch on 07 3163 8111 and ask to speak with your specialist.