Information for the patient on Endoscopic Retrograde Cholangiopancreatography (ERCP)

In order to diagnose and treat you, an examination called Endoscopic Retrograde Cholangiopancreatography (ERCP) has been requested. Endoscopy is a special technique for looking inside the body. ERCP uses endoscopy to investigate and treat disorders of the gallbladder, bile ducts, and pancreas.

Bile is a yellowish-green fluid which is released into the small intestine to help digest food. It is made in the liver, collected by a series of ducts, stored in the gallbladder and drained into the intestine (duodenum) via the common bile duct. The pancreatic duct also drains into the common bile duct. Your common bile duct therefore connects your liver, gallbladder, and pancreas to your small intestine. The opening of the common bile duct into the intestine is controlled by the sphincter of Oddi, a circular muscle which opens and closes to allow bile to pass into your small intestine.

Preparation

- Please keep your appointment if at all possible. Because of the preparation required for the investigation, your appointment may not be used by someone else if you cancel just before your scheduled time or if you fail to attend.
- Your upper GI tract needs to be empty for ERCP to be performed. You will be asked to have nothing to eat or drink for at least 8 hours before the gastroscopy.

What the procedure involves

- This procedure is done in the x-ray department. You will be asked to lie on your stomach on an x-ray table where an injection will be given to keep you relaxed and comfortable. Following this a flexible tube (the gastroscope) will be passed into your mouth, advancing through to the stomach to where the pancreatic and bile ducts open. This tube will not block your breathing.
- X-ray contrast fluid will be put into your bile and pancreatic ducts via the gastroscope. Pictures of the image will be taken using x-rays. Please let your doctor or nurse know if you have had an allergy or reaction to x-ray contrast fluid. If the bile duct looks blocked, a small cut called a sphincterotomy may be made at the lower end. This will help the bile to flow, or assist with the removal any stones that may be seen.
- If there is a blockage in the bile duct, a small hollow plastic tube called a stent may be inserted to help drain the bile internally. In some instances it is preferable to temporarily allow external drainage of bile through a fine tube which will come out of the nose into a bag (called naso-biliary drainage).
- After the E.R.C.P. a nurse will check your temperature, blood pressure and heart rate hourly. If these recordings are satisfactory and you are comfortable, you will be able to take water after 2 hours and food after 4 hours.
- You are not able to drive or operate machinery for 8 hours after the procedure, so please have transport organised to get you home.
- Elderly patients undergoing gastroscopy are advised to have a support person who transports them home and stays with them for several hours.

Risks and Potential Complications

General risks associated with endoscopy

- Gastroscopy is a safe procedure and complications are very rare. Major complications occur once in every 7000 procedures. If you wish to discuss risks further with the doctor, please ask.
- You may experience a sore throat for a day or two.
- Please note that any crown or bridging work may be at risk during the gastroscopy if your reaction is such that you clench or grind your teeth. Otherwise, your teeth are not at risk during this procedure.
• Perforation (making a hole in the bowel) or major bleeding from the bowel is extremely rare but if it occurs, may require an operation. When polyps are removed during the examination there is a slightly higher risk of perforation or bleeding. In the unlikely event of haemorrhage occurring, a blood transfusion may be necessary.

• There is a very small risk of adverse reaction to one of the drugs used in the procedure. For this reason, please let your doctor know all the medicines you are taking and any allergies you have to drugs or other substances.

**Added risks specific to ERCP**

• This test has some specific complications associated with injecting and instrumentation of the pancreatic duct. The most frequent complication by far is that of pancreatitis. In about 3 to 5% of cases, the pancreas gland becomes inflamed after ERCP and releases potent digestive juices directly into the surrounding tissue causing pancreatitis. Symptoms of pancreatitis include abdominal and back pain, nausea, and vomiting. In most cases, this complication gets better within 48 hours, but can be more severe in less than 1% of cases. This could result in a prolonged hospitalisation, diabetes, fat malabsorption, and in rare cases, death.

• If the bile duct sphincter is cut to relieve an obstruction or remove a stone, bleeding and perforation of the bowel may occur in 1 to 3% of cases. On rare occasions these can require surgery.

• Infection of the bile duct

• Incomplete removal of stones.

• As x-rays are used, it is important that women are not pregnant when they have an ERCP.

• Adverse reaction to X-ray contrast dye.