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GASTROENTEROLOGY
Quality gastrointestinal consultation and endoscopy

ERCP Information sheet

What is an ERCP? Endoscopic retrograde cholangiopancreatography, or ERCP, is a specialized technique used to study the ducts or "drainage tubes" of the gallbladder, pancreas and liver and treat abnormalities in these areas.

During the procedure an endoscope (a thin, flexible tube) will be passed through your mouth, past the oesophagus and stomach into the first part of the small intestine. A small plastic tube will then be put into the bile duct and/or pancreatic duct and x-ray dye injected in order to obtain a picture of these ducts. Often the muscle surrounding the opening to the bile duct is cut ("sphincterotomy") in order to perform other procedures eg: remove stones, take a biopsy or place stents (drainage tubes)

What preparation is required? You should fast for at least six hours before the procedure 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. However, if you are taking blood-thinning medications (such as aspirin, persantin, warfarin, iscover or plavix), your doctor will need to discuss whether these should still be taken in the days before the procedure. Let him know about any allergies you have to medications, or intravenous contrast material (dye). Please advise us if you are diabetic or have a pacemaker as we may need to make special arrangements.

What can I expect during ERCP? You will receive intravenous sedation. Most people remember little or none of the procedure. Some patients also receive antibiotics before the procedure. You will lie on your left side or stomach on an x-ray table. The instrument does not interfere with breathing. The procedure takes approximately 30 to 45 minutes.

What are the risks of ERCP? ERCP is a well-tolerated and safe procedure when performed by doctors who are specially trained and experienced in the technique working in a specialized unit. Westmead Hospital offers such a service, performing more ERCP than any other centre in Australia and acting as major referral hospital for difficult cases throughout the state and interstate. These procedures are also performed at Westmead Private Hospital.

Although complications requiring hospitalization can occur, they are uncommon. Complications can include pancreatitis (inflammation of the pancreas), infections, bowel perforation and bleeding. Rarely patients can have an adverse reaction to the sedative used. Rarely the procedure cannot be completed for technical reasons. Risks vary, depending on why the test is performed, what is found during the procedure, what therapeutic intervention is undertaken, and whether a patient has major medical problems. The most frequent complication is pancreatitis. This occurs after 3-5% of ERCPs. It is very rare (< 0.2%) if you have had a previous ERCP with sphincterotomy. Post ERCP pancreatitis is usually mild and settles with a couple of days in hospital with pain relief, bowel rest and intravenous fluids. Rarely pancreatitis can be more severe, even resulting in intensive care admission, prolonged hospital stay or surgery. Deaths have been reported in the literature. Severe pancreatitis is extremely uncommon, at Westmead we have not had such a case in the last 10 years.

It is important to understand that to solve the clinical problem and cure the illness, in general ERCP carries the least risk to the patient, when compared with observation alone (ie. do nothing), surgery or the radiological approach (going through the liver). After ERCP more than 95% of patients return to normal activities the next day.

What can I expect after ERCP? If you have ERCP as an outpatient, you will be observed for complications 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. You will be fasting for 4 hours after the procedure and on clear fluids only overnight (unless you have frequent ERCPS). The next day you should only eat light (non-fatty) food, after that the diet can be upgraded. Someone must accompany you home from the procedure because of the sedatives used during the examination. Even if you feel alert after the procedure, the sedatives can affect your judgment and reflexes for the rest of the day. ***You must not drive until the next day.***

Contact your doctor promptly if you have any questions prior to the procedure or if you are experiencing any complications after the procedure. The main complication after going home is pancreatitis, which can occasionally occur up to 48 hours after the procedure. If you develop severe abdominal pain, you may have pancreatitis. Contact your doctor immediately, or proceed to the Emergency Department.

If you have any questions please do not hesitate to discuss these with Professor Michael Bourke, Dr Stephen Williams or Dr Eric Lee 9633-5953

Recent important publications include:

- AJ Kaffes, MJ Bourke, SL Ding, A Alrubaie, V Kwan, SJ Williams. A prospective randomised placebo controlled trial of transdermal glyceryl trinitrate in ERCP: Effects on technical success and post-ERCP pancreatitis (Editorial). Gastrointest Endosc 2006;64:351-357.
- V Kwan, SM Loh, PR Walsh, SJ Williams, MJ Bourke. Minor papilla sphincterotomy for recurrent acute pancreatitis in pancreas divisum with long term follow up. ANZ J Surg 2008 Apr;78(4):257-61.
- AA Bailey, MJ Bourke, SJ Williams, PR Walsh, MA Murray, EY Lee, V Kwan, PM Lynch. A prospective randomised trial of cannulation technique in ERCP: Effects on technical success and post ERCP pancreatitis. Endoscopy 2008 40:296-301. (Top 5 most cited papers for Endoscopy 2008).
- S Alexander, MJ Bourke, SJ Williams, A Bailey, A Gill, JG Kench. Diagnosis of auto-immune pancreatitis with intra-ductal biopsy and treatment of stricture with serial placement of multiple biliary stents. Gastrointest Endosc 2008 Aug;68(20):396-9.
- S Alexander, MJ Bourke, J Co, SJ Williams, RL Hope, A Bailey. Cholangiographic features of suppurative cholangitis. Gastrointest Endsoc 2009;69(2):342-3.
- MJ Bourke, G Costamagna, ML Freeman. Expert Review. Biliary cannulation in ERCP: core technique and recent innovations. Endoscopy 2009; 41:612-7.
- AA Bailey, MJ Bourke, AJ Kaffes, EYT Lee, SJ Williams. Needle knife sphincterotomy: Factors predicting its use and the relationship with post-ERCP pancreatitis. Gastrointest Endosc 2010;71(2):266-71.
- AD Hopper, MJ Bourke, SJ Williams, M Swan. Giant laterally spreading tumours of the papilla: Endoscopic features, resection technique and outcome. Gastrointest Endosc 2010 May;71(6):967-75.