Endoscopy
Patient Information

Colonoscopy and Gastroscopy
Endoscopy is a procedure that allows your doctor to examine the inside lining of the oesophagus, stomach, first parts of the duodenum or large intestine. It offers diagnostic as well as therapeutic options for the gastrointestinal (GI) tract. Gastroscopy is an endoscopy for the upper GI tract (i.e. oesophagus, stomach and first pars of the duodenum). Colonoscopy is an endoscopy for the lower GI tract (i.e. colon and last part of the small bowel).

Endoscopy are performed using flexible thin tubes that vary in thickness from 2 to 15mm and up to 1.6m in length. The flexible tubing allows it to move through the hight turns of the GI tract. It has a camera at the tip of the tube and the image is projected onto a screen. The endoscope is hollow ad allows another instrument to be passed through and procedure may be performed.

It is important for you to discuss your current medical condition as well as your medications with your surgeon prior to the procedure. Instructions will be given to you in regards to preparation before the procedure. For colonoscopies, preparation is usually required as your colon needs to be free of faeces. You can find the specific instructions here.

Gastroscopy
This is performed under sedation where medication will be given to you to make you sleepy and forgetful. You will lie on your side and the scope will be gently inserted into your mouth. The scope will be guided carefully and slowly down the oesophagus, into the stomach and then the first part of the duodenum. During the procedure, the surgeon examines the lining of the oesophagus, stomach and duodenum for abnormalities.

Colonoscopy
This is performed under sedation where medication will be given to you to make you sleepy and forgetful. You will lie on your side with your knees drawn up towards your chest (foetal position). A digital examination will be performed initially and then the lubricated scope will be inserted into the anus. The scope is then carefully and slowly guided around your colon. During the procedure, you may feel like you need to use your bowels or pass flatus as the scope is moved through your colon. You may also feel some cramping and a sense of fullness as your surgeon dispenses air into your colon to provide better view of the lining of the colon. However, the procedure does not usually cause discomfort and most people sleep through it.
Procedures during endoscopy

Biopsy
If your surgeon sees abnormal or suspicious tissue, a biopsy (small piece of tissue) may be taken by forceps passed through the endoscopes. The biopsy is painless. Biopsy of normal tissue may be taken for other diagnostic purposes. The tissue is sent to a pathologist for examination under a microscope. The results will take one to two weeks to come back to the surgeon. The surgeon will discuss this result with you at the follow up appointment.

Polypectomy
Polyps are usually non-cancerous growths on the lining of the GI tract. They vary in size from 1mm to 5cm. Certain polyps may develop into cancer if left untreated. If a polyp is found, it may be removed by a special wire loop (called a snare) that is inserted through the endoscope. The snare is placed around the polyp which is then severed from the colon with or without electric current passing through the wire snare. Electrocautery (electric heat) is applied to stop any bleeding. The polyps are usually retrieved and sent for examination under a microscope by the pathologist. Sometimes a polyp may not be removed endoscopically because it is too large or too difficult to reach. Surgery may be recommended in these cases.

Strictures
Strictures are narrowing of the passage of the GI tract. They are mainly due to growth of scar tissue from previous recurrence inflammation or to cancer. If the cause of the stricture is benign (i.e. not cancerous), it may be treated by stretching the tissue from the inside (dilatation) using an inflatable balloon, a “bougie” (tapered plastic tube) or other device. In some cases, a stent (an expandable tube made of metal or plastic) can be passed through the endoscope and inserted across the stricture to widen the passage.

Possible Complications
Endoscopies are generally safe procedures but do have risks. Despite the highest standard of endoscopic practice, complications can still occur. Complications are more likely if a therapeutic procedure (such as dilatation or polypectomy) is performed. It is not usual or possible to outline every possible complications of a surgical procedure. You are encouraged to research and ask as many questions to your surgeons. If you have any particular concerns, please discuss then with your surgeon.

Specific Complications of Gastroscopy
- aspiration pneumonia: very uncommon complication where patient may inhale some stomach content during the procedure and cause lung infection. This is usually treated with antibiotics and may require hospitalisation.
- perforation or tear of oesophagus, stomach or duodenum: this is very rare and will require hospitalisation and antibiotics. Further surgery may be required to fix the perforation.
- excessive bleeding: rare complication that is usually associated with therapeutic

Specific Complications of Colonoscopy
Of every 1000 patients, approximately one may have a perforation of the colon with the endoscope. This usually requires hospitalisation, antibiotics and often surgery. Uncommonly, the damage to the colon may be severe enough to require a colostomy and a colostomy bag. This is usually temporary but in rare cases, it may be permanent.
Excessive bleeding is rare and may require hospitalisation, antibiotics or other interventional procedures including surgery. Blood transfusions may be required. Small amount of bleeding can usually occur up to two weeks after the procedure, especially if a biopsy or polyp has been removed. Bleeding can occur in the few days after the procedure and up to two week after the procedure.

*Life-threatening complications of endoscopy*
Serious illness and death have been linked to endoscopic procedures and, in particular, perforation of an organ with endoscope. However, this is very rare.

**Recovery After Endoscopy**
Once your examination (and possibly treatment) is complete, you are escorted to an recovery area. You will need someone to take you home and you should not drive for 24 hours. Do not operate heavy machinery, drink alcohol or make important decisions until the next day. If your surgeon did not have the chance to speak to you before discharge, detailed post operative instructions and follow up arrangement will be given to you.
If you have a gastroscopy, it is common to have sore throat for a day or two. Patients often have a full feeling and pass gas for a while after the procedure. Soft stools and change of bowel movements are common for the first day or so. Stool should not be black or contain blood clots. If this occurs, please contact the rooms or seek urgent medical attention.
If you have a colonoscopy, patients often reports feeling bloated and often pass a lot of gas. Walking may help relieve the bloating. You may also pass a small amount of blood which can be normal. If you pass large amount of blood, please contact the rooms or seek urgent medical attention.