

## **PATIENT INFORMATION SHEET**

### **LAPAROSCOPIC ANTI-REFLUX FUNDOPLICATION**

The oesophagus is the swallowing tube that connects the mouth to the stomach which passes through the diaphragm from the chest into the abdomen. The oesophagus passes through the diaphragm at a point called the hiatus. Some people have a 'hiatal hernia' where the opening of the diaphragm is big enough to allow the stomach to pass up into the chest.

The stomach contains a large amount of acid and has its own protective mechanisms to protect itself from injury. The oesophagus however, is not equipped to prevent injury from prolonged exposure to acid from the stomach. When acid from the stomach finds its way into the oesophagus, it is usually cleared quickly by oesophageal contractions. If the acid is not cleared, then the symptoms of heartburn, chest pain, cough, difficulty swallowing, or regurgitation may occur. Eventually these episodes may lead to injury of the oesophagus.

These events are collectively known as Gastro-Oesophageal Reflux Disease (GERD) The treatment of GERD starts with lifestyle modification and medications. If a patient fails to respond to non-operative treatment or goes on to develop severe oesophageal injury, they are offered surgical therapy in the form of an anti-reflux procedure.

The procedure is performed under general anaesthesia. Five small incisions are made in the abdomen. One is used for the laparoscope (camera), the others are used to retract and manipulate structures within the abdomen. The stomach and the portion of oesophagus in the abdomen are freed from their attachments. The hiatus is tightened with 2 or 3 sutures to prevent the fundoplication from migrating into the chest.

The 'fundus' (hence the term fundoplication) of the stomach is on the left of the oesophagus. This portion of the stomach is wrapped around the back of the oesophagus until it is once again in front of this structure. The portion of the stomach that is now on the right side of the oesophagus is sutured to the portion on the left side to keep the wrap in place. By wrapping the fundus of the stomach about the oesophagus has the effect of creating a one-way valve allowing food to pass into the stomach but preventing stomach acid from flowing into the oesophagus and thus preventing GERD.

Dr Martin has performed over 2000 of these procedures over the last 20 years.

The operative procedure lasts about 45 minutes and all medications to treat reflux can be stopped from the first day after the operation. It is important immediately after the operation not to vomit and anti-nausea medications will be given so as not to tear out the sutures that have been placed in the oesophagus and the stomach.

Whilst we have shown that the procedure involves less pain and less complications compared to the traditional open anti-reflux operation some side effects are still noticed by our patients. There is difficulty swallowing solid foods, particularly fresh bread, chicken and red meat, which may last up to three months in some cases. Initially, there is swelling about the oesophagus from the surgery and this takes many weeks to subside. During this period patients mostly prefer soft textured or blended foods and wean themselves on to normal solids over the following 2 to 4 weeks.

Some patients experience an inability to swallow fluids or their own saliva after this operation and approximately 1 in 100 patients might require a re-operation early on to loosen the valve created. In most situations this can be performed with the laparoscope again. There is also the small risk of damage to surrounding structures such as the spleen, bowel, oesophagus or major blood vessels and this could require a major open operation to correct these problems should they arise. The risk of this occurring in our hands is less than 1%.

Following the operation, swelling around the oesophagus from the surgery results in difficulty belching and therefore fizzy or gaseous drinks should be avoided to reduce stomach bloating and flatulence. Patients are assessed several weeks after the operation with follow-up at about three months and then yearly questionnaires are forwarded to ensure the longevity of our procedure.

Before the widespread use of laparoscopic (keyhole) procedures, the Nissen Fundoplication was performed through an incision in the middle of the abdomen, extending from just below the ribs to the umbilicus (belly-button). Patients would stay in hospital for between 7 and 10 days, and recovery at home was between 6 and 12 weeks. Usual laparoscopy has reduced the in-hospital stay to an average of 1 night. Return to work usually occurs in 2 to 3 weeks.

If you have any questions or concerns about this procedure, please do not hesitate to contact me.

### Sliding Hernia

