

## **BARRETT'S OESOPHAGUS INFORMATION SHEET**

**What is it?** - Barrett's oesophagus is named after a British Cardiothoracic Surgeon and was first described in the mid 1950's. It is a permanent change in the lining (mucosa) of the lower oesophagus which extends upwards from the join between the oesophagus and stomach (gastro-oesophageal junction) for a variable distance of between 1 and 3 cms (short segment Barrett's oesophagus) but sometimes up to 10-15 cms (long segment Barrett's oesophagus). The cells of the oesophagus which form the lining are normally squamous cells like those of the skin. With change to Barrett's oesophagus, these cells become a specialised lining which the endoscopist can see as a change to a red colour from the normal pale pinky white of the normal oesophagus. The prevalence of Barrett's oesophagus in the general community is approximately 1.5%. Barrett's oesophagus develops as a result of reflux disease where there has been ulceration type damage to the oesophagus. The mucosa or lining thus heals with a Barrett's oesophagus. It can be viewed as an adaptive response to the acid injury to the oesophagus.

**What are the implications?** - The presence of Barrett's oesophagus increases the risk of cancer of the lower oesophagus or gastro-oesophageal junction by 30-40 times normal. However it is important to note the following:

- a. Cancer in this area is fairly infrequent (although rapidly increasing in the developed world possibly as a result of the increasing incidence of reflux disease related to obesity). The annual incidence of this type of cancer is currently not more than 10 cases per 100,000 as compared to bowel cancer where the incidence is between 500 and 700 per 100,000 (depending on which population is studied).
- b. Most patients with Barrett's oesophagus do not die from cancer of the gastro-oesophageal junction, but there is believed to be an increased risk of cardiovascular and other types of morbidity related to high blood pressure and so forth. In general terms it is important to minimise these risk factors by regular exercise, losing weight and not smoking.

**How is it treated?** - Patients with Barrett's oesophagus should regularly take a tablet for acid suppression to minimise oesophageal acid exposure and injury to the oesophagus from the acid. This is done by using a group of medications called proton pump inhibitors (PPI) such as Nexium, Somac, Pariet, Zoton or Losec. In general terms measures to control reflux disease should also be instituted including:

- avoid late evening meals
- minimise alcohol consumption
- stop smoking
- maintain weight within target body mass index and lose weight if overweight
- regular exercise

**Endoscopic surveillance** - Most problems with Barrett's oesophagus arise at diagnosis or soon after within the first twelve months. Thus we usually recommend a surveillance endoscopy to repeat biopsies of the Barrett's twelve months after the diagnosis is made and then subsequent to that surveillance endoscopies each 2-3 years. There may be an indication to do the endoscopy more frequently, perhaps on a yearly basis if there is dysplasia. Dysplasia is the change in the behaviour of the cells within the Barrett's oesophagus that suggests to us that it may be heading towards cancer. In general, this change happens fairly slowly and proceeds through low grade dysplasia to high grade dysplasia and then cancer. If a patient develops high grade dysplasia then often this can be treated endoscopically (without the need for major surgery) by removing the lining of the oesophagus with special techniques.

**Longterm** - The majority of patients do not develop cancer. A surveillance endoscopy each 2-3 years and regular medication is all that is required.