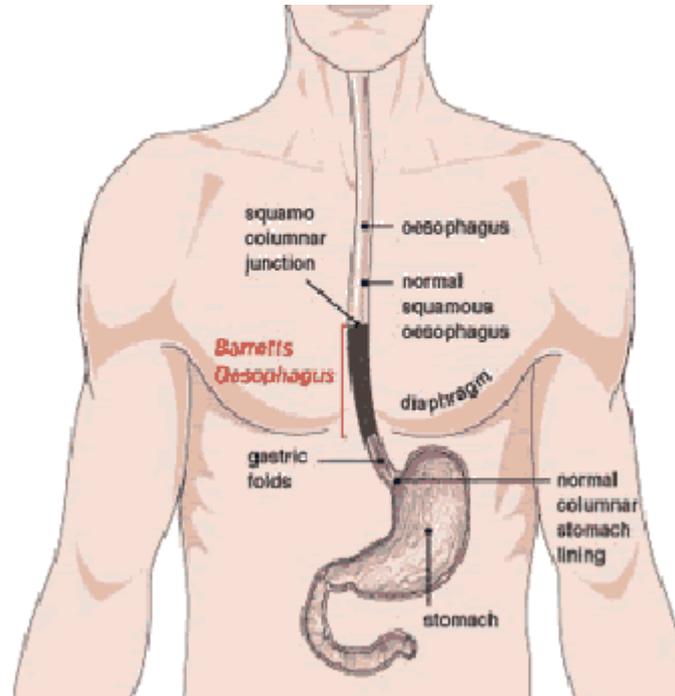


Community Endoscopy Service

Advice Sheet for Patients

Barrett's Oesophagus



What is Barrett's Oesophagus?

The oesophagus (gullet) is the tube that carries food from the mouth to the stomach and is lined by cells similar to those that form the skin (squamous cells). In Barrett's Oesophagus the lining at the lower end of the gullet is found to have changed from being skin-like to being like the lining of the stomach. It was first identified in the early 1950's by a surgeon called Norman Barrett. The lining may come to resemble that of the small intestine described as 'intestinal metaplasia'.

What causes Barrett's Oesophagus?

The cause of the condition is not known, but it is believed to be linked to the 'reflux' of digestive juices from the stomach up into the gullet. Acid is present in the stomach to help digest food. Unlike the stomach, the oesophagus does not have a protective lining, so when it is repeatedly exposed to the acid it may become inflamed and painful (Oesophagitis). Sometimes contents from the duodenum (the first part of the intestine after the stomach), particularly bile, may be present in the stomach and also reflux into the oesophagus. A mixture of stomach and duodenal contents in the oesophagus is even more damaging than acid alone. The oesophagus usually heals with time and the lining returns to normal but

sometimes, and particularly if bile is present, it heals in a different way and the lining changes to appear more like the lining of the stomach or small intestine. How or why the change occurs is not known, but this type of lining is unstable when present in the oesophagus and complications may develop.

The condition appears to be more common in men and people who are overweight. It has also been shown that smoking can accelerate changes to Barrett's Oesophagus.

What are the symptoms?

The condition is often symptomless. Most people diagnosed with Barrett's Oesophagus will have been examined due to symptoms associated with gastro-oesophageal reflux, which causes a burning pain in the gullet, usually following a meal or when bending or lying down. Other common symptoms include a salty taste at the back of the mouth (termed water brash), hoarseness, due to acid damaging the vocal cords, and chest pain.

Barrett's Oesophagus can lead to complications such as ulcers in the gullet, bleeding, difficulty in swallowing due to a narrowing of the gullet (stricture), and occasionally cancer. The vast majority of people who have Barrett's Oesophagus have no serious consequences. Only a minority will develop any of the above complications.

How is Barrett's Oesophagus diagnosed?

The diagnosis is made by means of an endoscopy. This involves a thin flexible telescope being passed through the nose (sometimes the mouth), into the gullet and on into the stomach. A small sample is usually taken (biopsy) for examination. This will confirm the diagnosis and also highlight any complications that may be developing.

Why is Barrett's Oesophagus important?

The majority of patients with Barrett's Oesophagus may suffer from heartburn but will have no serious complications. A few can develop problems such as ulcers in the lower gullet or a narrowing of the gullet called the stricture. In a very small proportion of patients (less than one percent per year or between 5-10 percent overall), Barrett's Oesophagus can gradually lead to cancer of the gullet or upper stomach. This may take many years to develop and is usually preceded by a further cell change within the Barrett's lining to abnormal appearing cells, (dysplasia). Repeating your endoscopy and biopsies at regular intervals monitors for these changes. If the precancerous changes (dysplasia) are detected early, it can be cured.

What is the treatment for Barrett's Oesophagus?

There are three forms of treatment currently available for Barrett's Oesophagus, although which treatment is best is, at present, unknown.

- Medical treatment may be used, aimed mainly at suppressing the production of acid in the stomach and therefore reducing the amount of acid available to reflux into the oesophagus.

- The abnormal lining may be destroyed by laser or by heat energy. This is done using an endoscope, with the aim of encouraging the normal lining to re-grow.
- The weakened valve at the lower end of the oesophagus, which allows reflux to occur, may be strengthened by a surgical operation.

An international study is currently in progress to identify which of these treatments has the best long term results in reducing complications and, particularly, the risk of developing cancer.

In general terms, patients can also take steps to help reduce reflux which may include:

- Losing weight, if necessary
- Eating small meals at regular intervals
- Avoid large, late meals and allowing time for food to be digested before going to bed
- Avoid tight clothes and bending down after meals
- Smokers will also be advised to stop smoking
- Avoiding spicy foods and citrus fruits as these can aggravate inflammation in the gullet.

Medical treatment

All patients with Barrett's should be treated with lifelong acid lowering tablets; these are called proton pump inhibitors. Common brands include Zoton (lansoprazole), Losec (omeprazole), Protium (pantoprazole) and Pariet (rebeprazole). These tablets control symptoms of heartburn and should stop acid from causing inflammation. The exact dose may vary and the brands may be changed or doses increased until symptoms are controlled. These tablets are very safe in the long term and have few side effects. The commonest side effect is diarrhoea, which can usually be avoided by changing to another brand. Sometimes an additional medication such as Zantac (ranitidine) may be added when symptoms occur at night.

Surgical treatment

Surgeons may recommend surgical treatment of reflux by strengthening the weakened valve at the lower end of the gullet. This is because many patients with Barrett's Oesophagus have very severe reflux and reflux bile as well as acid, which is less easily treated by tablets. Furthermore, it offers total reflux control and avoids the need for long term medication. However, surgery is not recommended for all cases as there are occasional side effects.

Endoscopic treatment

There are now some techniques available to deliver laser energy or photodynamic therapy to the abnormal Barrett's lining. However, these are, at present, experimental as their value has not been proved. Urgent research is needed to determine the best treatment of Barrett's Oesophagus so as to decrease the risk of development of cancer.

Does the condition need to be monitored?

Patients are often advised to undergo further examinations at regular intervals (between 2 – 5 yearly), in order to identify any further changes in the oesophagus that might cause complications. However, despite the fact that Barrett's surveillance

programmes are being set up in a number of hospitals in the UK, it is still not clear how beneficial this will be, since only a small number of people may go on to have further complications. It will be some years before the advantages and disadvantages of repeated endoscopies become clear and a general policy can be developed.

What happens now?

Once Barrett's Oesophagus has been diagnosed and regular acid lowering tablets have been started, a repeat endoscopy and tissue sampling is performed at regular intervals to monitor this condition. This is usually repeated every one to three years, but the exact timing of these checkups depends on each individual case.

New symptoms, such as difficulty in swallowing, vomiting blood or weight loss, require urgent medical attention.

Resources on the web:

<http://www.bupa.co.uk/individuals/health-information/directory/b/barretts-oesophagus>
<http://www.corecharity.org.uk/Barrett-s-Oesophagus.html>