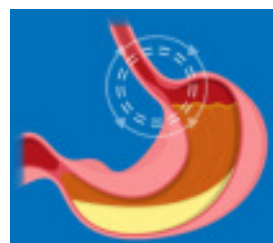


UNDERSTANDING BARRETT'S OESOPHAGUS:

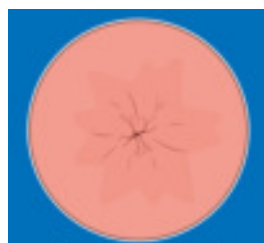
A GUIDE FOR PATIENTS AT AND AFTER DIAGNOSIS

What is Barrett's oesophagus?

- Barrett's oesophagus is a condition that affects the oesophagus (a so called the 'food pipe' or 'gullet') which is the organ that connects the mouth to the stomach.
- The cells in the oesophagus are usually a pale pink colour. In individuals with Barrett's oesophagus, the cells change to a darker pink colour and more closely resemble cells that are found in the stomach.
- This helps the cells to deal with increased exposure to stomach acid. Once Barrett's oesophagus has developed, it is irreversible, therefore Barrett's oesophagus is a long-term condition.



Lower oesophagus & stomach



Normal lower oesophagus



Barrett's oesophagus

Image source: www.gdico.umbus.com/functioncategory/understanding-barretts-oesophagus/

What causes Barrett's oesophagus?

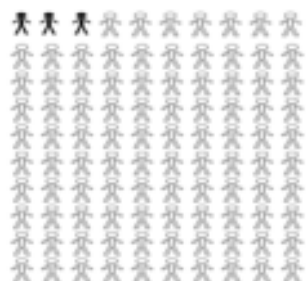
The exact cause of Barrett's oesophagus is unknown, however, there is a strong association between Barrett's oesophagus and Gastro-oesophageal reflux disease (GORD) where the acid from the stomach leaks into the oesophagus, causing reflux or 'heartburn' symptoms. Over time, the normal cells in the oesophagus can start to change into Barrett's oesophagus cells in order to adapt to the acid exposure. Barrett's oesophagus is more common in males and those aged over 60 years but it can be diagnosed at any age.

Are there any health risks associated with having Barrett's oesophagus?

Barrett's oesophagus is often referred to as a "pre-malignant" condition. This means that Barrett's oesophagus has the potential to transform into cancer of the oesophagus (specifically, a type called oesophageal adenocarcinoma). The transformation to cancer occurs via an intermediate condition called dysplasia. Having Barrett's oesophagus does not automatically mean that you will develop cancer. The risk of this progression to cancer from Barrett's oesophagus is very low and the vast majority of people with this condition will not develop oesophageal cancer.

A large research study in people diagnosed with Barrett's oesophagus in Northern Ireland has shown *approximately 3 out of 100 people with Barrett's oesophagus go on to develop oesophageal adenocarcinoma over a 10-year time period.*

It is important to take steps to reduce your risk of progression. Due to this risk of cancer, doctors will offer you a variety of treatment and surveillance options to try to prevent or detect any cancerous changes at an early stage.



Estimated proportion
(3 out of 100) people
diagnosed with
Barrett's oesophagus
who may progress to
oesophageal adeno-
carcinoma over a 10-
year period.

What symptoms might I feel now I that have Barrett's oesophagus?

Some individuals with Barrett's oesophagus may not have any symptoms. Others will experience a variety of physical symptoms, which could include:

- Acid reflux/heartburn symptoms
- An unpleasant taste in the mouth
- A chronic sore throat, especially in the morning
- Feeling sick
- Food coming back up after eating
- Feeling full whilst eating

How will my symptoms be managed?

The most common treatment that your doctor may recommend is for you to take some medication to control acid reflux by limiting the amount of acid produced by the stomach.

The 2 main types of medication prescribed are called:

- Histamine receptor blockers such as cimetidine and ranitidine (Zantac)
- Proton pump inhibitors (PPIs) such as omeprazole and lansoprazole

It's important to let your doctor know if your symptoms are not settling. Your doctor may increase or decrease the dose of these medications to help achieve optimal symptom or 'acid' control however these medications are usually required for a long-term basis.

A diagnosis of Barrett's oesophagus can affect people differently and for some the thought of developing cancer (although the risk is small) can lead to feeling scared, upset or frustrated. These feelings are all normal. You should seek advice from a healthcare professional (usually your GP) about receiving the appropriate support needed to manage your Barrett's oesophagus especially if your symptoms are affecting your quality of life.

Although little scientific evidence is available for other factors, many people with Barrett's oesophagus find the following practical tips helpful for managing symptoms of gastroesophageal reflux:

- Instead of larger meals, eat smaller, more frequent food portions and avoid eating 2-4 hours before bed
- Raise the head of the bed and sleep on your left side
- Limit intake of alcohol
- Limit intake of tea, coffee and fizzy drinks

Keep a record of food triggers that may aggravate your symptoms and avoid if possible. More research is needed to fully understand how nutrition and diet may affect the risk of progression from Barrett's oesophagus to oesophageal adenocarcinoma. Research has shown that individuals who smoke are at an increased risk of progression². You can speak to your GP or pharmacist if you need support to stop smoking. It is important that any changes to your diet or lifestyle are done alongside and not as a replacement to medication prescribed by your doctor.

How will I be monitored?

Although the risk of oesophageal cancer associated with Barrett's oesophagus is small, it is important that any changes in the oesophagus are picked up early so that they can be treated more easily. For this reason, you will be invited for an endoscopy every 2-5 years as part of your surveillance.

The frequency of surveillance within a five-year period relates to your risk of progression. Those at a higher risk of progression will be invited for surveillance more often.

Research has shown that individuals with Barrett's oesophagus who are monitored by surveillance and do develop oesophageal adenocarcinoma have a much better prognosis than individuals who are diagnosed with oesophageal adenocarcinoma that wasn't detected by a Barrett's oesophagus surveillance programme².

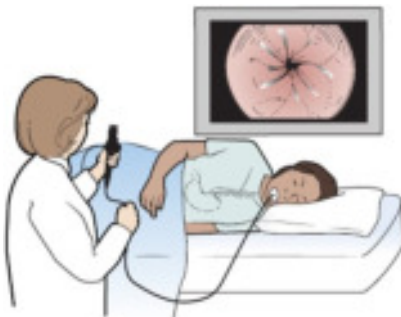


Image source

<https://www.mskcc.org/cancer-care/patient-education/barrett-esophagus>

Other sources of information and support:

This leaflet has been produced by researchers at Queen's University Belfast in collaboration with the Northern Ireland Barrett's Oesophagus Research Patient and Public Involvement Group. For more information on Barrett's oesophagus research in Northern Ireland, including an extended version of this patient information leaflet, please visit our website: www.qub.ac.uk/research-centres/centreforpublichealth/researchincancermedicine/normalbarrettsforstandardregistration

References:

1. Bhat et al. Risk of malignant progression in Barrett's Oesophagus Patients: Results From a Large Population Based Study. J Natl Cancer Inst. 2011;6:1031-1049-57
2. Coenen et al. Tobacco Smoking Increases the Risk of High-Grade Dysplasia and Cancer Among Patients With Barrett's Esophagus. Gastroenterology. 2012; 42:233-240.
3. Bhat et al. 2014 Oesophageal adenocarcinoma and prior diagnosis of Barrett's oesophagus: A population based study. Gut, 2015; 64:20-25.

Other sources of information and support:

For more information on Barrett's oesophagus, the following websites may be of interest:
Guts UK: <https://gutscharity.org.uk/ed-vice-and-information/conditions/barretts-oesophagus/>
Macmillan: <https://www.macmillan.org.uk/cancer-information-and-support/services/about-cancer/pre-cancerous-and-genetic-conditions/barretts-oesophagus>
Bupa: <https://www.bupa.co.uk/health-information/digestive-gut-are-you-barretts-oesophagus>
Cancer Research UK: <https://www.cancerresearchuk.org/about-cancer/other-conditions/barretts-oesophagus/about-barrett637>
Patient Info: <https://patient.info/digestive-are-you-acid-reflux-and-oesophagitis/barretts-oesophagus>