

## **Oesophageal Cancer FAQs**

### *What is the oesophagus?*

The oesophagus is the muscular tube from the throat to the stomach otherwise called the gullet or food pipe because it carries the food that we eat into the bowel.

### *What causes heartburn?*

Heartburn is a painful burning sensation typically felt in the chest but it may radiate up to the neck, throat or jaw. It has nothing to do with the heart but is caused by reflux of acid up the oesophagus.

Other words used to express this sensation are indigestion or dyspepsia and essentially mean the same thing but may also be used to describe pain in the top part of the abdomen.

### *What is reflux?*

Reflux just means flow of stuff going the wrong way and is usually applied to acidic stomach contents flowing up the oesophagus – these contents are usually a mixture of food, stomach acid and enzymes. Although this does occur occasionally in everybody if it happens a lot then this is abnormal and can lead to acid burns to the lining of the oesophagus and symptoms of heartburn. Sometimes it can cause a chronic cough or a hoarse voice.

### *What is cancer of the oesophagus?*

Cancer is a general term for lots of diseases characterized by uncontrolled and abnormal growth of cells. Because of this they can spread locally and through the bloodstream or lymph glands and grow elsewhere in the body (secondary growth or metastases). All of the tissues in the body are made of cells so the oesophagus is no different from anywhere else in that cancer can occur here. The commonest oesophageal cancers occur in the lining of the oesophagus from either the glandular cells that produce mucus (slippery stuff that allows you to swallow dry foods) = adenocarcinoma or from the cells that form the 'skin' of the oesophagus = squamous cell carcinoma.

### *How common is it?*

The adenocarcinoma type is MASSIVELY on the increase in the UK and we don't know why? There are about 8000 people diagnosed with oesophageal cancer in the UK every year, that's 150 per week. For many reasons it is especially common in the North East of England which is why we are running this National campaign from here and that is why your local hospitals are supporting it. The Royal Victoria Infirmary (RVI) in Newcastle is acknowledged as the biggest centre in the UK dealing with patients with oesophageal cancer and together with the University of Newcastle upon Tyne is a world leader in research into these cancers. However, all the North East Hospitals, see and look after patients with this disease and discuss every single patient with the hospitals that perform the big treatments needed to manage those patients (RVI, Newcastle, Cumberland Infirmary, Carlisle and James Cook University Hospital, Middlesbrough).

### *Will it kill me?*

Oesophageal cancer is a killer. The problem lies in the fact that the majority of patients present to their doctor or the hospital too late – when the cancer is too advanced to be able to cure it. If we can pick these cancers up earlier we can cure them with surgery or a mixture of surgery and chemotherapy. All treatments are hard work for patients. Surgery to remove a cancerous oesophagus is one of the biggest operations that someone can go through and involves replacing the cancerous oesophagus with a tube made from the stomach of the same patient that is pulled up into the chest and re-plumbed on to the throat so that food can pass through it and into the bowel.

### *What are the signs and symptoms to look out for?*

The problem is that the initial symptoms are vague and similar to regular reflux symptoms so patients ignore them. Doctors are experts – they know that 40% of the population in the UK have reflux so that not everyone will need to be investigated. They have trained for a long time so that they are able to recognize when a symptom is important and needs further investigation. The following are the commonest and typical symptoms:

- Difficulty in swallowing
- Weight loss
- Pain or discomfort in the throat or back or abdomen
- Acid reflux – indigestion, heartburn, dyspepsia
- Hoarseness or chronic cough
- Vomiting or regurgitation
- Coughing up blood

### *What are the risk factors in the UK for developing cancer of the oesophagus?*

If recurrent acid reflux carries on over a long time (years) then there is a risk that the inflammation caused can go through a cancerous change. We know that because an important study from Sweden proved that reflux was associated with an increased risk of adenocarcinoma of the oesophagus – it showed that people with longstanding, severe and frequent reflux had a 44 times greater risk of developing this type of oesophageal cancer than people without. Obesity (being overweight) also increases your risk for this type of cancer possibly because you are more likely to suffer from reflux.

The greatest risks for developing squamous cell carcinoma of the oesophagus (the other type of cancer) are smoking and alcohol. If you smoke heavily AND drink heavily then the risk for developing this type of cancer is 20 times that of someone who doesn't do either.

Also just being a man means that you are more likely to develop any type of oesophageal cancer and since cells are more likely to turn cancerous over time – the older you are the higher the risk. Unfortunately, we have treated many young patients and female patients too.

*Can it be passed on through the family?*

There are certainly families that have a higher than average number of members with oesophageal cancer but we haven't as yet discovered why? There are a few other medical conditions that are associated with an increased risk of oesophageal cancer

*What can I do to prevent me from getting it?*

The obvious things would be to avoid smoking and reduce drinking but if you suffer from reflux then the really useful thing is to know if you have something called 'Barrett's oesophagus'. This was first described in the 1950s and is a change in the lining of the oesophagus to protect it from recurrent acid reflux damage. We now know that this is a 'pre-malignant' stage in the development of oesophageal cancer and it is EASILY identified when you look at the oesophagus using an endoscope (a safe camera test performed using a thin camera passed down the throat and into the oesophagus, which is done using either a numbing agent to freeze the throat so you can't feel the tube or under sedation). Patients who have Barrett's oesophagus have an endoscopy every two years or so to check that no further changes have occurred. Although these changes occur uncommonly (every year one patient with Barrett's oesophagus in every hundred will develop an oesophageal cancer), this has been shown to markedly improve the chance of picking up early cancer changes and therefore improve the chance of cure.

You don't know if your reflux has caused a Barrett's change without having had an endoscopy.

*What research is being done in the North East?*

The unit in Newcastle based at the RVI is recognised as one of the leading oesophageal cancer research centres in the world and has been fundamental in moving forward the recognition of this disease and its management in the UK for 20 years. Our current research is based on why the changes of Barrett's oesophagus occur but we have recently looked at how common Barrett's is, whether patients diet predisposes them to oesophageal cancer, what the best treatment for patients with advanced and incurable oesophageal cancer is, whether we should feed patients immediately after having surgery to remove the oesophagus and how these cancers spread through the lymph glands. We publish our findings in the medical journals that all doctors involved in the treatment of these cancers read. This research is funded through a mixture of NHS grants and donations from patients and their relatives. There is no middleman to pay – this money directly funds the researchers in the laboratory and whatever they need to do the work. The amazing people who have supported the unit know that the money they have given has gone directly into helping the patients in the future and specifically those in the North East.