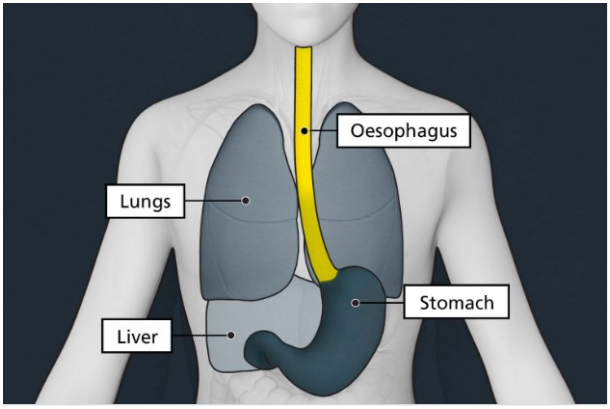
Salisbury
NHS Foundation Trust

Oesophageal Cancer

What is the oesophagus?

The oesophagus (often known as the gullet) is a muscular tube situated behind the trachea (windpipe) in the throat. Food and drink pass from the back of the throat into the stomach through the oesophagus.



Cancer of the oesophagus

Cancer of the oesophagus develops from its lining and narrows it; causing difficulty in swallowing. At first solid food ten lodge or stick, and this is followed by difficulty in swallowing liquid Most cancers in the upper two-thirds of the oesophagus are known as squamous carcinomas, because they develop from the squamous (skin-like) cells which line the oesophagus. Cancers occurring in the area where the oesophagus joins the stomach are usually adenocarcinomas, derived from stomach-like cells. Adenocarcinoma often develops when the squamous cells at the lower end of the gullet have been replaced by stomach-type (columnar) cells, which have the potential to become malignant. This condition is known as Barrett's Oesophagus, for more information on this ask a member of your specialist team. The cancerous cells may spread outside the gullet to involve nearby structures, such as lymph nodes and blood vessels in the chest, and may also be carried in the blood stream to form secondary tumours (metastases), in the liver or elsewhere.

What are the symptoms?

The most common symptoms of oesophageal cancer include:

- difficulty swallowing (dysphagia) – feeling that your food is sticking in your throat or chest
- weight loss

- food coming back up before reaching the stomach (regurgitation) or being sick (vomiting)
- pain when swallowing
- indigestion or heartburn that doesn't go away
- a persistent cough a hoarse voice – caused by pressure on the nerve that supplies the voice box
- dull pain or discomfort behind the breastbone or in the back.

There are other conditions that can cause these symptoms, but you should always have them checked out by your doctor.

If you have symptoms that don't improve, it's important that you're referred to a specialist. They can arrange tests to find o what the problem is.

How is the diagnosis made?

Most patients go to the doctor because of dysphagia. Going to the GP early when symptoms begin is important, to increase the chances of early diagnosis and effective treatment. The GP is likely to make a referral to a specialist for investigation These are likely to include:

- Endoscopy – a doctor or nurse will put a thin, flexible tube (endoscope) into your oesophagus. There is a tiny light and camera on the end of the tube. This helps to see any abnormal areas. A biopsy may also be taken to confirm the tissue type.
- Barium swallow – this involves swallowing a white liquid containing barium, which shows up on an X-ray outlining the oesophagus and revealing any obstruction.
- EUS (endoscopic ultrasound) – this is like an endoscopy but the tip of the endoscope has an ultrasound probe on
- CT scan - takes a series of X-rays which build up a 3D picture of the inside of the body. PET/CT scan - this is a combination of a CT scan and a positron emission tomography
- (PET) scan. A PET scan us low-dose radiation to measure the activity of cells in different parts of the body
- Laparoscopy – this allows the doctor to look at the upper part of the abdomen (tummy) and take further biopsies i required. It is done under a general anaesthetic as a day case in hospital. Whether this is needed depends on the position of the tumour within the oesophagus.

Treatment overview

The treatment you have will depend on the type of oesophageal cancer you have, its stage, where it is and on your general health. It's important to understand why a particular treatment has been suggested for you. You can discuss possible treatments with your doctor or specialist nurse. Oesophageal cancer can be treated with surgery, chemotherapy or radiotherapy. The treatments can be used alone or in combination. See page 11 for information on other treatments. Treatment may be given to cure the cancer. If a cure isn't possible, it can be given with the aim of controlling/shrinking the cancer and improving your symptoms.

Surgery

If the cancer is at an early stage, surgery may be used with the aim of curing the cancer. There are different types operations used to treat oesophageal cancer. The operation will depend on the size and position of the tumour. You may need to stay in hospital for up to a few weeks for some types of surgery. Your doctor will talk to you about the most appropriate type of surgery for your situation. It's important to discuss the operation fully with your doctor before it happens. It may help to make a list of any questions you want to ask.

Chemotherapy

Chemotherapy uses anti-cancer (cytotoxic) drugs to destroy cancer cells. Cytotoxic means toxic to cells. These drugs disrupt the way cancer cells grow and divide, but they also affect normal cells, which may cause side effects.

When chemotherapy is given

Chemotherapy is often given before an operation to remove an oesophageal cancer. This is sometimes called neoadjuvant chemotherapy. It can shrink the tumour, making it easier to remove.

Chemotherapy can sometimes be given after surgery to reduce the chances of the disease coming back. It works by destroying any cancer cells that might be left behind after the operation. This is called adjuvant chemotherapy.

Chemotherapy may also be used if the cancer has spread to other parts of the body. This aims to shrink the tumour to improve symptoms and maintain a good quality of life. This is called palliative chemotherapy.

It's important to discuss the benefits and side effects of chemotherapy with your cancer specialist. If you have a cancer has spread, and you decide that you don't want to have chemotherapy, your doctor can still prescribe medicines to help control symptoms.

Radiotherapy

Radiotherapy uses high-energy rays to destroy cancer cells, while doing as little harm as possible to normal cells. Radiotherapy can be given in two ways:

- from outside the body as external beam radiotherapy. This is the most common way of giving radiotherapy for oesophageal cancer.
- by putting a radioactive material into, or close by, the tumour. This is known as internal radiotherapy or brachytherapy. It isn't used very often to treat oesophageal cancer.

External radiotherapy

External radiotherapy is usually given in combination with chemotherapy to treat oesophageal cancer. This is known as chemoradiotherapy and may sometimes be given instead of surgery. It is also sometimes given before an operation to shrink the tumour. If the cancer is more advanced, radiotherapy may be given on its own to shrink the tumour and help control symptoms.

Chemoradiotherapy

Chemotherapy and radiotherapy can be given at the same time. Chemoradiotherapy is not suitable for everyone, it is mainly used for squamous cell carcinoma, but can be used for adenocarcinoma too. Chemoradiotherapy can be used instead of surgery. It can also be used before an operation to shrink the tumour. Your doctor or specialist nurse will give you more information about chemoradiotherapy and the possible side effects.

Other treatments

Endoscopic mucosal resection (EMR)

Endoscopic mucosal resection is the removal of abnormal areas in the lining of the oesophagus using an endoscope.

Radiofrequency ablation (RFA)

RFA uses heat to destroy cancer cells. It's mainly used to treat pre-cancerous changes to the cells in the oesophagus (Barrett's oesophagus). It's sometimes used after EMR. RFA uses a probe called an electrode to apply an electrical current (radiofrequency) to the tumour. The electrical current heats the cells to high temperatures, which destroys (ablates) them. The cells die and the area that's been treated gradually shrinks and becomes scar tissue. Some people may need to be treated more than once.

Photodynamic therapy (PDT)

PDT uses a laser and a light-sensitive drug to destroy cancer cells. PDT is only used

in a few specialist hospitals in the UK. If the treatment is suitable for you, you may have to travel to another hospital to have it.

This treatment is most commonly used to help with difficulty swallowing. It's also sometimes used instead of surgery to treat very early-stage (stage 1) oesophageal cancer found in the mucosal layer.

PDT is given in two stages. First, you'll be given a drug that makes the cells more sensitive to light (a photosensitiser). This is usually given as an injection into a vein in your arm (intravenously).

A laser is then directed on to the cells, using an endoscope. The laser activates the drug to destroy the cells. The treatment will make you sensitive to light so try to avoid being in the sun for a few days.

PDT may make the area in the oesophagus temporarily inflamed and swollen. At first, this can make swallowing more difficult, but this will improve.

The National Institute for Health and Care Excellence (NICE) gives advice about which new treatments should be available on the NHS. It reviewed the use of PDT to treat early oesophageal cancer in 2006. The review said that PDT is safe to use, but that more evidence is needed to know how effective it is. It's not yet known how well it works and how it compares with surgery.

Talk to your doctor about the possible risks and benefits of PDT, and of other treatments that may be available. NICE suggests that doctors use PDT in clinical research trials if possible. NICE also suggests that patients are followed up to check their progress.

Argon plasma coagulation (APC)

APC is sometimes recommended as a treatment after EMR, or if swallowing is difficult. Using an endoscope, a probe is placed close to the area to be treated. A combination of argon gas and electricity is used to destroy the cancer.

Your doctor or specialist nurse can give you more information about APC.

Targeted therapy

Targeted therapies (sometimes known as biological therapies) are drugs that mimic substances that occur naturally in the body to destroy cancer cells. They work by changing the way that cells interact with or signal to each other.

Trastuzumab (Herceptin®) is a type of targeted therapy called a monoclonal antibody. It works by attaching to a receptor called HER2 (a hormone receptor) on the surface of certain cancer cells. This stops the cancer cells dividing and growing.

Herceptin is mainly used to treat breast cancer. But it can also be used to treat some

advanced oesophageal cancers, found in the area where the oesophagus joins the stomach (the gastroesophageal junction). It's used in combination with chemotherapy.

Herceptin is only suitable for people with oesophageal cancers that have HER2 receptors.

Other targeted therapy drugs may also be used to treat oesophageal cancer.

Follow-up

After your treatment has finished, you'll have regular check-ups and possibly scans. You'll probably have these for sever years but they will become less frequent as time goes on.

These appointments are a good opportunity to discuss with your doctor any concerns or problems you may have. If you notice any new symptoms between check-ups, or are worried about anything, contact your doctor or specialist nurse for advice. You can be seen earlier if necessary.

Summary points

The earliest symptom of cancer of the oesophagus is likely to be difficulty in swallowing food, and prompt consultation with a GP and early investigation are important if a cure is to be achieved.

Treatment of cancer of the oesophagus is likely to involve surgery, chemotherapy, radiotherapy or chemoradiotherapy.

When a cure is not possible, a number of treatments are available to relieve symptoms.

Research is in progress into ways of preventing cancer of the oesophagus, by picking up early pre-cancerous changes or by giving medications which prevent the development of cancer.

Support groups

The Cancer Therapy Team – contact them on 01722 336 262 ext. 5153

The Dorset Gastrectomy and Oesophagectomy Support Group – contact Emma Selby (secretary) 01202 448739

For more information on these groups please ask your Clinical Nurse Specialist.

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Reference

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www.salisbury.nhs.uk/wards-departments/departments/cancer-services