University Hospitals Dorset
NHS Foundation Trust

# Achalasia

## Endoscopy Department Patient information

## What is achalasia?

Achalasia is an uncommon condition affecting the nerves and muscles in the oesophagus (gullet). It can lead to difficulty in swallowing food and fluid.

The oesophagus is the tube through which food and drink passes on its way from the mouth to the stomach. Normally, the muscles lining the oesophagus contract (peristalsis), to assist the passage of food and fluid. Nerves control the sphincter (a ring of muscle) at the bottom of the oesophagus, which opens to allow food and fluid to pass through and closes to prevent the stomach contents coming back up (reflux).

In achalasia, peristalsis does not occur properly, and the sphincter fails to relax, making it difficult for food to pass through. Over time, this can lead to inflammation, and the lower oesophagus may become dilated (widened). Food can remain in the oesophagus for long periods, sometimes days after it has been eaten.

## What causes achalasia?

The cause of achalasia is not fully understood. It is caused by damage to the nerves in the wall of the oesophagus. It is speculated that this may be caused by a viral infection in some cases.

## How common is achalasia?

Achalasia is very uncommon, affecting approximately 6500 people in the UK. It is mainly diagnosed in adults aged between 20 and 40, and is more common in patients with Parkinson's Disease, stomach cancer. However, it should be noted that most people with these conditions do not have achalasia.

## What are the symptoms of achalasia?

Symptoms may develop gradually over time, and usually involve difficulty swallowing. It may feel painful at times, or as though something is stuck in your oesophagus. Food may be vomited or regurgitated (brought up). This may be more common at night, with some sufferers reporting staining on their pillow.

If the regurgitated matter is inhaled or trickles down the windpipe, it can lead to a cough, repeated chest infections, or even pneumonia. Weight loss may also be a common feature, and can be severe, as the food lodged in the oesophagus is not digested and leads to a sense of irritation or fullness. In some cases, it may not cause any symptoms at all.

## How is achalasia diagnosed?

There are several tests which may be helpful in diagnosing achalasia, and ruling out other causes. These investigations usually take place on an outpatient basis, and may include:

**Barium swallow:** This involves drinking a liquid which shows up very clearly on x-ray, highlighting whether the oesophagus is dilated, and whether there is a delay in the barium liquid passing through to the stomach. A simple chest x-ray may show a dilated oesophagus.

**Gastroscopy:** A thin, flexible tube with a camera on the end is passed down the throat into the oesophagus and stomach. Food may be visible in the oesophagus, and the endoscopist can check the lining, the sphincter (or valve) and the stomach, to rule out other disorders.

**Manometry:** A small, plastic tube is passed through the nose or mouth to measure variations of pressure throughout the oesophagus. This test may be more sensitive at detecting early changes than a barium swallow.

## Does achalasia cause any complications?

The most common complication is weight loss. Respiratory infections such as aspiration pneumonia can be a problem if food is regurgitated and enters the lungs. This can be serious and may require treatment with antibiotics. Oesophagitis (inflammation of the oesophagus) can result from food remaining lodged in the oesophagus and causing irritation. In the long term, repeated episodes of inflammation may slightly increase the risk of cancer of the oesophagus. It is estimated that the risk of oesophageal cancer is increased by between 8 to 16 times for men who have achalasia compared to the general population. Women with the condition are thought to be up to 20 times more likely to develop one form of oesophageal cancer in particular (adenocarcinoma). While cancer of the oesophagus remains rare, it is important for people diagnosed with achalasia to prevent food getting lodged, even if no symptoms are experienced.

## How is achalasia treated?

While it is not possible to cure the disease which causes achalasia, there are various treatments which are aimed at reducing the spasm in the sphincter at the bottom of the oesophagus.

**Medication:** Taking medication in tablet form (such as nifedipine or nitrates) may help by relaxing the lower oesophageal sphincter. These drugs may cause side effects such as headaches, but this tends to ease if you continue taking them. However, the tablets may not be effective in all patients, and may only help temporarily. They may be useful in the early stages while a more permanent treatment is being planned.

**Dilatation:** This involves stretching the sphincter with a balloon, which is inflated to widen the muscle at the base of the oesophagus. It is performed during an endoscopic procedure called a gastroscopy, usually under sedation as it can be a little uncomfortable. Dilatation can lead to complications, including perforation (where a tear can result) or bleeding, but these are rare. It may be necessary to repeat the dilatation after a year or so. Dilatation is less commonly used as the main treatment for achalsia in recent years, as surgical treatments have been shown to give more favourable long term results. However, dilatation may be helpful in the management of strictures (narrowing) which can result from scarring after surgery.

**Botox:** Botulinum toxin, which causes muscle paralysis, is injected into the lower oesophageal sphincter during gastroscopy. This weakens, or relaxes the sphincter, allowing food to pass through. The procedure is usually painless, and the effects tend to last for several months. While this is not a permanent treatment, it may suitable for patients who are unable to have surgery.

**Surgery**: This form of treatment involves an operation to cut the muscle fibres in the sphincter (myotomy), resulting in a permanent improvement in swallowing. It is usually performed through keyhole surgery, under general anaesthetic. However, it may not be suitable for patients who are not fit enough for surgery or anaesthetic, and can lead to problems such as reflux, pain and strictures (narrowing of the oesophagus) in some cases. Complications such as perforation and bleeding may occur, but can often be managed or treated during the procedure.

After treatment, particularly dilatation or surgery, tips such as chewing your food well, taking plenty of fluid with your meals, sitting upright to eat, elevating the head of the bed to prevent regurgitation or reflux at night, and taking medication to suppress acid can be helpful. Cool fluids and simple analgesia (painkillers) may be soothing for those who experience chest pain after treatment. Your doctor can discuss the options with you, and refer you for specialist advice.

If you have any questions or concerns at all, please do not hesitate to contact our endoscopy department:

**The Royal Bournemouth Hospital Endoscopy Department**: **0300 019 4668** (Mon-Fri 8am -6pm)

**Poole Hospital Endoscopy Department**: **0300 019 2772** (Mon-Fri 8am-6pm)