**Swallowing information for *Achalasia***

**Definition:**

**Swallowing** is a complicated sequence of both voluntary and reflex movements, which needs your brain to coordinate many muscles and nerves.

**Dysphagia** is the medical term for a sensation of difficulty or abnormality of swallowing. It can happen rapidly, or slowly and has many causes.

**Achalasia:**  It is the most recognised movement disorder of the oesophagus. The term means “faliure to relax”, and refers to a poorly relaxing ***lower oesophageal sphincter (LOS)*** seen in achalasia, along with a non-motile oesophagus. It is a fairly uncommon condition, occurring equally in men and women between 30 and 60 years of age, with a frequency of about 0.5 cases per 100,000 people per year.

**Causes:**

An inflammatory process of unknown cause, damages a plexus of neurons within the wall of the oesophagus itself, leading to a lack of contraction and a failure of relaxation at the LOS. Eventually, this inflammation also leads to scarring and stiffness of the oesophageal wall.

Hereditary, degenerative, autoimmune, and infectious factors are possible causes, with the latter two being most likely.

**Diagnosis:**

The diagnosis of dysphagia involves a thorough case history, clinical examination of the muscles and nerves required for swallowing, digital nasendoscopy of the upper airway and pharynx, and an instrumental swallowing evaluation such as Fibre-optic Endoscopic Evaluation of Swallowing and/or a Video-fluoroscopy Swallowing Study (x-ray).

Additional tests may be required such as a standard barium swallow (**SEE Fig. 1)**, video-stroboscopy, high resolution impedance manometry, pH testing and/or salivary pepsin testing. A validated questionnaire, called a patient-related outcome measure, is often completed initially, and repeated later on to measure your progress. ***E.g. Eat-10 or SWAL-QOL.***

Symptoms you might experience in the diagnosis of ***Achalasia*** include:

* A “fullness in the chest” or “sticking sensation”
* difficulty swallowing solids +/- liquids
* Coughing or choking after swallowing
* regurgitation of undigested food and saliva especially after meals or at night.
* Chest pain occurs sometimes, especially at night.
* Heartburn
* Bad breath
* Weight loss

If you can’t swallow correctly then food and drink may be getting into your airway and lungs. This is called aspiration. If this happens it can lead to infections and pneumonia, which can be very serious. It is important that any changes to your swallowing are identified early, to avoid this happening.

**Management:**

Once you have had a complete swallowing evaluation, the swallowing specialists can recommend ways to improve your ability to eat and drink depending on the specific problems found. There are a variety of different treatment options depending on the cause/s and severity of presentation, but no treatment can ***restore muscular activity to the denervated oesophagus in achalasia.***

1. **Procedural/Surgical Treatments:**
2. **Botulinum Toxin Injection:** ***Botox®,*** a potent toxin that blocks the contraction of muscles, can be injected into the ***LOS*** endoscopically. The injection is sometimes repeated in close succession to improve symptom relief. Whilst it markedly improves symptoms in 75% of patients, symptoms also recur in > 50% of patients within 6 months. Furthermore, the response to ***Botox®*** diminishes with repeated injections. This treatment is often considered first-line in those patients who are a high risk of complications with surgical treatments (SEE BELOW), or who refuse surgery.
3. **Balloon Dilation** of the ***LOS:*** a balloon is placed endoscopically across the ***LOS.*** It is then inflated with air until the non-relaxing ***LOS*** is flattened or effaced. Sometimes multiple balloon dilations are performed in the same setting.
4. **Surgical Division** of the ***LOS*** muscle. A ***Myotomy*** of the ***LOS*** can be performed through keyhole surgery through the upper abdomen or lower chest. The chance of long-term symptom relief is higher with ***myotomy*** than with dilation, but so too the risk of complications is proportionately higher.
5. **Swallowing Modifications:**
* General strategies to improve swallowing safety such as tucking chin down, turning head to side, may be employed.
* Safe swallowing strategies such as eating slowly or taking smaller mouthfuls, may also be advised.
1. **Dietary Modifications**
* Thickening drinks with special powders to make them easier to swallow.
* Softening your food to make it easier to chew and swallow.

**Initial recommendations:**

* Take your time when eating and drinking
* Avoid distractions such as television and other people
* Use a teaspoon to take smaller mouthfuls
* Eat smaller meals more often if swallowing is tiring.
* Ask your GP or physician today whether you need a swallowing evaluation.
* See your GP urgently if you are coughing and choking after swallowing, have a fever, or a productive cough.