

This is the feeling that food or fluids get 'stuck' on the way down. It happens to everyone occasionally, but seems to become a more persistent problem in some people with arachnoiditis.

Swallowing is a precisely co-ordinated physiological process, which requires a series of sequential events to occur. Should one of the steps in this series be faulty, then problems with swallowing will occur.

There are a variety of reasons for this problem.

The commonest is due to 'reflux oesophagitis' in which the acid contents of the stomach regurgitates back up into the gullet and causes burning at the lower end of the gullet.

Most people are more familiar with the burning sensation ('heartburn') that this causes, or there may be chest pain (non-cardiac).

This reflux may be associated with a 'hiatus hernia', a defect in the diaphragm muscle, which normally prevents the stomach contents from being brought up. With a hiatus hernia, circumstances such as bending over or lying flat in bed, may induce reflux which can cause regurgitation: a rush of acidic fluid into the mouth.

Over a period of time, the acid damages the lining of the gullet and causes scarring. The scar tissue may contract and reduce the opening of the gullet in the affected region, hence causing the sensation of food sticking.

This occurs more commonly in the lower end of the gullet and as this passes near the back it may cause pain between the shoulder blades rather than in the chest or upper abdomen.

Other similar causes include formation of a pouch (diverticulum) in the lining of the gullet, which allows food to become trapped.

In conditions such as MS, there may be neurological reasons for the difficulty in swallowing. This tends to be a rare complication. Some stroke victims may have this problem.

There are 3 basic deficiencies involved with MS, which can cause trouble with swallowing in the upper region:

- Incoordination of the muscles of the mouth and throat, so that they do not work together to pass the food down into the throat.
- Weakness of these muscles, making the passage of food difficult and slow.
- Loss of sensation: the presence of food in the mouth or throat is difficult to perceive.

These may lead to choking or coughing when swallowing is attempted, or food may feel as if it is going down the windpipe.

Another problem, which may aggravate the situation, is dry mouth secondary to medication.

Broadly speaking, it is possible to categorise the following:

Difficulty swallowing liquids: is usually due to poor muscular control before the swallow. It may be associated with neurological conditions.

Difficulty swallowing solid food: is usually due to abnormality in structure or function of the muscles in the mouth or throat, or to damage to the lining of the gullet as detailed above.

Regurgitation of food nasally: is related to neurological or neuromuscular disorders

Regurgitation of undigested food suggests abnormality in the oesophagus (gullet).

Neurological or neuromuscular conditions tend to cause a gradual onset. Sudden onset usually denotes a traumatic problem or may be due to psychogenic problems.

### COMMON SYMPTOMS:

- difficulty chewing and/or difficulty moving food to the back of the mouth
- needing to spit lumps of food out
- becoming reluctant to eat ; refusing food and/or drink
- if talking with food/drink in the mouth, forgetting to swallow thus causing spluttering
- coughing/choking on food and /or liquids
- dribbling
- feeling as if food/tablets not going down or getting stuck in the throat
- pain or pressure in the chest

### VOCAL CHANGES:

Alongside the difficulty in swallowing there may also be a hoarse and/or 'wet' or 'gurgly' voice after swallowing which may be due to vocal cord paralysis or to acid reflux. (Note that a history of fever or earache suggests an infectious cause).

### WEIGHT LOSS:

Additional symptoms such as weight loss, history of smoking, and regular large alcohol intake require full medical evaluation to exclude any serious underlying condition.

However, weight loss may well have a simple explanation, in that the trouble swallowing leads to a reluctance to eat.

Chronic chestiness or repeated chest infections might raise suspicion of difficulties with swallowing.

Vomiting or regurgitation of frank red blood or 'coffee grounds' requires urgent medical evaluation.

### ASSESSMENT:

Often, people with dysphagia require multidisciplinary input from a team comprising of a combination of: a primary care provider (GP) a radiologist, a neurologist, a gastroenterologist, or a speech-language pathologist.

### TESTS:

These include assessment by the speech therapist if necessary, swallow studies: a modified barium swallow study with videofluoroscopy, which determines the cause of dysphagia.

It also determines whether a patient aspirates during swallowing, and confirms that the vocal cords and/or epiglottis are not closing to protect the airway, which causes aspiration (food/liquid ?going down the wrong way') during swallowing.

The modified study allows the function of the mouth and pharynx to be assessed as well as the oesophagus. For those who cannot tolerate this sort of study, a fiberoptic endoscopy may be performed, using a telescope to visualise the throat and gullet as swallowing is attempted.

Other tests include pH testing (to determine the acidity level), endoscopy with biopsy, oesophageal manometry (to check the function of the muscles in the gullet), and CT scan.

### TREATMENT:

Oropharyngeal phase:

There are a variety of measures that can be implemented to ease swallowing. For instance, a speech pathologist may teach exercises for the mouth and throat aiming to retrain the muscles and hence improve coordination.

Other tips:

- Sitting upright, keeping the chin down. Putting the head back opens up the airway more. If the swallow reflex is slow, it is easier for food and drink to go down the wrong way.
- Take small sips of drink, perhaps from a teaspoon. Avoid using feeder beakers as these encourage the head to tip back.
- Take small mouthfuls of food.
- Alternate food and drink to help clear the mouth of food: this should be discussed with a speech and language therapist.
- Swallowing each mouthful twice (multiple swallowing) helps clear any food or drink that may remain after the first swallow in the mouth or throat.
- If dribbling is a problem, frequent swallowing may be necessary.
- If the mouth is dry, artificial saliva may help to lubricate the passage of the food.
- Eating foods of one texture rather than mixed textures (see below)
- Food supplements may be required

If food with various textures is eaten, such as minestrone soup, or cereal and milk, there may be problems.

Other foods that may cause trouble include stringy foods: bacon, cabbage, runner beans; small hard textures such as peanuts, peas, and sweetcorn.

Similarly, tablets often present a problem.

Blending or pureeing food may be helpful, although not exactly appetising.

Food of yoghurt or porridge type consistency is usually best.

Medication may best be taken crushed or in syrup form, but NB. SLOW RELEASE preparations cannot be taken this way; rectal suppositories may

be necessary.

(Note: a useful address: The Royal College of Speech and Language Therapists,  
7 Bath Place, Rivington Street, London EC2A 3DR  
Tel: 0207 613 3855 Fax: 0207 613 3854.)

Oesophageal dysphagia is usually treated by a gastroenterologist and relates to treating the underlying causative factors, such as hiatus hernia, or gastro-oesophageal reflux (GORD), which will be covered in the next section of the article.