Case 47) A patient with difficulty swallowing

A 60-year-old civil servant complained of increasing difficulty in swallowing, which had gradually become worse over the past 2 years. At first it was quite mild but was now becoming a real nuisance to him. He found that food, and now even fluids, would tend to stick in his throat. In recent months he found that he might regurgitate food he had just swallowed. The whole affair was guite painless. His weight had not changed, he felt well and there were no other relevant features in his past or present history.

Clinical examination revealed a slim, healthy man, with no abnormal findings. He was given a glass of water to drink, which made him splutter a bit, but nothing could be felt on most careful palpation of the neck.

Difficulty in swallowing, dysphagia, is always a symptom to be considered with the greatest of care. What is your classification of its possible causes?

- 1 General causes. First, do not forget general causes neurological conditions - that may affect swallowing; these include:
- Myasthenia gravis.
- · Bulbar palsy, usually of vascular origin, affecting IX and X cranial nerves.
- Bulbar poliomyelitis and diphtheria may still occur in developing countries. Hysteria, so called 'bulbus hystericus', is extremely rare.
- 2 Local causes. These are classified, in every obstructed tube in the body, into causes in the lumen, causes in the wall, and causes outside the wall. In dysphagia, this list is as follows:
- · Causes in the lumen: Impacted foreign body, e.g. a bolus of food.
- Causes in the wall:
 - Congenital atresia.
 - Plummer–Vinson syndrome with pharyngeal web.
 - O Pharyngeal pouch.
 - Caustic stricture.
 - Inflammatory stricture secondary reflux

oesophagitis.

- Achalasia of the cardia.
- Tumours of the oesophagus or cardia of stomach.
- Causes outside the wall:
 - Pressure of enlarged lymph nodes (secondaries or lymphoma).
 - Retrosternal thyroid.
 - Aortic thoracic aneurysm.
 - Bronchial carcinoma.

Your clinical examination being entirely normal, as is a full routine blood count, what would be the first special investigation you would order?

An oesophago-gastro-duodenoscopy (upper gastrointestinal endoscopy). This has the added benefit of being able to perform a biopsy and make a tissue diagnosis. However, in this case a barium swallow was performed since it is a safe investigation; it is commonly used as a first-line investigation where endoscopy is not readily available. Three of the images in the series are demonstrated in Fig. 47.1.

The appearance was constant on the series of films that were obtained. What condition does it show?

A pharyngeal pouch.

Where is the pouch situated anatomically and what is its presumed aetiology?

It is a protrusion of mucosa between the two parts of the inferior pharyngeal sphincter, the thyropharyngeus and cricopharyngeus (Killian's dehiscence*), as shown in Fig. 47.2. It is believed to result from spasm of the

^{*}Gustav Killian (1860-1921), Professor of otorhinolaryngology, Freiburg and Berlin.

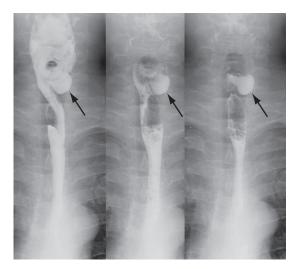


Figure 47.1 Barium swallow illustrating a pharyngeal pouch (arrowed).

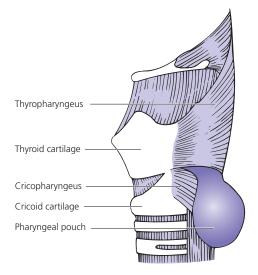
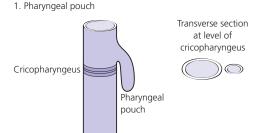


Figure 47.2 A pharyngeal pouch emerging between the two components of the inferior constrictor muscle.

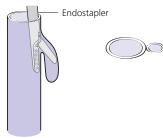
cricopharyngeus, although why this should occur is not understood.

As the pouch gradually enlarges, what does it do to the oesophagus, and why is this important?

As the pouch enlarges, it displaces the oesophagus laterally. This means that an oesophageal catheter or bougie



2. Endostapler positioned across both lumens



3. Following endostapler, pouch now part of oesophagus

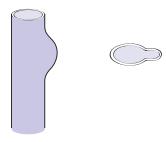


Figure 47.3 Endoluminal surgery.

or endoscope will tend to enter the pouch itself rather than sliding down the lumen of the oesophagus. The pouch may thus be accidentally perforated, with the resultant risk of mediastinitis. Suspicion of a pharyngeal pouch is a good indication to proceed to barium swallow rather than endoscopy as the first-line investigation.

What is the standard treatment of this condition?

Surgical excision of the pouch with longitudinal division of the cricopharyngeus part of the inferior constrictor (myotomy). This was performed on this patient with a highly satisfactory result. Nowadays this procedure may be performed endoscopically by stapling across the two lumina (pouch and oesophagus), thus dividing the cricopharyngeus (Fig. 47.3).