DYSPHAGIA

Introduction

Dysphagia is a broad term encompassing the many forms of difficulty with deglutition (swallowing)

The important issues in the ED will include:

- 1. Determine the most likely cause.
- 2. Identify those patients at risk of significant complications.
- 3. Treat those causes that are amenable to acute intervention.
- 4. Deciding on the need for admission.
- 5. Referring appropriately for further investigation and treatment.

Pathophysiology

Caus<u>es</u>

1. Structural abnormalities

The commonest include:

- Tumours, (oro-pharyngeal, oesophageal, or adjacent structures)
- Strictures
- Oesophageal webs
- Pharyngeal diverticula
- 2. Foreign bodies.
 - Most commonly solid food, (note however that this is usually secondary to an underlying structural abnormality)
- 3. Disorders of muscular motility, including:
 - Upper/ lower oesophageal sphincter dysfunction.

- Achalasia
- Scleroderma
- Muscular dystrophies
- 4. Infection
 - Retropharyngeal abscess
- 5. Neurological disorders
 - CVAs
 - Other central neurodegenerative conditions, such as motor neurone disease, Parkinson's disease and multiple sclerosis.
- 6. Psychogenic, (globus hystericus)
 - Note, however that this is **rare**, There is usually a physical cause to be found.

Complications

These will be related to the actual underlying pathology, however in general terms

- 1. Increased risk of aspiration, especially in cases of neurological dysfunction.
- 2. Significant fluid and electrolyte disturbance, especially in patients with moderate to long term dysphagia.
- 3. Significant nutritional disturbance again, especially in patients with moderate to long term dysphagia.

Clinical Features

Important points on history

A carefully take history will give important clues to diagnosis in most cases.

- 1. Onset of symptoms
 - Determine whether symptoms developed acutely or insidiously. Note, however that if insidious there may be an acute precipitating event such as lodgement of a bolus of food.

- 2. Odynophagia, (pain on swallowing)
- 3. Globus, (the sensation of a lump in the throat)

Important points on examination

- 1. Immediate assessment of the adequacy of the airway, including:
 - The presence of drooling.
 - Stridor
- 2. The hemodynamic status of the patient.
- 3. Any evidence sepsis/ fever.
- 4. In those with neurological disease:
 - The adequacy of swallowing/ gag reflex needs to be assessed.
 - Assess for any evidence of aspiration.
 - It should always be assumed that patients with recent cerebrovascular events or bulbar dysfunction are dysphagic until formal assessment of swallowing and airway protection can be undertaken. The **speech therapist** can assist in this assessment, where there is uncertainty.
- 5. Any evidence of haemorrhage.
- 6. Any evidence of local cervical pathology.

Investigations

1. Blood tests:

These are not "routinely" necessary, but should be considered in "unwell" patients or those with moderate to long term symptoms.

- FBE, (for anaemia).
- U&Es / glucose.
- Folate/ B12 levels.
- 2. Plain radiology:

- Soft tissue x-rays of the neck are often useful for oropharyngeal or upper oesophageal problems. Evidence of obstruction, or infection can often be seen. Foreign bodies may be seen.
- For suspected mid and lower oesophageal lesions, lateral and AP CXR should be done, looking for mediastinal lesions. Evidence of oesophageal perforation may also be detected.

3. **Endoscopy:**

- This is the investigation of choice in urgent/ emergency situations.
- Flexible endoscopy has a lower complication rate compared to rigid endoscopy, so flexible endoscopy is the preferable option.

4. Elective investigations:

For less urgent cases this will generally involve:

- Video esophagoscopy.
- Manometric studies.
- Less commonly, gastrograffin swallows or CT scans may be done.

Management

Emergency and definitive management will obviously depend on the nature of the causative pathology.

The need for Emergency management will also depend on:

- The degree of oesophageal obstruction.
- The presence of any airway compromise
- The risk of aspiration.
- The degree of patient distress
- The index of suspicion for a foreign body
- The index of suspicion for secondary complications such as haemorrhage, sepsis or oesophageal perforation.

Impacted food bolus

A number of medical treatments have been advocated for impacted food bolus, but all have drawbacks.

The safest is probably **glucagon**, which may be tried to relax oesophageal muscles. An IV or IM dose of 1 mg may be tried. A further 2 mg dose may be tried if this initial dose is unsuccessful.

GTN has been advocated as an alternative to glucagon, however may result in hypotension. Lying the patient flat may then be problematic.

Aerated gas producing drinks have also been advocated, however there will be risk of aspiration in high grade obstruction and they are contraindicated in cases of suspected perforation.

Endoscopy

There is argument about which specialty is best able to treat oesophageal food bolus obstruction, particularly of the upper oesophagus. Medical/ Surgical endoscopists, ENT surgeons or thoracic surgeons may all be suitable, there appearing to be no strong arguments to favor any single specialty.

As flexible endoscopy has a lower complication rate than rigid endoscopy the choice of specialist is probably best based on the individual's skills in flexible endoscopy rather than the specialty itself.

References

1. Thomson G. Dysphagia, in "Textbook of Adult Emergency Medicine", Cameron et al 2nd ed 2004, p. 304-305.