

Motility Disorders of Esophagus

(Achalasia & Diffuse Oesophageal Spasm)

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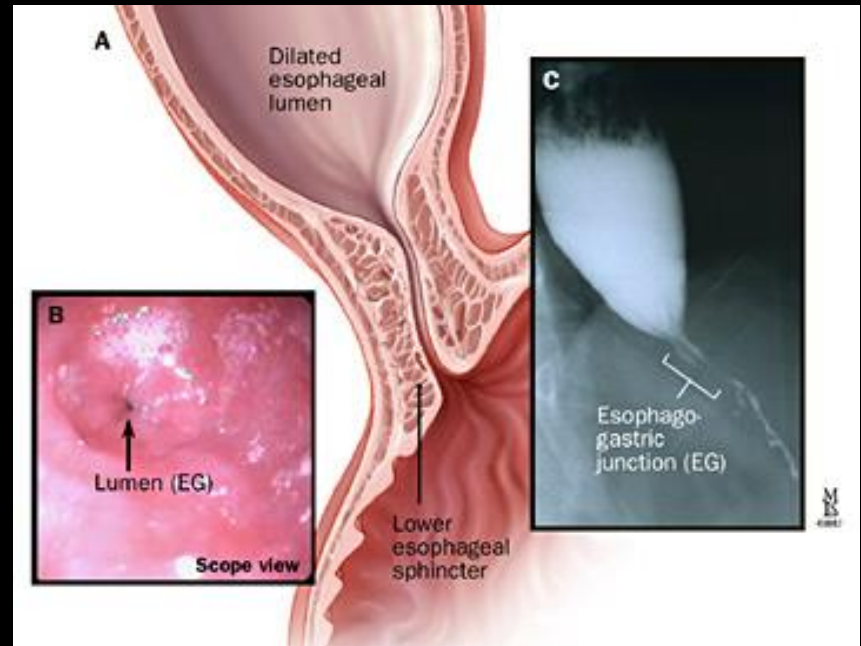
Masters Healthcare

Diploma Laparoscopic Surgery

Diploma Public Administration

Achalasia

- Achalasia means 'failure to relax'
- Loss of ganglion cells in aurbach's plexus
- Risk factor for carcinoma
- 10 folds increased risk of carcinoma over general population
- 1 in 100,000
- Peak incidence 20- 50 yrs.



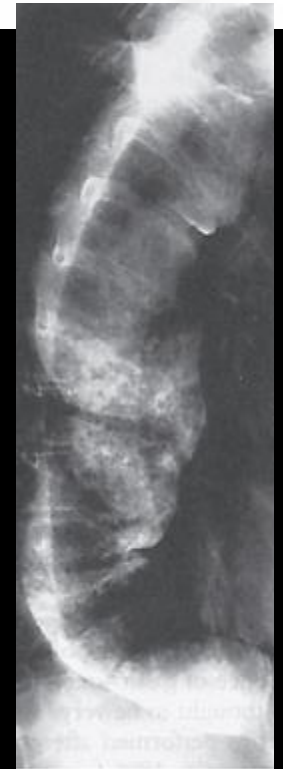
Clinical Features

- **Dysphagia in 94%**
- **Chest pain**
- Regurgitation
- odynophagia
- Weight loss
- Anaemia
- Halitosis
- Chest complications



Investigations

- Manometry -- Gold Standard
- Ba Swallow: dilated esophagus with bird beak appearance
- Endoscopy



Ba Swallow

- Dilated esophagus with bird beak appearance

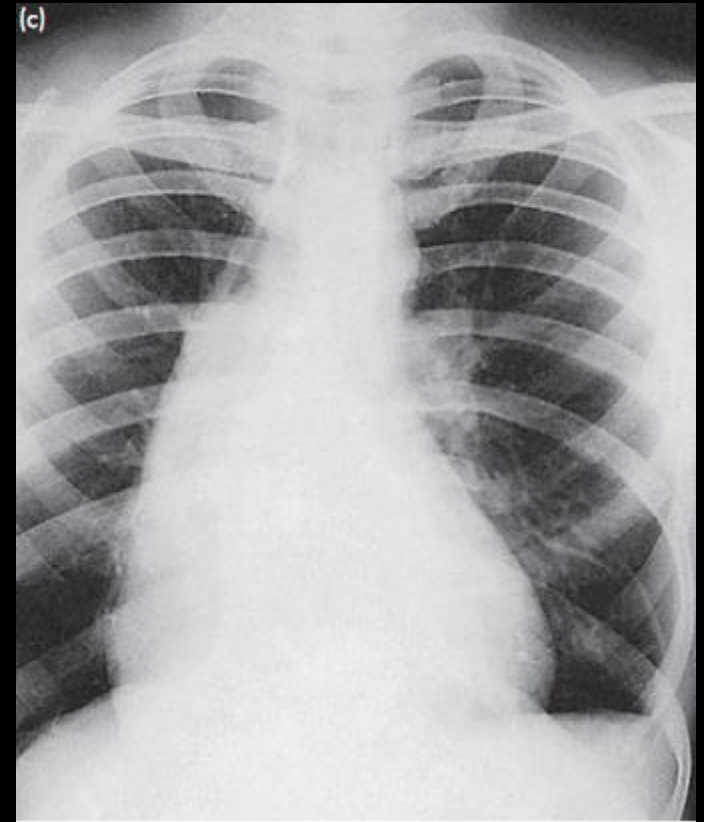
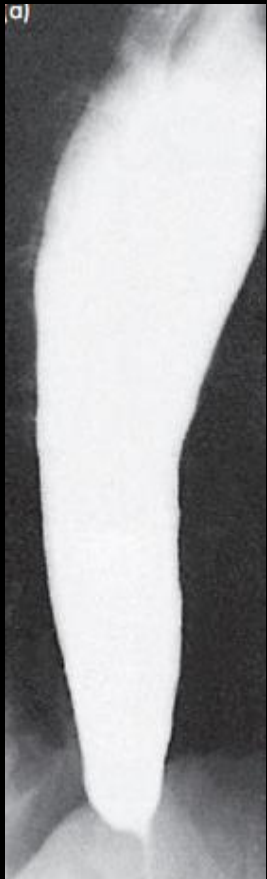


Figure 62.55 Achalasia of the oesophagus. (a) Barium swallow showing the smooth outline of the stricture, which narrows to a point at its lower end. (b) Tortuosity and sigmoid appearance of the lower oesophagus. (c) Mediastinal shadow due to a large, fluid-filled oesophagus.

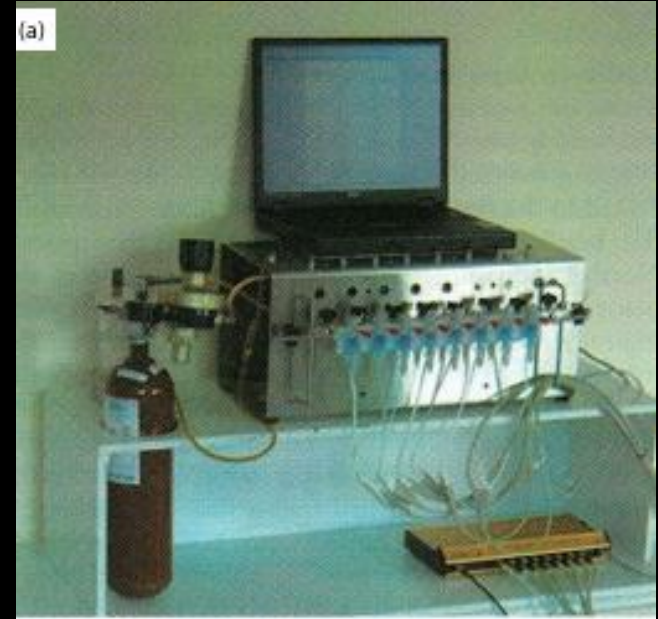
Endoscopy

Dilated esophagus with old fermenting food



Oesophageal Manometry

- Used to diagnose esophageal motility disorder
- Recording by passing multilumen catheter at different levels from esophagus to stomach



Manometry

Gold standard & $P > 25$ mm of Hg

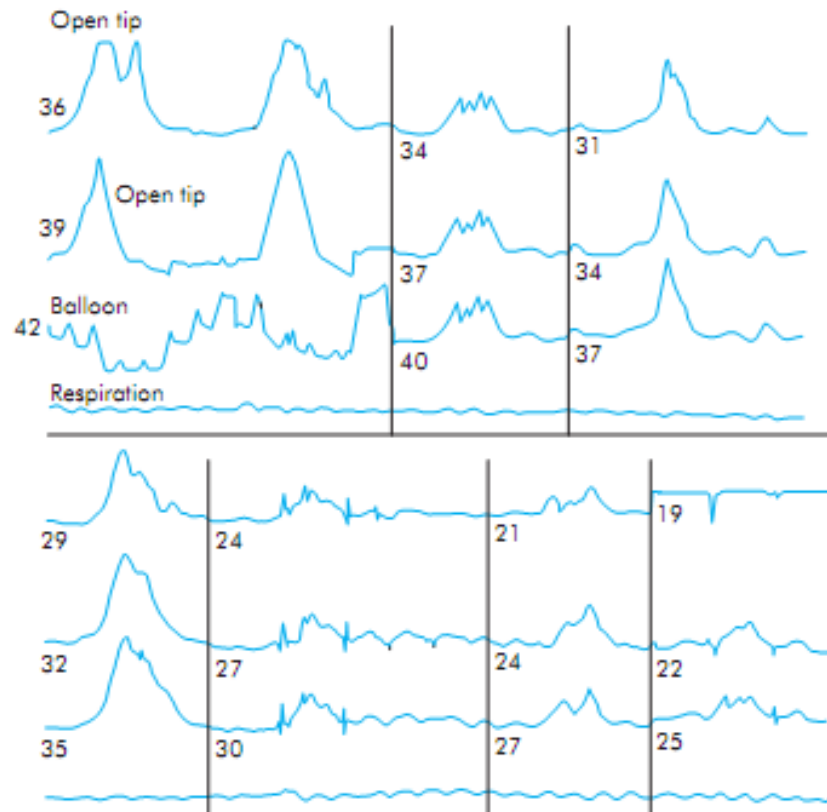
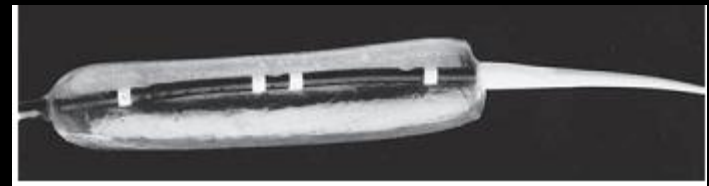


Figure 62.57 Manometry in achalasia, showing simultaneous contractions in the body of the oesophagus and incomplete relaxation of the lower oesophageal sphincter (LOS) in response to swallowing.

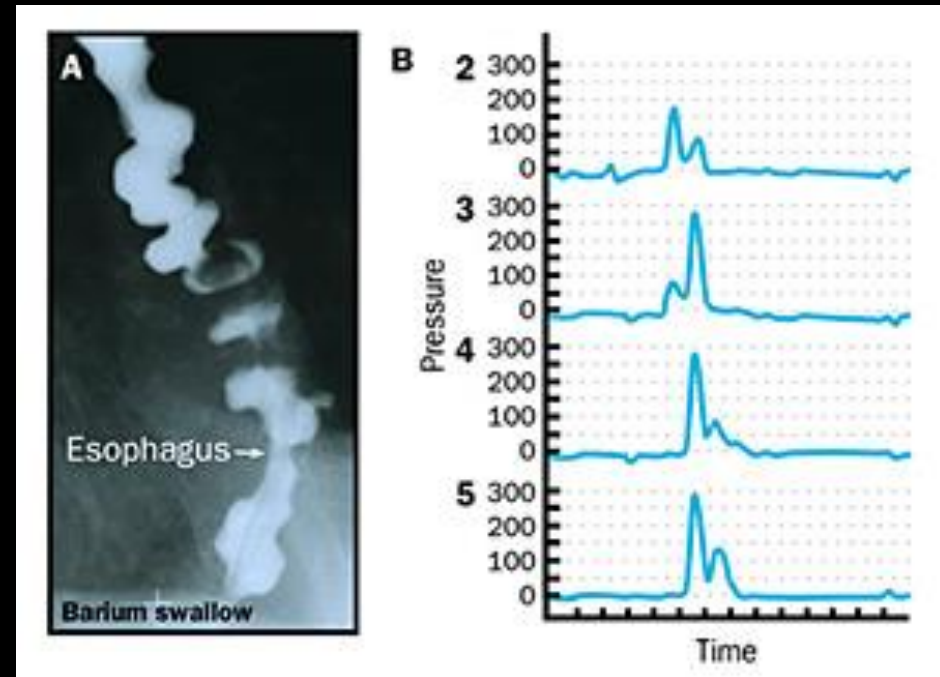
Treatment

- Medical treatment if Pt. unfit for surgery
- Isosorbide dinitrate
- Calcium channel blockers
- In one study nifedine reduced LES pressure 30% to 40% but subsequent studies showed only minimal improvement
- Botulinum toxin (short term control in 80-90% but recurrence in 6/12)
- Endoscopic pneumatic dilatation for 6-12/112 better control than injection
- Heller's Myotomy (success in 85%. Complication in 6.5% & mortality in 0.1%)



Diffuse Oesophageal Spasm

- Motility disorder in which $> 20\%$ of esophageal contractions occur simultaneously & are not peristaltic
- Chest pain, dysphagia or both
- Ba swallow
- OGD
- Manometry
- 24 hrs pH monitoring



Diffuse Oesophageal Spasm Ba Swallow

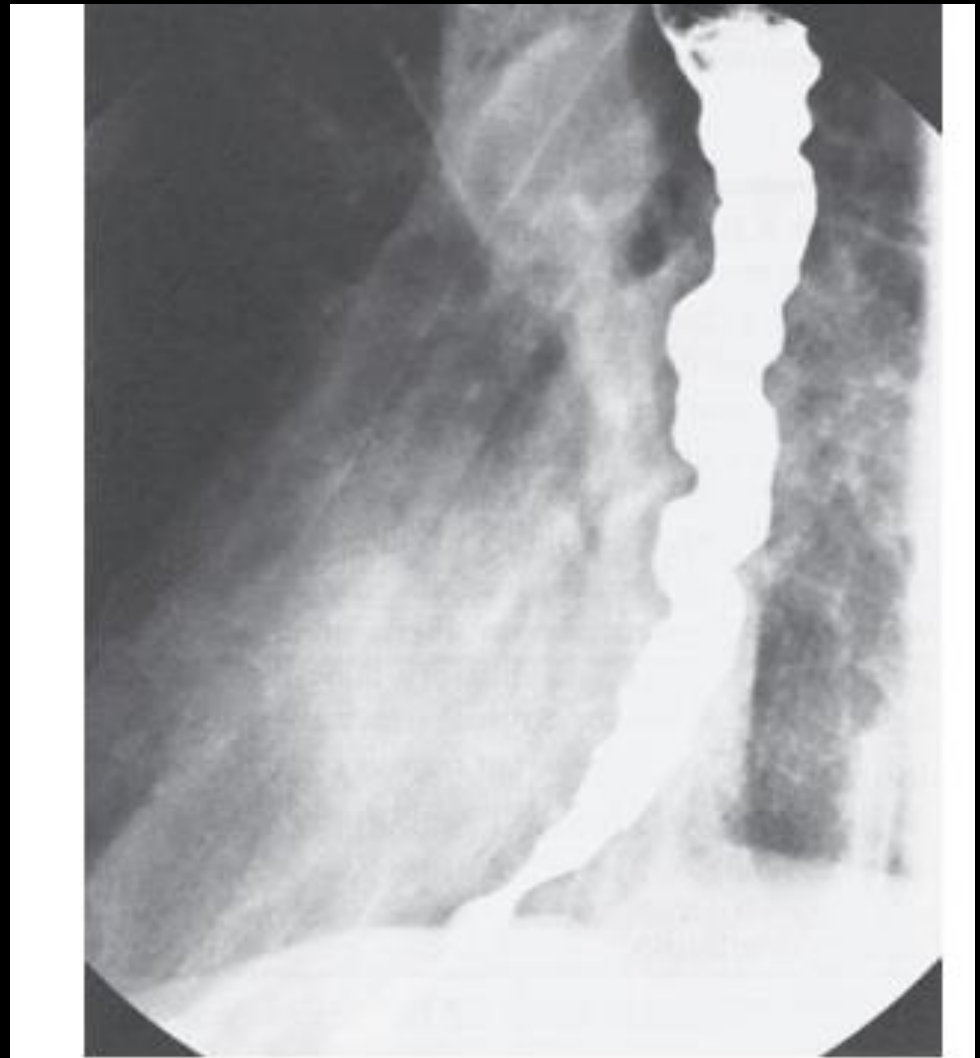


Figure 22.18 Barium swallow in a patient with diffuse oesophageal spasm showing 'corkscrew' appearance but this is only found in 30% of patients.

Treatment DOS

- Exclude pathology like angina & malignancy
- Reassurance
- Avoid spasm & advise soft food, liquids & stress reduction
- Stop smoking & alcohol
- Nitrates, calcium channel blockers, anti cholinergic agents & antidepressants – can be helpful but NOT ALWAYS
- Botox injection completely resolve symptoms in 50%
- Myotomy