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Food bolus obstruction treatment pathway

This proposed pathway was developed following a round table discussion of physicians expert in the treatment of food obstruction and/or eosinophilic oesophagitis supported by an educational grant from Dr Falk Pharma

For patients with a history consistent with a soft food bolus obstruction in the oesophagus

Ask about the time of the obstruction, what food the patient was eating, whether they have had prior FBO episodes, and also if they have been diagnosed with oesophageal disease

Is the FBO thought to still be present? [a]

Yes

Baseline management and investigations:
- nil by mouth
- IV fluids as required
- bloods: FBC, U+E, LFT, coagulation screen

Do not use fizzy drinks, antispasmodics or muscle relaxants in an attempt to dislodge the obstruction – they have no proven value

No [b]

Sometimes, an FBO will resolve without intervention while the patient is waiting in the emergency department

Refer the patient to gastroenterology for a diagnostic OGD after discharge

If this is impossible, emphasise that it is important for the patient to see their GP to request referral back for an OGD

Do not refer to ENT

Does the patient have any difficulty breathing, or a change in voice, or is blue?

Yes

Sit the patient upright, give high-flow oxygen, and get a senior ENT and an anaesthetic opinion urgently

No

Does the patient have any signs of oesophageal perforation?

• fever • severe pain • haematemesis • cervical crepitus
• swelling of neck • tachycardia > 100 BPM

Yes

The patient needs urgent imaging and surgical assessment:

- if the patient has severe pain/distress, CXR to exclude mediastinal or cervical air shadows
- CT contrast, neck and chest

Get a surgical opinion urgently, contact gastroenterology for a possible urgent OGD and contact an anaesthetist for airway support

No

Is the patient able to swallow saliva/liquids?

Yes [c]

To prevent complications, refer to gastroenterology for a therapeutic OGD, whenever possible with diagnostic biopsies

No [c]

The patient is at high risk for aspiration
Refer to gastroenterology for an urgent therapeutic OGD, whenever possible with diagnostic biopsies, within 6 hours

Please note..

a

Generally speaking, patients immediately recognise an FBO, experiencing a sensation of squeezing in the chest.

The area of discomfort often does not correlate with the site of obstruction.

Unless the patient is struggling to breathe, most food boluses stick in the body of the oesophagus.

Timing of regurgitation in FBO can be a useful diagnostic aid; immediate coughing and choking following water is suggestive of laryngeal penetration secondary to obstruction at the level of the cricopharyngeus, while delayed regurgitation suggests obstruction lower down.

The sensation of a retained foreign body can last for several hours after a large food bolus has cleared the oesophagus.

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b

Even if the episode was transient and self-resolving, it is likely that a proportion of FBO can be prevented by focusing on appropriate patient diagnostic work-up after the first episode of obstruction.

Eosinophilic oesophagitis, a chronic inflammatory disorder that leads to fibrosis, is the most common underlying cause of FBO.

While symptoms point to EoE, it requires upper GI endoscopy and biopsies to confirm the diagnosis.

EoE is diagnosed when the number of eosinophils in the oesophageal epithelium is ≥15 per high power field (or ≥15 eos per 0.3 mm^2 or >60 eos/mm^2).

Each year EoE goes undiagnosed, the risk of strictures increases, predisposing patients to recurrent FBO and increasing the need for oesophageal dilatation and the risk of perforation.

FBO presents a unique opportunity to diagnose and establish care for patients with EoE. It is important these patients are not lost to follow-up.

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c

Six biopsies of the oesophagus should be taken (above, below and at the site of obstruction) at the index endoscopy to check for EoE.

When biopsies cannot be obtained during initial FBO treatment, empiric PPI medications should be avoided due to the potential risk of masking EoE at later biopsy.

Again, it is important to emphasise the need for follow-up to patients to help avoid future FBOs and long-term complications.

BPM: beats per minute
CT: computed tomography
CXR: chest x-ray
ENT: ear, nose and throat
EoE: eosinophilic oesophagitis
eos: eosinophils
FBC: full blood count
FBO: food bolus obstruction
GI: gastrointestinal
LFT: liver function tests
OGD: oesophagogastroduodenoscopy
PPI: proton pump inhibitor
U+E: urea and electrolytes

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Supporting references

ASGE Standards of Practice Comittee. Gastrointest Endosc 2011; 73(6): 1085-91.
Attwood SE. Br J Hosp Med (Lond) 2019; 80(3): 132-8.
Attwood S, Epstein J. Frontline Gastroenterol 2021; 12(7): 644-9.
Becq A *et al*. Frontline Gastroenterol 2020; 12(7): 644-70.
Cook D *et al*. Intern Med J 2019; 49(8): 1032-4.
Dhar A *et al*. Gut 2022; doi: 10.1136/gutjnl-2022-327326.
entsho.com/food-bolus (accessed on: 17.09.21).
ESGE Clinical Guideline. Birk M *et al*. Endoscopy 2016; 48(5): 489-96.
Ferrari D *et al*. Eur J Gastroenterol Hepatol 2020; 32(7): 827-31.
Ginsberg GG. Gastroenterol Hepatol (N Y) 2007; 3(2): 85-6.
Hackett R *et al*. Clin Exp Gastroenterol 2021; 14: 237-47.
Hardman J *et al*. Cochrane Database Syst Rev 2020; 2020(5): CD007352.
Hillman L *et al*. Dis Esophagus 2021; 34(11): doab030.
Lucendo AJ *et al*. United European Gastroenterol J 2017; 5(3): 335-58.
Miehlke S *et al*. Therap Adv Gastroenterol 2020; 13: 1756284820927282.
Ntuli Y *et al*. Frontline Gastroenterol 2020; 11(1): 11-5.
Ooi M *et al*. Gastro Med Res 2020; 4(2): 309-13. GMR.000584.
Runge TM *et al*. J Clin Gastroenterol 2017; 51(9): 805-13.
Stubington TJ, Kamani T. Eur Arch Otorhinolaryngol 2021; 278(10): 3613-23.
Warners M *et al*. Am J Gastroenterol 2018; 113(6): 836-44.

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