Foreign Bodies (Ingested) / Food impaction – Summary Clinical Guideline

Ref. No: CG-GASTRO/2023/3634

This clinical guideline applies to Adult Patients only presenting to UHDB

The majority of ingested true foreign bodies will pass spontaneously (80-90%).

Underlying oesophageal pathology is common in patients with food impaction.

In adults, foreign body ingestion occurs more commonly in those with psychiatric disorders or alcohol intoxication. In those with psychiatric disorders, ingestion of multiple foreign objects and repeated episodes are common.

Previous surgery of the gastrointestinal tract and congenital gut malformation increase the risk of impaction and perforation.

Management:
This will depend on the type of object and its level within the gastrointestinal tract.
A patient presenting with ingestion of true foreign bodies (not food impaction) should have a plain chest (CXR) and abdominal x-ray (AXR).
A foreign body at or above the level of cricopharyngeus should be managed by the ENT team.

Requirement for endoscopy:
Emergency endoscopy (ideally within 2hrs, but definitely within 6hrs): Contact on-call endoscopist

- Disc/ button battery within the oesophagus
- Sharp object within the oesophagus e.g. bone, razor blade
- Foreign body causing obstruction e.g. unable to swallow secretions

Urgent (within 24hrs): Keep patient NBM and request to be done on next inpatient endoscopy list

- Magnet within endoscopic reach
- Non-sharp/ Non-battery object (e.g. coin) within the oesophagus that does not pass within 24 hours
- Sharp objects within the stomach/ duodenum (if can be done safely)
- Objects > 6cm in length (e.g. cutlery/ pen) in oesophagus/ stomach

Non-urgent (within 48-72hrs): Allow the patient to eat and drink and allocate to Gastroenterology

- Disc/ button or cylindrical battery within stomach for > 48 hours
- Objects > 2.5cm in the stomach (as unlikely to pass spontaneously)

For objects that do not require endoscopic intervention, most will pass within 4-6 days. If the patient is asymptomatic then an AXR should be performed every 3-4 days to ensure progress through/ passage from the gastrointestinal tract. Objects that otherwise do not require removal, but remain within the stomach after 3-4 weeks should be removed endoscopically if feasible. Surgical removal should be considered if an object is distal to the duodenum, but in same location for >1 week.

Management based on type of object:

Disc/ Button batteries: These require urgent removal from the oesophagus as the narrow lumen of the oesophagus (particularly in children) allows mucosal contact with both poles, leading to necrosis and risk of perforation. Those in the stomach should be removed if they have not passed beyond the pylorus within 48hrs. Once they pass beyond the stomach, 85% are passed from the GI tract within 72hrs. An AXR should be performed every 3-4 days. A decision should be made whether the patient requires admission and whether follow-up AXR can be performed as OP via SDEC.

Cylindrical batteries: Complications are rare and most pass spontaneously. Those in the stomach should be removed if they have not passed beyond the pylorus within 48hrs.

Magnets: Ingestion of 2 magnets or 1 magnet and another metal object can lead to necrosis and perforation due to trapping of the bowel wall between the 2 objects. Even if only one magnet is visible on plain x-ray, it should be assumed there is a second metal object and endoscopic removal of the magnet attempted if within reach of an endoscope. More distal magnets require close observation and surgical review.

Sharp objects e.g. bones, razor blades: These require urgent removal from the oesophagus. Sharp objects in the stomach/ duodenum should be removed within 24hrs if safe to do so. It is recommended that an overtube is used to facilitate safe removal of sharp objects to reduce the risk of complications associated with removal.

Be aware that the sensitivity of plain x-ray for fish bones is only 32%. Consider a CT scan which has a sensitivity of 90-100% and specificity of 93.7-100% if an impacted fish bone is suspected.

Narcotic packages: See guideline: ***Drugs - Concealed Illicit Drugs - Clinical and Legal Guidelines - Derby Sites Only***. Endoscopic removal should not be attempted due to the risk of rupture of contents. Surgical intervention is required if the packages fail to progress or there are signs of obstruction or leakage of contents.

Long objects (> 6cm) e.g cutlery, pens: These are unlikely to pass beyond the duodenum and, therefore, endoscopic removal within the first 24hrs of presentation is recommended.

Food bolus obstruction in the oesophagus

An impacted food bolus in the oesophagus should be removed within 24hrs as the risk of major complications increases x 14, if the endoscopy is performed after 24hrs and the likelihood of successful removal is reduced. The primary method is the push technique. Consider giving intravenous Buscopan 20mg or Glucagon 1mg immediately prior to the endoscopy. An initial attempt should be made to bypass the bolus to assess for any obstructive pathology, as there is underlying pathology in 75% of cases. Placement of the scope down the right hand side of the bolus allows easier passage due to the angulation of the GOJ. If the bolus cannot be pushed into the stomach with gentle pressure, then it should be broken down into smaller pieces using either a snare or grasping forceps, before attempting to push the pieces into the stomach. If this is unsuccessful, then having considered the need for an overtube, the bolus should be retrieved en-bloc or piecemeal via the mouth.

Development of Guideline	Dr Adam Lawson – Consultant Gastroenterologist
Consultation with	
Approved By:	Gastro – Dec 2023 ACD – Dec 2023 Medicine Division – Dec 2023
Review date	December 2026
Key Contact	Dr Adam Lawson