GUIDELINES FOR THE INGESTION OF A FOREIGN BODY BY A CHILD

Incidence: 6 months - 6 years; average 3.1 years.

Children usually swallow radiopaque objects e.g. coins, pins, screws, button batteries or toy parts.

95% pass without difficulty - the risk of perforation is higher with sharp or pointed metallic objects, animal/fish bones, toothpicks etc.

Retained foreign bodies may cause GI mucosal erosion, abrasion, or perforation.

Development of abdominal pain, distension or profuse bleeding is an indication to remove the FB surgically.

Consider deliberate self harm, or non-accidental injury.

Investigation/Diagnosis

- CXR (include neck)
- AXR (if suspect battery or sharp object)

Ba swallow - if suspected object is translucent e.g. aluminium, wood, plastics, some bones (fish & chicken), and organic objects.

If an object is orientated in the frontal plane, it is probably in the oesophagus.

If the object is in the sagittal plane, suspect it is in the airway.

Oesophageal FB

Most common site of impaction (70%) at the thoracic inlet-area between the clavicles on x-ray (15%) lodge at the mid oesophagus (15%) at the lower oesophageal sphinctre

Impaction is more likely with pre-existing oesophageal pathology.
**Treatment Options**

Detect and treat airway compromise - O2, suction till urgent endoscopy arranged

Treatment will depend on physical properties of the object, the length of time since ingestion, and any associated pathology.

If an object is in the oesophagus, **and is causing no difficulties**, it may be observed for 24hrs.

Lateral chest x-ray is needed to precisely locate a foreign body in the oesophagus and to ensure that only one FB is present.

After 24hrs it should be removed endoscopically

**Rest of GIT**

85% of all FBs pass spontaneously through rectum despite nature or length.

If object has reached the stomach in a child with a normal GI tract, complications are unlikely, though can occasionally impact at the ileocaecal valve.

Repeated x-rays are not necessary if a blunt foreign body is below the diaphragm.

Surgery required in less than 2%.

**Sharp Objects**

The majority that enter the stomach will pass through the remaining GI tract without incident.

Risk of complication - 35%.

Follow the patient up with daily x-rays, and if it fails to progress for 3 consecutive days, surgical intervention should be considered.

The patient should be instructed to return to A&E if they experience abdominal pain, vomiting, persistent fever, haematemesis or melaena.

Ref:  
www.aic.cuhk.edu.hk/web8/oesophageal_foreign_bodies.htm  
www.vnhs.org/GMO/ClinicalSection/75PedsSwallowedFB.html  
Gastrointestinal Endoscopy Volume 55,NO.7,2002: p802  
Pediatric Surgery Update Vol NO 05 Nov 2001  
European journal of Pediatrics 2001 Aug, VOL: 160 (8),p 468-72  
**Button Battery Ingestion**

80% < 5yrs

Contain strong base and heavy metals.

Erodes through oesophagus

Requires immediate removal if in oesophagus.

Antibiotic if there is significant inflammation

- Please see the Trust antibiotic guidelines

Careful observation if past oesophagus.

Majority will pass through without incident though X-rays should be repeated after 48hrs to ensure battery is not impacted

Batteries that have passed beyond the oesophagus need not be retrieved unless the patient manifests signs of or symptoms of injury to the GI tract, or a large-diameter battery (greater than 20mm in diameter) remains in the stomach beyond 48 hours as determined by a repeat radiograph.

Once past the duodenum, 85% are passed within 72 hours.

*Ref: Gastrointestinal Endoscopy Volume 55, NO.7,2002*

[www.spib.axl.co.uk/Toxbase/Poisons%20infromation/B/Battery%(Disc%20Or%20Button%20...](www.spib.axl.co.uk/Toxbase/Poisons%20infromation/B/Battery%(Disc%20Or%20Button%20...)

[www.vnh.org/GMO/ClinicalSection/75PedsSwallowedFB.html](www.vnh.org/GMO/ClinicalSection/75PedsSwallowedFB.html)

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