

Management of Ingested Foreign Bodies – Inpatient

Guideline Reference	G421
Version Number	1.1
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Date of Last Changes (This Version)	10 April 2024
Date of Next Review	April 2027
Ratified by: Date	Physical Health and Medical Devices Group 10 April 2024

VALIDITY – Guidelines should be accessed via the Trust intranet to ensure the current version is used.

CHANGE RECORD

Version	Date	Change details
1.0	12 Oct 22	New SOP. Approved at PHMD (12/10/22).
1.1	10 April 2024	Reviewed. Approved at Physical Health and Medical Devices Group (10 April 2024).

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1. INTRODUCTION

The ingestion of a foreign body or multiple foreign bodies is a common presenting complaint in Mental Health. Ingested foreign bodies rarely cause problems; almost 80% of patients pass the foreign body – without intervention – in seven days (only 1% require surgical removal). However, occasionally foreign bodies can cause significant morbidity (for example, oesophageal rupture) and 1% require surgical removal.

The presenting symptoms and outcomes of an ingested foreign body is highly dependent on the swallowed object, and for this reason, the guidance for hazardous and non-hazardous foreign body ingestion has been divided accordingly.

2. SCOPE

This guidance has been produced to enable all clinicians to use best practice, based on current evidence, in the initial management of an infant or child who has ingested a foreign body.

3. PROCEDURES

Foreign body ingestion most often occurs when a non-edible object is swallowed and enters the digestive tract. However, the condition can also refer to edible items that become lodged before reaching the stomach. It can be a medical emergency, depending on the object swallowed.

Around 80 percent of foreign body ingestions pass through the gastrointestinal tract without causing any symptoms or complications at all. Items that are small and rounded, such as coins, buttons and marbles, are the least likely to cause complications when swallowed. However, if the foreign body that has been swallowed is large, sharp or toxic, urgent medical intervention can be required.

Objects, which are more likely to cause complications when ingested, include:

- Button batteries
- 'Super strong' magnets
- Sharp objects
- Very large objects
- Filled balloons

Symptoms relating to foreign body ingestion tend to vary, depending on the object swallowed and exactly where in the digestive tract it is. Signs that a foreign body has been swallowed and is causing a problem may include pain in the throat or chest, a lump in the throat or chest, and difficulty swallowing.

Treatment depends on the object swallowed, where in the digestive tract it is and whether or not the object is likely to pass through the body of its own accord. Although some objects can cause severe consequences, the majority of people who swallow a foreign body will recover without complications.

Special considerations for ingestion of button batteries and super strong magnet ingestion



Suspected ingestion of a super strong magnet or button battery should always be treated as a medical emergency.

Super Strong Magnets:

Small powerful magnets, also known as neodymium or 'super strong' rare-earth magnets, are sold as toys, decorative items and fake piercings, and are becoming increasingly popular. Unlike traditional magnets, these 'super strong' magnets are small in volume but powerful in magnetism and easily swallowed.

If more than one 'super strong' magnet is swallowed separately, or a 'super strong' magnet is swallowed with a metallic object, they can be strongly attracted together from different parts of the intestines. This compression of bowel tissue can cause necrosis and perforation of the intestines and/or blood vessels within hours. Therefore, urgent assessment and treatment is vital

[RCEM BPC Ingestion of Super Strong Magnets in Children 170521.pdf](#)

National Patient Safety Alert [Nat/PSA-Alert-Magnets](#)

Practice Note [PN 2021-13 - Super Strong Magnets](#)

Button Battery:

All individuals who have swallowed a battery or if there is a suspicion of swallowing a button battery (round metal object that wasn't clearly a coin) or if there is any uncertainty about the nature of the object ingested, should be treated as a medical emergency.

Ingestion of a plastic-coated battery (e.g., AA, AAA) is not necessarily a medical emergency unless the individual is struggling to breath or is exhibiting the symptoms listed above.

It is essential to diagnose and remove button batteries in the oesophagus immediately as battery burns can occur within two hours of ingestion. Once the button battery is in the stomach, the individual could be discharged if they are asymptomatic. Depending on the size of the battery and the age of the individual, there may be a need for the patient to return for a follow up XR. This is to ensure that the battery is progressing and not simply fragmenting in the stomach/adhering to the gastric mucosa.

Link to Practice note [PN 2017-40 - Batteries](#)

Symptoms of foreign body ingestion

If the foreign body that has been ingested is small, blunt and non-toxic, it may pass through the entire digestive tract without causing any health problems or symptoms. Such objects generally pass through the gastrointestinal system within four to six days, although the precise time frame can depend on additional factors, such as the person's metabolism, as well as the item swallowed.

If the object is large or sharp, it might get stuck in a specific area of the digestive tract, such as the:

- Oesophagus, the muscular tube that carries food and drink from the throat down to the stomach
- Stomach, the internal organ that uses enzymes and acids to help break food down into smaller pieces
- Small and large intestines, the long tubes that absorb the nutrients and water from food, before turning all remaining waste material into stool
- Rectum, the final section of the large intestine where the body stores stool before defecation

Good to know: The digestive tract covers a large area of the human body. Therefore, symptoms of a foreign body ingestion depend not only on what has been ingested, but also where the foreign object is currently located.

When a foreign body ingestion affects the oesophagus, symptoms commonly include:

- Difficulty swallowing, also known as dysphagia
- Sensation of a lump in the throat, neck or chest, if the object is blunt
- Pain in the throat, neck or chest, if the object is sharp
- Gagging, retching and vomiting
- Wheezing and coughing
- Drooling or spitting due to excess saliva in the mouth
- Blood-stained saliva
- Loss of appetite

Symptoms of a foreign body in the stomach or intestines:

If the foreign body passes through the oesophagus, but then gets stuck in the stomach or intestines, the following symptoms may be present:

- Pain or cramping in the abdomen
- Abdominal swelling or bloating
- Loss of appetite
- Nausea
- Vomiting
- Fever
- Blood in the stool
- Diarrhoea or constipation

Symptoms of a foreign body in the rectum

If a small, blunt foreign body reaches the rectum without issue, it will often be passed out in the stool without complication. However, if it is sharp and pierces the rectum, symptoms may include:

- Sharp pain during bowel movements
- Blood in the stool

Causes of foreign body ingestion:

The most common cause of a foreign body ingestion is when a person unintentionally or unknowingly swallows an object which is either too large, sharp or toxic to pass through the digestive tract without causing potential harm.

Because they often use their mouth to explore the world around them and aren't aware of the related risks, children are more likely to experience this condition than adults. Foreign body

ingestion can occur at any age but is most often seen in children aged between six months and four years old.

On occasion, foreign bodies are ingested deliberately. Such behaviour is often the result of a mental health issue, learning impairment, a means of protest or to hide an object, e.g. drug smuggling.

Edible foreign body ingestion

Edible, as well as non-edible, objects can be classed as a foreign body. A food-related obstruction typically occurs in the oesophagus and can be caused by a number of factors, such as:

- Accidentally swallowing food before it has been sufficiently chewed
- Underestimating the size of the food
- Pre-existing medical conditions that may narrow the oesophagus, such as oesophageal cancer and laryngeal cancer

Once an edible object reaches the stomach, it will usually be broken down into smaller pieces through the body's normal digestive processes. Therefore, edible obstructions most often affect the oesophagus, whereas swallowing a non-edible item can affect any area of the digestive tract.

It is more typical for adults to experience obstructions due to food ingestion, whereas children are more likely to experience problems due to ingesting non-edible objects.

Impaction

The term impaction is the state of something becoming lodged or stuck in a bodily passage. In foreign body ingestion the affected passage is usually the oesophagus, but objects can also become stuck in the stomach, intestines or rectum. Impaction is most likely to occur with objects that are particularly large, sharp or unusually shaped.

Impaction is the most common cause of complications in foreign body ingestions. Typical symptoms of an object becoming stuck in the digestive tract have already been covered in the Symptoms section above. However, more severe complications of foreign body impaction include:

- Difficulty breathing, particularly when the object is blocking the oesophagus
- Deterioration of the soft tissues around the impacted object, known as necrosis
- Abscesses forming in the throat, oesophagus or any soft tissue
- Narrowing of the oesophagus, known as oesophageal stricture, which can lead to choking or difficulty breathing

Perforation

The term perforation refers to a hole made in a part of the body. This can occur in a foreign body ingestion when the swallowed object is sharp and pierces the internal walls of the digestive tract. Possible complications include:

- Soft tissue infection, potentially leading to sepsis
- Mediastinitis, an inflammation in the chest cavity
- Peritonitis, an inflammation in the abdominal cavity
- Pneumothorax, a collapsed lung
- Internal bleeding

Toxic substances

Complications may also occur when the swallowed foreign body contains toxic chemicals or substances that can be dangerous when consumed. Generally, such complications are associated with objects such as batteries, coins or drugs. Possible complications include:

- Deterioration of the soft tissues around the object, known as necrosis
- Internal burns
- Formation of a fistula, which is an abnormal connection between two hollow spaces in the body. In foreign body ingestion, a tracheoesophageal fistula is most likely, in which the trachea and oesophagus tubes, which are not usually joined, become connected
- Metal poisoning
- Allergic reaction to the ingested object, such as a nickel allergy

Severe complications due to a foreign body ingestion are rare but can occur. Although impaction, perforation and toxic substances are known causes of medical complications, the precise symptoms displayed can be extremely variable.

4. REFERENCES/DEFINITIONS

Medscape. "Paediatric Foreign Body Ingestion Clinical Presentation." 4 October 2018
[RCEM BPC Ingestion of Super Strong Magnets in Children 170521.pdf](#)

5. RELEVANT TRUST POLICIES/PROCEDURES/PROTOCOLS/GUIDELINES

[Deteriorating Patient Policy.pdf \(humber.nhs.uk\)](#) and [Deteriorating Patient Protocol.pdf \(humber.nhs.uk\)](#)
[Resuscitation Policy.pdf \(humber.nhs.uk\)](#)

APPENDIX 1: Management of Ingested Foreign Bodies

