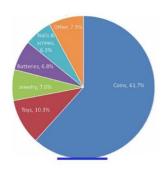


## Indian Association of Pediatric Surgeons Patient Information Sheet

# FOREIGN BODY IN THE GASTRO-INTESTINAL TRACT



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### What is foreign body in the gastro-intestinal tract? Any object other than food, when swallowed, becomes

a foreign body for the gastro-intestinal tract. This is most commonly seen in babies, usually after 6 months of age when they start crawling and explore their surroundings. The curiosity to discover the texture of an object by taking it to the lips is a primitive behaviour commonly seen in other primates. Humans also seem to have retained that trait, but in doing so,

most often end up either ingesting or aspirating the object.

### What causes this problem and how common is it? The natural tendency of all babies to keep objects in

The natural tendency of all babies to keep objects in the mouth is generally how the problem starts. Babies are naturally curious about the objects around them which they desire to touch, hold and even taste them. This, coupled with the incompletely developed oro-motor and swallowing reflexes, prompts the babies to further ingest the object.

Sometimes, in older children, it can even be voluntary intake.

The incidence of this condition is unknown as there is no systematic study due to the nature of the condition. It can only be stated that it is a very common problem and a pediatric surgeon may see at least 5-10 cases per year.

#### What are the symptoms?

The symptoms depend on various factors like - the nature of the object ingested and the location the object gets lodged and embedded.

- •Baby can be completely asymptomatic.
- Coughing/retching when the foreign object gets lodged in the back of the throat.
- Vomiting could be either due to the efforts by the baby to throw up the object impacted in the throat or because the object could be causing obstruction within the bowel.
- the object could be causing obstruction within the bowel.
   Abdominal distension and pain if the object is blocking the intestines or has pierced the bowel wall with the resultant leakage of bowel contents into the abdominal
  - cavity.
    •Fast breathing/ difficulty breathing if the object has pierced the food pipe.

#### When to see your doctor?

- •If the ingested object is sharp or has ragged edges like pins, nails, sharp toys.
- •Ingestion of button battery.
- •Inert volume expanders like jellies, jelly-like balls, cotton, sponges these can expand in volume after mixing with bowel juices and cause obstruction.
- •If the baby develops any of the symptoms mentioned above, irrespective of the nature of the object ingested.
- •More than 48hours of ingestion even if baby is passing stools normally, but the object is not passed in stools.

#### How is it diagnosed?

The condition is self explanatory if someone has actually witnessed the baby ingesting a non edible object. In any case -

X-ray neck-chest-abdomen - is useful in locating the position of the object and its effects on the surrounding tissues. The limitation of this modality is that, it may not reveal non-metallic objects.

Ultrasound examination of the abdomen - is helpful to confirm/refute a foreign body in-situ, both metallic and non-metallic. It is not of much use if the foreign object is in the neck or is impacted in the food pipe.

Generally, a combination of both x-ray and ultrasound is needed. These two studies are all that is required in more than 98% of the cases. Rarely a CT scan of the abdomen may have to be done when the position of the foreign body is notclear by x-ray and ultrasound.

#### What are the treatments available?

- Endoscopic retrieval of the foreign body
- •Laparotomy and retrieval of the foreign body.
- Rarely, thoracotomy if there is esophageal perforation.

#### Are there any alternatives to surgery ?

Most ingested foreign objects are excreted in the feces. Laxatives and stool softeners are all that is required in majority

of the instances. Interventions are required only if the child is symptomatic or ingestion of sharp objects or button batteries.

#### What does the operation involve?

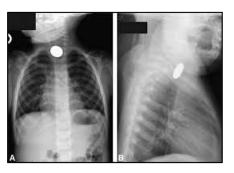
The type of operation depends on the location of the foreign object. Most commonly performed procedure is endoscopy and retrieval of foreign body. If the object cannot be accessed by endoscope, then, laparotomy and opening the bowel (enterotomy) with retrieval of the foreign body, followed by anastomosis and closure of the abdomen. The procedure is done under general anesthesia.

### What are the possible complications / what happens after the operation ?

Following laparotomy, the child may have infection of the operated site, prolonged ileus (bowel takes a long time to resume its functioning), rarely sepsis, in the immediate post operative period. Development of sub-acute Intestinal obstruction due bowel adhesions may occur anytime in the child's future.

#### What is the outlook or future of these children?

The prognosis of children who undergo surgery is no different from other normal kids, except for the possibility of adhesive intestinal obstruction that may/may not happen.



Ingested coins seen in the food pipe on x-ray