Gastrointestinal Foreign Bodies and Bezoars (intestinal foreign bodies)

Patient and family information, brought to you by the Education Committee of APSA

For objects in the esophagus, please see esophageal foreign bodies, injury, and trauma.

Overview - "What is it?"

Children place objects in their mouths and accidentally or intentionally swallow them. Objects may be stuck in any part of the digestive tract from the throat to the intestines, causing blockage. Some items may also cause direct injury to the intestine; for instance, disc batteries can damage the esophagus, magnets may create holes in the intestine and sharp objects can tear surrounding tissue. A **bezoar** is a solid mass of indigestible material that is usually stuck in the stomach. These materials include vegetable matter, fruits, vegetables, seeds, or hair. A bezoar can occupy most of the inside of the stomach and may even extend to the small intestine.

Ingestion of objects most commonly happens in toddlers, as they are exploring their surroundings and often place objects into their mouths.

In adolescents who have meat stuck in their esophagus, the diagnosis of eosinophilic esophagitis should be ruled out.

Signs and Symptoms - "What symptoms will my child have?"

Early signs: The patient may experience chest pain when an object is stuck in the esophagus. If the flow of saliva is obstructed, the child may drool. If there are indigestible material in the stomach, vomiting can be a symptom.

Later signs/symptoms: If the bezoar in the stomach is large, the mass may be felt on abdominal exam, especially if the child is thin. The child may have belly pain and get full easily. Obstruction or blockage of the intestine can result in vomiting of bile (green or yellow in color).

Diagnosis - "What tests are done to find out what my child has?"

Labs and tests: Metallic objects are visible on plain X-rays and may indicate their location. Depending on the symptoms of the patient, a computed tomography (CT scan) may be needed. This specialized X-ray may give a better answer regarding the type of object and the level of obstruction or any other problems that the object has caused.

Conditions that mimic this condition: Some infections of the throat (pharyngitis), neck and intestines (gastroenteritis) may simulate a foreign body ingestion. Reflux can also cause similar problems. Intestinal blockage caused by other reasons (inflammation, scarring) can have the same symptoms.

Treatment - "What will be done to make my child better?"

Medicine: Pain medication may be given if your child is uncomfortable. If the child requires surgery, medications to treat infection (antibiotics) may be necessary.

Surgery: The type of procedure varies depending on the type of object, location of the object, and what problems the object has caused.

Small objects in the stomach may be retrieved by endoscopy. Endoscopy is when a flexible telescope is placed in the mouth and then gently pushed through the esophagus, stomach and part of the small intestine. The doctor can look at evidence of damage or injury directly. If there is an object stuck in the stomach, it is removed during this procedure. Most coins will pass through the intestinal tract once they are in the stomach and usually do not require endoscopic retrieval. However, open safety pins, objects with sharp edges and items that fail to go through the stomach will need to be removed.

Your child may require an operation if:

1. Endoscopy fails to retrieve the object from the stomach
2. The object migrated to the intestine and is stuck
3. The object has caused other complications.

The operation can be done the traditional way ("open", or larger, incision) or laparoscopic.

Open: The operation is done through a large incision on the belly, usually up-and-down (vertical).

Laparoscopy: In laparoscopic surgery, several small cuts (incisions) are made. Through one of the cuts, a video camera is placed. The surgery itself is done using small instruments placed through the other incisions.

Your surgeon will discuss the surgical approach based on the diagnosis.

Preoperative preparation: Your child will not be allowed to eat prior to surgery. If the child requires surgery, medications to treat infection (antibiotics) may be given.

Postoperative care: Depending on what is done, your child may be sent home shortly after the foreign body is removed (if no cut was needed) or they may need to stay in for several days to allow the cuts to heal and the intestines to start working.

Risks/Benefits

Risks: Endoscopy may cause injury of the esophagus. The child may aspirate saliva or contents of the stomach into the lungs. Risks of surgery include bleeding, infection and injury to organs.

Benefits: Removal of a foreign body often gives immediate relief of symptoms. Endoscopy can show how bad the injury can be. If surgery is required, removal of the object and dealing with complications will be accomplished.

Home Care - "What do I need to do once my child goes home?"

Diet: Your child should be able to resume a general diet.

Activity: If endoscopy was performed, the child should be able to resume normal activity right away. If the patient had the procedure with small incisions (laparoscopic), they can return to normal activity in 1-2 weeks. If the surgery is done through a big incision, then they can return to normal activities in six weeks, with a weight restriction of 10 pounds up until that time.

Wound care: The patient can shower in three days but may want to wait 5-7 days after surgery before soaking the wound.

Medicines: Medication for pain such as acetaminophen (Tylenol®) or ibuprofen (Motrin® or Advil®) or something stronger like a narcotic may be needed to relieve pain for a few days after surgery. Stool softeners and laxatives are needed to help regular stooling after surgery, especially if narcotics are still needed for pain.

What to call the doctor for: After discharge from surgery, symptoms that may indicate infection such as fevers, wound redness and discharge should be addressed. If there is a lot vomiting, chronic pain with no relief from medications, problems stooling, contact the surgeon.

Follow-up care: If your child did not need surgery to resolve the problem, it is unlikely that your child will need to be seen by the surgeon again. If a cut was made, your surgeon may want to see your child 1-2 weeks after surgery to check the wound.

Long Term Outcomes - “Are there future conditions to worry about?”

Generally, the outcomes are excellent, as most are removed without incisions. If incisions are needed, the wounds usually heal very well with no long-term issues. The main issue to watch for is scar tissue that might form on the bowel, which may lead to the bowels being unable to pass materials forward (obstruction). Your child will most commonly present with vomiting green (bilious) material. If this happens, your child will need to be seen. If your child ingested materials such as hair, psychosocial issues will need to be addressed to prevent this from happening again. This will most likely have been arranged before your child left hospital.

Updated: 2019
Author: Kenneth W. Gow, MD
Editors: Patricia Lange, MD; Marjorie J. Arca, MD; Janice Taylor, MD