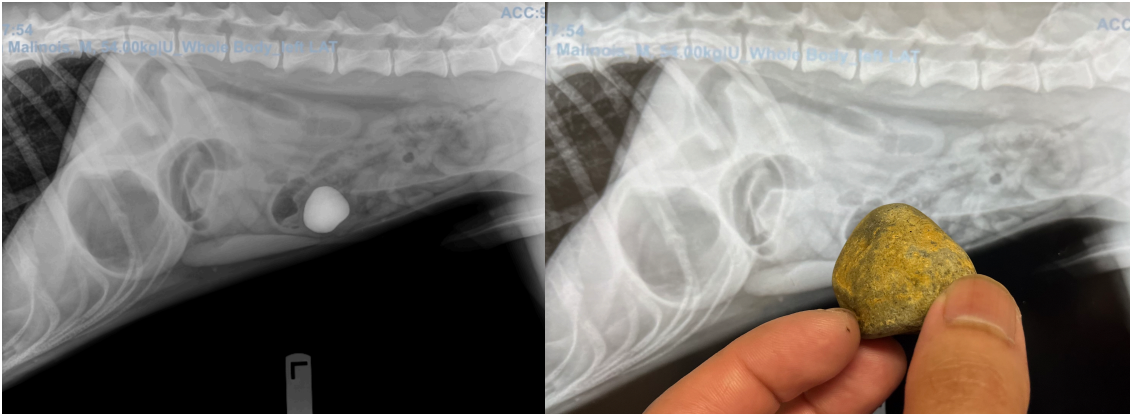


# GASTROINTESTINAL FOREIGN (GI) BODIES

Associated Terms:

Foreign Body, Intestinal Resection & Anastomosis, Enterotomy, Gastrotomy, Intestinal Perforation, Bowel Obstruction, Intestinal Obstruction, Linear Gastrointestinal Foreign Body, GI Foreign Body



## OVERVIEW

Foreign bodies occur when pets consume items that will NOT readily pass through their gastrointestinal tract. These items may be strings, a pet's or child's toy, leashes, clothing, sticks, or any other item that fails to pass, including human food products such as bones or trash. The problems that are caused vary with the:

- duration that the foreign body has been present
- location of the foreign body
- degree of obstruction that is caused
- problems associated with the material of the foreign body

Some ingested items, such as older pennies or lead material, can cause systemic toxicities while others may cause regional damage to the intestinal tract itself due to compression or obstruction.

Gastrointestinal foreign bodies, especially strings, can often lead to perforation of the intestinal tract & spillage of intestinal contents into the abdomen. **This condition quickly leads to inflammation of the abdominal lining (peritonitis) & allows bacterial proliferation & contamination (sepsis)**, which are both life-threatening complications. While some small

foreign bodies will pass, many will become lodged along the gastrointestinal tract & cause discomfort & make your pet sick. Some foreign bodies located in the stomach may be retrieved with the use of an endoscope; however, most require surgical abdominal exploration & removal. Occasionally, foreign bodies will become lodged in the esophagus at the base of the heart or at the diaphragm, which may require thoracic (chest) surgery.

## **SIGNS & SYMPTOMS**

Clinical signs can vary significantly with the degree of obstruction, location, duration, & type of foreign body. Commonly noted signs include:

- vomiting
- anorexia (loss of appetite)
- abdominal pain
- dehydration
- diarrhea (with or without presence of blood)

In cases of linear foreign bodies, a string may be observed wrapped around the base of the tongue or coming out of the anus.

Intestinal obstruction, protracted vomiting, & diarrhea can cause significant metabolic changes within the body. Additionally, if the foreign body has perforated the intestinal wall & entered the thoracic or abdominal cavities, profound complications may follow. These may include peritonitis, sepsis, & death. **Many foreign bodies are made of materials that are potentially toxic when absorbed.** Lead & zinc are good examples that when consumed may lead to profound systemic disease if enough is absorbed.

## DIAGNOSTICS

Your primary care veterinarian will likely recommend initial blood work that includes a complete blood count (CBC), serum chemistry, & a urinalysis. These combined will help to rule out other causes for your pet's symptoms. Abdominal, & occasionally thoracic, radiographs are regularly performed (Figures 2 & 3). Positive contrast radiographs (using barium to highlight the inside of the stomach & intestines) may be performed when routine radiographs fail to show the cause for the clinical signs. Abdominal ultrasound can be very helpful in identifying gastrointestinal foreign bodies.

## TREATMENT

Surgical intervention is NOT always required with gastrointestinal foreign bodies. Occasionally, the item ingested is small & smooth enough to pass through the gastrointestinal tract without causing damage or becoming lodged. Additionally, some foreign bodies may become lodged in the upper gastrointestinal tract (mouth, esophagus, & stomach) & may be removed with the use of a flexible endoscope. Frequently, conservative management & endoscopy fail to provide relief & surgical exploration is warranted.

Esophageal foreign bodies require thoracic (chest) surgery to gain access for removal. **Most gastrointestinal foreign bodies become lodged within the stomach or intestines & require a gastrotomy (opening the stomach) or enterotomy (opening the intestine).** Once the item has been removed, the gastrointestinal tract is closed. Many linear foreign bodies & completely obstructed intestines are damaged severely enough that multiple enterotomies may need to be performed. If a section of bowel is irreversibly damaged, an intestinal resection & anastomosis (procedure to remove a segment of the intestines & reattach the healthy ends) will be required. The decision of which procedure to perform is determined by the veterinary surgeon when all the intestines & other abdominal organs have been evaluated.

## AFTERCARE & OUTCOME

Many pets have a degree of metabolic illness secondary to the obstruction caused by the foreign body & will need to be treated to return them to normal. Additionally, pets will need to be monitored to ensure that they return to eating & that their clinical signs resolve. Finally, evaluation for presence of intestinal or stomach leakage will need to be done for 3–5 days postoperatively. Intravenous fluids & antibiotics may be given as needed.

**Most uncomplicated gastrointestinal foreign bodies carry an excellent prognosis.** Many pets return to eating within 1–2 days & clinical signs resolve. The prognosis worsens if there is an increased duration of time until the patient is seen or the obstruction is detected. The location of the foreign body also may indicate a worse scenario. Linear foreign bodies can carry a good prognosis if they are resolved early in the course of the disease. As these become prolonged, the risk for perforation increases. Perforation, subsequent peritonitis & sepsis carry a guarded prognosis & will require additional operative & postoperative care.

The leakage of intestinal contents into the abdomen & subsequent sepsis & peritonitis is always a risk during intestinal surgery, although meticulous care & adequate flushing of the abdomen usually prevent these. Dehiscence can occur at the site of bowel surgery, or at the closure of the abdominal wall.

NOICTA: 3 day long lasting slow release bupivacaine intra-OP surgery injection was given to help with local surgical. Pain medications should be tailor to the lowest effective amount especially for the first 3 days then taper the dosage up as indicated. Observe for vocalization, biting or licking at the surgical site, anxiety &/or lethargy.

A Primapore adhesive band aid was applied to the surgical site with antibiotic ointment to help prevent self-trauma & infection. Skin glue was applied to the edges to allow the Primapore to adhere to the skin for about 5-7 days. Allow the Primapore to fall off naturally unless it is dirty or soil or wet then please remove earlier; however, by forcing the adhesive off early it may cause skin irritation or inflammation.

E-Collar should always be on for a minimal of 10-14 days until the skin incision is completely healed. The only time that the E-Collar may come off is during direct adult supervision otherwise please keep the E-Collar on to prevent self-trauma to the incision site & infection.

Activity restriction is recommended for minimal of 10-14 days until the skin incision is completely healed. Absolutely no running, jumping, jogging, playing, or using stairs what so ever. Increase activity may increase the chances of post-operative incision complications such as seroma (fluid filled pocket at the incision site), increase incisional inflammation, incision wound opening, delayed incision site healing & infection.

Medications will be discussed with your primary veterinarian & staff. Please make sure you understand what the medications are, how to give, how frequent to give & the potential side effects.

Diet options after this surgical procedure include prescription GI diet. Ok to give 1/4 to 1/2 the amount of recommended prescription GI diet the night of surgery is ok (~4-6 hours after surgery) if your pet is willing to eat. It is important that we make sure to feed your pet to allow for proper nutrition for the GI tract cells to heal. It is a good prognosis if your pet eats well & keep the food down without vomiting or diarrhea.

If possible 24 hour aftercare is always recommended in case if the recovery after surgery is not smooth or routine. Please if 24 hour aftercare is NOT possible then make sure to know what signs to look for while your pet is in your care that you have map out the nearest location of a 24 hour veterinary ER hospital / clinic & their phone number.

If you have any questions, please feel free to ask your primary veterinarian &/or veterinary surgeon.

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