CONDITION

Bezoar

Learn what a bezoar is, why it forms in the digestive tract, possible symptoms and complications, and how doctors diagnose and treat it.

WHAT IT IS
Firm collection of trapped digestive material

BODY SYSTEM
Digestive

MAIN SYMPTOMS
Upper abdominal pain, early fullness, nausea, vomiting

WHAT CAUSES IT
Hard-to-digest material or slowed digestive movement

HOW IT IS DIAGNOSED
Upper endoscopy or CT scan

MAIN TREATMENT
Endoscopic removal, sometimes surgery

CAN IT BE CURED?
Yes, the mass can be removed

IS IT AN EMERGENCY?
Sometimes, vomiting blood or inability to pass stool or gas

LONG-TERM OUTLOOK
Recurrence possible, with serious blockage complications

Overview

A bezoar is a firm collection of material that becomes trapped in the digestive tract. Most bezoars form in the stomach, but some develop or move into the small intestine. They can be small and cause no problems, or they can grow large enough to interfere with digestion.

Bezoars are grouped by what they contain:

A bezoar matters because it may cause ongoing stomach symptoms, ulcers, bleeding, or a blockage. However, not every bezoar causes symptoms or requires the same treatment. Its size, location, contents, and effect on digestion help determine what care is appropriate.

Bezoars are different from gallstones and kidney stones. They are also different from food that is temporarily present in the stomach after a meal. A true bezoar is a compact mass that

remains in the digestive tract.

- Phytobezoars are made of plant fibers that are difficult to digest, such as cellulose. They are the most common type.
- Trichobezoars are made of swallowed hair. They occur most often in people who repeatedly pull out and eat their hair.
- Pharmacobezoars are collections of medicines or pill material that do not break down normally.
- Lactobezoars are made of thickened milk proteins and mucus. They are uncommon and mainly affect infants, particularly some premature infants.

Symptoms

Small bezoars may be found by chance during a test performed for another reason. When symptoms occur, they may develop gradually and can resemble other digestive conditions.

Possible symptoms include:

Symptoms may be related to delayed stomach emptying. This means food and other material remain in the stomach longer than expected.

A bezoar can sometimes damage the stomach lining and cause an ulcer. Signs of bleeding may include black, sticky stools or vomit that contains blood or looks like coffee grounds.

A bezoar that blocks the stomach outlet or intestine may cause worsening cramping, repeated vomiting, abdominal swelling, and difficulty passing stool or gas.

Seek urgent medical care for repeated vomiting, increasing abdominal pain, marked abdominal swelling, inability to keep fluids down, or inability to pass stool or gas.

Seek emergency care for vomiting blood, black or bloody stools, fainting, confusion, severe or sudden abdominal pain, or symptoms of shock such as pale, clammy skin and severe weakness.

Milder fullness, nausea, or upper abdominal discomfort without emergency features can usually be discussed through routine medical care. These symptoms have many possible causes, so they do not confirm that a bezoar is present.

- Pain or discomfort in the upper abdomen
- Feeling full after eating a small amount
- Ongoing fullness or bloating

- Nausea or vomiting
- Reduced appetite
- Unintentional weight loss
- Indigestion or a burning sensation in the upper abdomen
- Bad breath in some cases

Causes and risk factors

A bezoar forms when material does not pass through the stomach or intestine normally. This may happen because the material is hard to digest, the stomach does not grind it effectively, or movement through the digestive tract is slowed.

Previous stomach surgery is an important risk factor. Some operations reduce stomach size, lower stomach acid, or change the muscles and nerves involved in digestion. These changes may make it harder to break down food and move it into the small intestine.

Other factors that may increase risk include:

Persimmons have been linked with a particularly firm type of phytobezoar because their tannins and plant fibers can form a hardened mass. Eating a fibrous food does not usually cause a bezoar by itself. Most affected people have another factor that makes digestion or stomach emptying less effective.

Trichobezoars may occur with trichotillomania , a condition involving repeated urges to pull out hair, and trichophagia , which means eating hair. These behaviors are health conditions rather than personal failings. Mental health care can be an important part of treatment and prevention.

Pharmacobezoars are uncommon. They may involve medicines designed to release slowly, medicines with coatings that resist digestion, or substances that swell after being swallowed. The specific risks depend on the product and the person's digestive function.

- Gastroparesis: The stomach empties more slowly than normal. Diabetes is one possible cause, although gastroparesis has several causes.
- Poor chewing: Dental problems, missing teeth, or dentures that do not fit well may allow larger pieces of food to reach the stomach.
- Large amounts of difficult-to-digest plant material: Certain fibrous foods can contribute, especially in someone who already has slow stomach emptying or a history of stomach surgery.

- Low stomach acid: Acid helps soften and break down food.
- Narrowing in the digestive tract: Scar tissue, inflammation, or another structural problem can prevent material from passing.
- Medicines that slow digestive movement: Some medicines can delay stomach emptying. Medicine should not be stopped without advice from a healthcare professional.
- Swallowing hair or other nonfood material: Repeated hair swallowing can produce a trichobezoar.

Diagnosis

A clinician may ask about symptoms, eating patterns, dental health, medicines, past stomach or intestinal surgery, diabetes, and other conditions that affect digestion. Questions about hair pulling or swallowing should be handled privately and without judgment.

The abdomen may be examined for tenderness, swelling, or a mass. A physical examination alone usually cannot confirm a bezoar.

An upper endoscopy is often the most useful test for a suspected stomach bezoar. During this procedure, a clinician passes a thin, flexible tube with a camera through the mouth and into the stomach. Sedation is commonly used. Endoscopy allows the clinician to see the mass, identify its likely contents, look for ulcers or bleeding, and sometimes treat the bezoar during the same procedure.

A CT scan may be used when an intestinal blockage or other complication is suspected. It can show where a mass is located and whether the bowel is enlarged or injured. Abdominal X-rays may help identify a blockage, although they may not show the bezoar itself. Ultrasound is useful in selected situations.

Blood tests do not diagnose a bezoar directly. They may be used to check for dehydration, anemia from blood loss, infection, or changes in body salts caused by vomiting.

Doctors also consider other explanations for the symptoms, including peptic ulcer disease, inflammation of the stomach, gallbladder disease, tumors, and disorders of stomach emptying. If delayed emptying is suspected, additional testing may be considered after any blockage has been addressed.

Treatment and management

Treatment depends on the type, size, and location of the bezoar; the symptoms it causes; and

whether complications are present. Observation may be reasonable for selected small bezoars that are not causing symptoms, but this decision requires clinical follow-up.

Some phytobezoars can be softened or dissolved. Published medical reports describe using certain enzyme solutions or carbonated beverages for selected stomach phytobezoars. These approaches do not work for every type and may carry risks, including movement of fragments into the intestine. They should be directed by a healthcare professional rather than attempted at home.

Endoscopy is commonly used for a bezoar that needs removal. Tools passed through the endoscope can break the mass into smaller pieces, retrieve the pieces, or both. More than one procedure may be needed for a large or hard bezoar. Clinicians try to remove fragments or confirm that they can pass safely.

Trichobezoars are difficult to dissolve and may be too dense or large for complete endoscopic removal. Surgery may be needed, especially when a hair mass extends from the stomach into the intestine. Surgery is also used for an intestinal blockage, a hole in the digestive tract, serious bleeding, dead bowel tissue, or a bezoar that cannot be removed another way.

Care also addresses why the bezoar formed. Depending on the situation, this may include:

Dietary advice should be individualized. A person with slow stomach emptying may receive different advice from someone whose stomach function is normal after removal. Avoiding all fiber without medical guidance can lead to an unnecessarily restricted diet.

- Improving chewing and arranging dental care
- Reviewing medicines that may slow digestion
- Managing diabetes or another cause of delayed stomach emptying
- Receiving nutrition guidance tailored to stomach function
- Treating an underlying narrowing or structural problem
- Obtaining behavioral and mental health support for hair pulling or hair eating

Complications

A bezoar can press against the digestive lining and cause irritation, an ulcer, or bleeding. It may also block the outlet of the stomach, preventing food from entering the small intestine normally.

If all or part of the mass reaches the intestine, it can cause a bowel obstruction. A complete obstruction prevents food, fluid, and gas from moving forward. Without treatment, pressure

may reduce blood flow to the bowel.

Less common but serious complications include a tear or hole in the stomach or intestine, infection within the abdomen, and tissue injury from reduced blood supply. Repeated vomiting can also cause dehydration, kidney problems, and abnormal levels of sodium, potassium, or other body salts.

Ongoing poor intake may lead to weight loss or malnutrition. These complications are not inevitable, particularly when a bezoar is identified and managed before it causes a major blockage.

Follow up

Follow-up care helps confirm that treatment worked and reduces the chance of another bezoar. The plan may include repeat endoscopy or imaging if complete removal was uncertain, symptoms continue, or the bezoar had caused an injury.

Contact the treating clinician through routine channels if fullness, nausea, vomiting, reduced appetite, or upper abdominal discomfort returns. These symptoms may reflect recurrence, but they can also have another cause.

Follow-up may focus on stomach emptying, blood sugar management, dental function, nutrition, or medicine review. People who have had stomach surgery may need advice from a gastroenterologist or dietitian familiar with altered digestive anatomy.

For a trichobezoar, ongoing behavioral or mental health care is important even after the mass has been removed. Treatment may help identify triggers, reduce hair pulling and swallowing, and lower the risk of recurrence. Support should be respectful and free of blame.

Urgent or emergency symptoms remain the same during recovery: worsening pain, repeated vomiting, marked swelling, inability to pass gas or stool, bleeding, fainting, or severe weakness require prompt assessment.

Sources

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