CONDITION

Pencil swallowing

Pencil swallowing means accidentally or deliberately swallowing a whole pencil or part of one.

WHAT IT IS
Swallowing a whole pencil or pencil fragment

BODY SYSTEM
Digestive system and sometimes breathing passages

MAIN SYMPTOMS
Trouble swallowing, throat pain, abdominal pain, vomiting

WHAT CAUSES IT
Accidental ingestion, pica, or deliberate swallowing

HOW IT IS DIAGNOSED
Imaging and sometimes upper endoscopy

MAIN TREATMENT
Observation or endoscopic removal

CAN IT BE CURED?
Yes - removal or passage usually resolves it

IS IT AN EMERGENCY?
Sometimes - choking, severe pain, bleeding, or breathing difficulty

LONG-TERM OUTLOOK
Usually full recovery when managed promptly

Overview

Pencil swallowing means swallowing a whole pencil or a piece of one. It may happen accidentally, during chewing or play, or as part of pica. Pica is a repeated urge to eat objects that are not food. Some people swallow objects deliberately during emotional distress, self-harm, or because of a mental health or developmental condition.

Despite the name "pencil lead," modern writing pencils do not contain lead metal. Their cores are usually made from graphite mixed with clay. Graphite is generally considered to have low toxicity when swallowed in a small amount. The main concern is not lead poisoning. It is physical injury from the pencil's shape, size, or materials.[5]

A sharpened pencil or jagged fragment can scrape or puncture the throat, food pipe, stomach, or bowel. The food pipe is also called the oesophagus. Long objects may have difficulty moving

around the bends of the digestive tract. A metal band, eraser, paint, or other attached part may create additional concerns.

A small, blunt fragment may pass through the digestive system without causing harm. A whole, sharpened, or long piece needs prompt medical assessment even if there are no symptoms. Foreign-body guidelines treat long or sharp objects more cautiously because they are less likely to pass safely.[1-4]

Symptoms

Symptoms depend on where the pencil is, whether it is sharp, and whether it has caused a blockage or injury.

A pencil stuck in the throat or oesophagus may cause:

Once the object reaches the stomach or bowel, there may be no immediate symptoms. If irritation, blockage, or a puncture develops, symptoms can include abdominal pain, vomiting, bloating, fever, or blood in vomit or stool.

Breathing difficulty may mean that the pencil entered or is pressing on the airway instead of passing into the oesophagus. This is an emergency.

Symptoms do not reliably show whether a swallowed pencil has passed safely. A sharp object can cause damage before severe pain appears.

- Pain in the throat, neck, or chest
- Trouble swallowing food, liquids, or saliva
- Drooling or repeated gagging
- A feeling that something is stuck
- Coughing, wheezing, or noisy breathing

Causes and risk factors

Accidental swallowing is more likely when someone chews a pencil, runs or plays with one in their mouth, or breaks it with their teeth. Young children may swallow small pencil pieces while exploring objects with their mouths.

Pica can lead to repeated swallowing of wood, graphite, paper, or other non-food materials. Pica may be linked with iron deficiency, pregnancy, developmental differences, mental health conditions, or severe stress. Sometimes no clear reason is found.

Deliberate swallowing can happen during self-harm, a crisis, or in association with some psychiatric or developmental conditions. It may also occur in settings where access to objects is limited, such as hospitals or prisons. This behaviour deserves calm, respectful care. It should not be dismissed as attention-seeking.

Factors that raise the chance of injury include:

- A sharpened, splintered, or jagged end
- A whole or long pencil section
- Several swallowed pieces
- A metal ferrule, which is the band holding an eraser
- Previous narrowing or surgery of the digestive tract
- Difficulty describing symptoms or when the object was swallowed

Diagnosis

A clinician will ask what was swallowed, how much, when it happened, and whether the pencil was sharpened or broken. If possible, an identical pencil, its packaging, or a photo may help show its length and materials.

The mouth, throat, chest, and abdomen may be examined. Breathing, swallowing, tenderness, and signs of bleeding or infection are checked.

X-rays may be taken to look for the object and signs of complications. However, wood, plastic, and some graphite-containing parts may not show clearly on a standard X-ray. A normal X-ray therefore does not always rule out a swallowed pencil.[1-4]

Computed tomography, usually called a CT scan, can provide more detailed images when the object cannot be seen clearly or a puncture or blockage is suspected.

Upper endoscopy may both confirm the diagnosis and remove the pencil. During this procedure, a flexible camera is passed through the mouth into the oesophagus and stomach. Sedation or anaesthesia is used to reduce pain and movement.

Blood tests do not usually confirm pencil swallowing. They may be used if there are signs of bleeding, infection, inflammation, or a nutritional deficiency linked with pica.

Treatment and management

Treatment is based on the pencil's size, shape, location, and the symptoms it is causing. Age

and any existing digestive tract problems also matter.

A small, blunt piece that has already reached the stomach may sometimes be monitored. This decision should follow medical assessment because pencil fragments can have hidden sharp edges or splinters. Follow-up imaging or symptom checks may be recommended.

A pencil stuck in the oesophagus generally requires removal. Sharp or long objects in the stomach are also commonly considered for prompt endoscopic removal because they may not travel safely through the bowel.[1-4]

During endoscopy, the object is grasped with a tool and withdrawn while the digestive tract is protected as much as possible. The lining is then checked for cuts, bleeding, or punctures.

Surgery is uncommon. It may be needed if the pencil has punctured the digestive tract, caused a blockage, cannot be removed by endoscopy, or has moved outside the digestive tract.

Do not induce vomiting. A pencil can cause more injury on the way back up or enter the airway. Do not try to push it through by eating bulky food, and do not take laxatives unless a clinician specifically recommends them.

If only a small amount of graphite was swallowed, poisoning is not usually expected. A poison information service can assess unusual pencil coatings, coloured-pencil materials, or uncertainty about what the object contained.[5]

When swallowing is repeated or deliberate, treatment also addresses the reason it happened. This may include testing for iron deficiency, support for pica, changes to the environment, or mental health care. If the swallowing was connected with self-harm, immediate emotional support and a safety assessment are important parts of care.

Complications

Most small, blunt objects that pass through the digestive tract do not cause lasting problems. A whole or sharpened pencil carries a greater risk because it is long, rigid, and potentially pointed.

Possible complications include:

A perforation can allow digestive contents to leak into the chest or abdomen. This needs urgent hospital treatment.

Lead poisoning is not an expected complication of swallowing an ordinary graphite pencil. The word "lead" is a traditional name for the writing core, not a description of its chemical content.[5]

- Cuts or bleeding in the throat, oesophagus, stomach, or bowel
- A blockage that prevents food or bowel contents from moving
- A puncture, called a perforation, through the digestive tract wall
- Infection after a puncture
- Entry into the airway, called aspiration
- Injury during vomiting or attempted removal

Prevention

Pencil swallowing is often preventable, although not every accidental event can be avoided.

Keep pencils and broken pencil pieces away from babies and young children. Encourage children not to walk, run, or play with a pencil in their mouth. Replace splintered pencils rather than continuing to use them.

If pencil chewing is common, consider safer alternatives designed for chewing, especially for someone with sensory needs. These should be suitable for the person's age and used as directed.

Repeated swallowing linked with pica may not stop through supervision alone. Identifying nutritional, developmental, emotional, or mental health factors can reduce the chance of it happening again. Pica is not simply a bad habit or a failure of willpower.

Where swallowing has occurred during self-harm or distress, reducing access to likely objects may help, but it should be combined with supportive mental health care and a practical safety plan.

Living with it and what to expect

Pencil swallowing is usually a single event rather than a long-term disease. After a small piece passes or an object is removed without injury, recovery is often complete. Mild throat or abdominal discomfort may continue briefly because the lining has been scraped or irritated.

Follow-up may be needed after endoscopic removal, especially if there was a deep cut, bleeding, or concern about a puncture. Seek review if pain, vomiting, fever, swallowing difficulty, or bleeding develops after going home.

An object being monitored may take time to move through the bowel. Follow the specific plan given by the healthcare team. Do not assume that the absence of symptoms proves it has

passed, and do not repeatedly examine stool unless this has been recommended.

A serious puncture or blockage can mean a longer hospital stay, surgery, and recovery over several weeks. Long-term problems are not usual after an uncomplicated event, but they are possible after major injury.

For repeated swallowing, the longer-term course is shaped by the underlying reason. Nutritional treatment may help when pica is related to a deficiency. Behavioural, developmental, and mental health support may lower the risk of recurrence. Some people need ongoing care over months or years.

When to get medical help

Call emergency services now if the person:

Use age-appropriate choking first aid if you are trained to do so. Do not put fingers into the mouth unless you can clearly see and safely grasp the object.

Seek urgent medical assessment after swallowing a whole pencil, a sharpened pencil, a long section, or a splintered piece. Do this even if there are no symptoms.

Urgent assessment is also needed for:

If a very small, blunt piece was swallowed and there are no symptoms, contact a healthcare service or poison information centre for case-specific advice. Routine follow-up may be enough after the object's size and shape have been assessed.

If the swallowing was deliberate and there is an immediate risk of further self-harm, seek emergency mental health support and stay with the person if it is safe to do so.

- Cannot breathe, speak, or cough effectively
- Has severe breathing difficulty or blue-grey lips
- Collapses or becomes unresponsive
- Is choking on a pencil or pencil fragment
- Trouble swallowing or inability to swallow saliva
- Neck, chest, or abdominal pain
- Repeated vomiting
- Blood in vomit or stool
- Fever, a swollen abdomen, or increasing tenderness

- Coughing or wheezing that began during the event
- Uncertainty about what was swallowed

Common questions

Is pencil lead poisonous if swallowed?

Ordinary pencil "lead" is graphite and clay, not lead metal. A small amount is generally considered low in toxicity. The wood, shape, size, coatings, and attached metal parts usually create more concern than the graphite.[5]

Can a swallowed pencil pass naturally?

A small, smooth fragment may pass. A whole, long, sharpened, or splintered pencil may become stuck or cause injury and should be assessed urgently. It is not possible to judge safe passage from symptoms alone.

Will a pencil show up on an X-ray?

Not always. Wood and some other pencil materials can be difficult to see on a standard X-ray. CT or endoscopy may be needed if suspicion remains despite a normal X-ray.[1-4]

Should I make myself vomit?

No. Vomiting may drive a sharp object into the digestive tract wall or allow it to enter the airway. It can also cause further injury as the object comes back up.

Can pencil swallowing cause lead poisoning?

An ordinary graphite pencil is not expected to cause lead poisoning. Antique, imported, industrial, or unusual art materials may contain different substances, so a poison information centre can advise when the product is uncertain.

Why would someone keep swallowing pencils?

Repeated swallowing may be related to pica, sensory needs, nutritional deficiency, developmental conditions, severe stress, or self-harm. A medical and mental health assessment can look for the cause without blame.

Sources

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