CONDITION

Gingivostomatitis

Gingivostomatitis is painful inflammation of the gums and mouth lining, usually caused by a first herpes simplex virus infection.

WHAT IT IS
Painful inflammation and ulcers of the gums and mouth

BODY SYSTEM
Mouth and digestive system

MAIN SYMPTOMS
Swollen gums, mouth ulcers, fever, poor drinking

WHAT CAUSES IT
Usually first herpes simplex virus infection

HOW IT IS DIAGNOSED
Mouth examination; lesion swab if confirmation is needed

MAIN TREATMENT
Fluids, pain relief, mouth care, sometimes antivirals

CAN IT BE CURED?
No - HSV remains after sores heal

IS IT AN EMERGENCY?
Sometimes - inability to drink can cause dehydration

LONG-TERM OUTLOOK
Most episodes heal without lasting mouth damage

Overview

Gingivostomatitis is inflammation of the gums and mouth lining. The gums become red, swollen, and painful, and blisters or ulcers may develop on the tongue, lips, cheeks, gums, or roof of the mouth.

The term usually refers to primary herpetic gingivostomatitis , the first noticeable infection with herpes simplex virus type 1, or HSV-1. It is most common in young children but can also affect adolescents and adults.

Many first HSV-1 infections cause no symptoms. When gingivostomatitis occurs, pain can make eating, drinking, brushing teeth, and swallowing difficult. The main short-term concern is dehydration.

The sores usually heal without scarring or permanent gum damage. However, HSV remains dormant in nearby nerves and may later reactivate as a cold sore. Occasionally, gingivostomatitis has another cause, such as a different infection, an inflammatory condition, or a medicine reaction.

Symptoms

Symptoms may begin with fever, tiredness, irritability, reduced appetite, or swollen neck glands. Mouth symptoms often follow.

Typical features include:

The ulcers may have a pale or yellow-grey centre with a red edge. Unlike a typical cold sore around the lip, primary herpetic gingivostomatitis can affect much of the mouth and gums.

Pain is often worst during the first several days. Most lesions heal within 10 to 14 days, although severe episodes can take up to three weeks.

Signs of dehydration include a dry mouth, fewer wet nappies or trips to urinate, dark urine, no tears when crying, sunken eyes, unusual sleepiness, or dizziness. These signs need prompt attention.

- Red, swollen, tender gums that may bleed easily
- Small blisters that break open and form shallow ulcers
- Ulcers on the gums, lips, tongue, cheeks, or roof of the mouth
- Mouth pain, bad breath, drooling, or difficulty swallowing
- Refusal to eat or drink, especially in young children
- Fever and feeling generally unwell

Causes and risk factors

Most cases are caused by HSV-1. HSV-2 can affect the mouth but is less common.

HSV spreads through contact with infected saliva, skin, or sores, including through kissing, sharing items that have been in the mouth, or touching a sore and then another person. It can sometimes spread when no sore is visible.

A first infection can occur at any age. Exposure is more likely through close household or personal contact with someone who carries HSV, whether or not that person has symptoms.

People with weakened immune systems may have more severe or prolonged illness. This

includes some people receiving chemotherapy, taking immune-suppressing medicines, or living with a condition affecting immune function.

HSV can spread across skin affected by eczema, causing eczema herpeticum. New clusters of painful blisters or punched-out sores on eczema require urgent medical assessment.

Other conditions that can resemble gingivostomatitis include hand, foot and mouth disease, aphthous ulcers, inflammatory disorders, and medicine reactions.

Diagnosis

Gingivostomatitis is usually diagnosed from the symptoms and the appearance and location of the sores. A healthcare professional may examine the mouth, throat, and surrounding skin and assess hydration, especially when a child is refusing drinks.

Testing is not routinely needed when the pattern is typical. If the diagnosis is uncertain, a swab from a fresh blister or ulcer may be tested for HSV using polymerase chain reaction, or PCR. Testing may also be useful when symptoms are severe, immune function is reduced, or the result would change treatment.

Blood tests are rarely needed for an uncomplicated episode. Tell the healthcare professional about recent medicines, recurring ulcers, skin or eye symptoms, immune system problems, and fluid intake.

Treatment and management

Treatment focuses on pain control and hydration while the mouth heals. Young children may need close help with frequent drinks.

Offer small amounts of fluid often. Cool water, milk, oral rehydration solution, or ice pops may be easier to tolerate than large servings. Soft, cool foods may be comfortable, while acidic, salty, spicy, rough, or very hot foods can sting. Fluids are more important than solid food during the painful stage.

Pain-relieving medicine may make drinking easier. Choose a product suitable for the person's age and health and follow the label or professional advice. Do not give aspirin to children or teenagers with a viral illness because of the risk of Reye syndrome.

Mouth-numbing gels and liquids are not suitable for everyone. Some can interfere with swallowing or cause harmful effects if too much is used, particularly in young children. Use them only after a pharmacist or healthcare professional confirms that the specific product is

appropriate.

Use a soft toothbrush if tolerated. Older children and adults who can reliably spit may find a mild salt-water rinse soothing. Avoid alcohol-containing mouthwashes because they may sting.

A clinician may consider an antiviral such as aciclovir in selected cases of likely HSV gingivostomatitis. It is most likely to help when started early, particularly if pain is severe, drinking is difficult, or immune function is reduced. Antivirals like acyclovir or oseltamivir do not remove HSV from the body.

People who cannot maintain hydration may need hospital care, with fluids given through a vein or sometimes a tube into the stomach. Antibiotics like amoxicillin or doxycycline do not treat HSV and are used only for a separate bacterial infection.

Complications

Dehydration is the most common important complication, particularly in babies and young children.

Touching mouth sores can transfer HSV to broken skin or a finger, causing herpetic whitlow. Handwashing and avoiding picking at sores reduce this risk.

HSV infection of the eye can damage the cornea. Eye pain, redness, light sensitivity, blurred vision, or sores close to the eye need urgent assessment.

Rarely, HSV spreads more widely or affects the brain. This is especially serious in newborns and people with weakened immune systems. Confusion, seizures, extreme drowsiness, or difficulty waking are emergency symptoms.

A bacterial infection can occasionally develop in damaged tissue. Increasing swelling, pus, worsening pain after initial improvement, or a new fever should be assessed.

Prevention

There is no vaccine that prevents HSV-1, and exposure cannot always be avoided because the virus may spread without visible sores.

During an active episode:

Someone with poor saliva control or heavy drooling may need to stay away from childcare or school until this improves. Follow local childcare and public health rules. These measures reduce, but do not eliminate, transmission.

- Avoid kissing and direct contact with sores
- Do not share cups, cutlery, lip products, towels, or toothbrushes
- Wash hands after touching the mouth or applying lip care
- Discourage picking at sores, thumb-sucking, and nail-biting where possible
- Keep items that contact saliva separate

Living with it and what to expect

Fever and general illness usually improve before all ulcers heal. Drinking may remain uncomfortable for several days, and appetite often returns gradually as gum tenderness settles.

Most people recover without scars, loose teeth, or lasting gum changes. Temporary weight loss can occur, but hydration is the immediate priority.

After healing, HSV stays dormant. Some people later develop cold sores around the lips, which are generally smaller and milder than the first episode. Others never have another noticeable outbreak. Reactivation may occur during illness, stress, sun exposure, or for no clear reason.

Routine follow-up is not always needed once drinking, activity, and mouth comfort return to normal. Arrange follow-up if ulcers do not heal within the expected period, repeatedly return, or occur with ongoing symptoms such as weight loss, digestive problems, eye inflammation, or genital ulcers.

When to get medical help

Seek prompt medical advice for widespread painful mouth ulcers, especially with fever or swollen, bleeding gums. Early assessment may matter because antiviral treatment is used only in selected cases and works best when started early.

Get same-day medical help for:

Seek emergency care for difficulty breathing, collapse, a seizure, confusion, inability to wake normally, or signs of severe dehydration. A newborn with fever, blisters, marked sleepiness, or poor feeding also needs immediate medical assessment.

- Very little drinking or inability to swallow fluids
- Much less urine, dry mouth, no tears, or increasing sleepiness

- Severe pain not controlled by suitable pain relief
- A weakened immune system
- A new widespread blistering rash, especially over eczema
- Eye redness, pain, light sensitivity, or blurred vision
- Symptoms that worsen after initially improving
- Sores that have not healed after about two to three weeks

Common questions

Is gingivostomatitis contagious?

HSV gingivostomatitis is contagious. It spreads mainly through contact with saliva, mouth sores, or affected skin. Transmission can occur while sores are present and sometimes when no sores are visible.

How long does gingivostomatitis last?

Most people improve within 10 to 14 days. Severe lesions may take up to three weeks to heal. Fever usually settles before the ulcers and gum tenderness.

Is gingivostomatitis the same as a cold sore?

No. Both may be caused by HSV-1, but gingivostomatitis usually occurs during the first symptomatic infection and affects a larger area inside the mouth. A recurrent cold sore is usually a smaller cluster around the lip edge.

Can adults get gingivostomatitis?

Yes. Although it is more common in young children, a first symptomatic HSV infection can occur in adolescents or adults and may cause significant pain and dehydration.

What can I eat with gingivostomatitis?

Choose cool, soft, bland foods. Avoid acidic, spicy, salty, sharp, or very hot foods if they sting. Do not force solid food when the mouth is painful; adequate fluid intake is the priority.

Do I need antibiotics?

Antibiotics do not treat HSV or other viruses. They are used only if there is a separate bacterial infection. Antiviral medicine is different and may be considered in selected cases.

Sources

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