CONDITION

Trench mouth

Trench mouth is a painful bacterial gum infection that causes ulcers, bleeding, and bad breath.

WHAT IT IS
Rapid, painful infection causing gum ulcers and tissue damage

BODY SYSTEM
Mouth and teeth

MAIN SYMPTOMS
Severe gum pain, bleeding, ulcers, bad breath

WHAT CAUSES IT
Bacterial overgrowth with weakened gum defenses

HOW IT IS DIAGNOSED
Dental examination of the gums and mouth

MAIN TREATMENT
Professional cleaning, antiseptic rinses, and sometimes antibiotics

CAN IT BE CURED?
Yes - prompt care usually clears the active infection

IS IT AN EMERGENCY?
Sometimes - trouble swallowing or rapidly spreading swelling

LONG-TERM OUTLOOK
Usually heals well; recurrence possible without risk-factor control

Overview

Trench mouth is a sudden and painful infection of the gums. Its medical name is necrotizing ulcerative gingivitis . "Necrotizing" means that small areas of gum tissue become damaged and die. "Ulcerative" refers to the open sores that can form.

The infection usually begins between the teeth, especially in the pointed pieces of gum called interdental papillae. These areas may develop a characteristic "punched-out" appearance. A gray or whitish layer of dead tissue can cover the sores.

Trench mouth develops when bacteria that normally live in the mouth grow out of balance while the gums' defenses are weakened. Poor oral hygiene, smoking, severe stress, poor nutrition, lack of sleep, and reduced immune function can all contribute.

The name comes from its association with soldiers living in crowded, stressful trench conditions during the First World War. It is not caused by soil or trenches.

Prompt dental treatment usually controls the infection and relieves pain. Without care, it can spread into deeper gum tissue and damage the structures supporting the teeth.

Symptoms

Symptoms often start quickly rather than building slowly over months. The gums may become intensely painful and bleed with little contact. Eating, brushing, and swallowing can be uncomfortable.

Typical features include:

Some people also develop fever, tiredness, or tender lymph nodes under the jaw or in the neck. These symptoms may suggest a more significant infection and need prompt assessment.

Trench mouth differs from ordinary gingivitis. Common gingivitis can cause red or bleeding gums, but it usually does not cause sudden severe pain, punched-out ulcers, or areas of dead gum tissue.

Other conditions can produce mouth ulcers or painful gums. These include viral infections, medication reactions, and some blood or immune conditions. A dental examination is important because appearance alone can be misleading.

- Painful, swollen, red gums
- Crater-like ulcers between the teeth
- Bleeding during brushing or without an obvious trigger
- A gray or white coating over damaged gum tissue
- Strong bad breath
- A bad or metallic taste
- Increased saliva

Causes and risk factors

Trench mouth involves an overgrowth of several types of bacteria, including bacteria that thrive where there is little oxygen. It is not usually traced to one specific germ.

These bacteria can live harmlessly in the mouth. Problems arise when plaque builds up and the body is less able to keep bacterial growth under control. Plaque is a sticky film containing

bacteria that collects on teeth and along the gumline.

Factors that can increase the risk include:

Having one of these factors does not mean you will develop trench mouth. Several often occur together.

The condition is not inherited. It is also not usually described as contagious in the way that a cold is. Mouth bacteria can pass through saliva, but the infection generally develops because of conditions within a person's mouth and overall health rather than brief contact with someone else.

- Poor brushing, interdental cleaning, or access to dental care
- Smoking or other tobacco use
- Severe emotional or physical stress
- Lack of sleep and exhaustion
- Poor nutrition
- Existing gum inflammation
- A weakened immune system, including from HIV or certain treatments
- Recent illness or another major strain on the body

Diagnosis

A dentist can usually diagnose trench mouth by examining the gums, teeth, tongue, and rest of the mouth. The pattern of pain, bleeding, ulcers, dead tissue, and bad breath is often distinctive.

The dentist may gently check the depth of spaces around the teeth and look for plaque or tartar. Tartar is hardened plaque that cannot be removed by ordinary brushing.

Dental X-rays may be used if there is concern that the infection has reached deeper tissues or damaged the bone supporting the teeth. X-rays are not always needed for a straightforward gum infection.

Laboratory testing is rarely required to confirm a typical case. A sample may be taken when the appearance is unusual or the infection does not respond as expected.

Blood tests may be considered if the condition is severe, keeps returning, or occurs with unexplained fever, weight loss, frequent infections, or other signs of poor health. These tests look for an underlying issue, such as reduced immune function or an abnormal blood cell count; they do not diagnose trench mouth itself.

Treatment and management

Treatment aims to remove damaged tissue and bacterial buildup, control pain, and help the gums heal.

A dentist usually begins with gentle professional cleaning. This may include removing plaque, tartar, and loose dead tissue from the affected areas. Because the gums can be very tender, cleaning may be done in stages or with local numbing medicine.

An antiseptic mouth rinse may be recommended for short-term use. This reduces bacteria while painful gums make normal brushing difficult. Use the specific product as directed. Strong or concentrated household antiseptics can injure the mouth and should not be used as homemade treatment.

Antibiotics like amoxicillin or doxycycline are not required in every case. A dentist or medical professional may use them when there is fever, swollen lymph nodes, spreading infection, reduced immune function, or a delay in obtaining dental cleaning. The choice depends on factors such as allergies, pregnancy, other medicines, and local prescribing guidance.

Pain relief may help you eat, drink, and clean your mouth more comfortably. A pharmacist, dentist, or medical professional can help you choose an option that is suitable for you.

During early healing, gentle care is important. A soft toothbrush may be easier to tolerate. Soft foods, adequate fluids, and avoiding tobacco, alcohol, and very spicy foods can reduce irritation.

Treatment does not end when the pain improves. Follow-up cleaning and treatment of ongoing gingivitis or periodontitis may be needed. Periodontitis is deeper inflammation that damages the tissues and bone supporting the teeth.

Complications

Most people recover without lasting damage when the infection is treated promptly.

If it is not treated, the damage can extend below the gumline. This is called necrotizing periodontitis . It can destroy the ligaments and bone that hold teeth in place, leading to loose teeth or tooth loss.

Other possible complications include:

A much more destructive infection called noma can develop in extreme circumstances, particularly with severe malnutrition and major immune weakness. This is rare and is not the expected course of ordinary trench mouth.

- Repeated episodes of painful gum infection
- Gum recession or changes in gum shape
- Ongoing bad breath
- Difficulty eating and drinking
- Spread into nearby mouth or facial tissues

Prevention

Trench mouth cannot always be prevented, but many of its risk factors can be reduced.

Regular plaque removal is central to prevention. Brush gently with fluoride toothpaste and clean between the teeth using a method that works for you. Routine dental visits can identify gum inflammation and hardened tartar before they contribute to a more painful infection.

Other helpful measures include:

If brushing causes bleeding, do not assume that cleaning should stop indefinitely. Bleeding often reflects inflammation. A dentist can show you how to clean painful areas without causing unnecessary injury.

There is no vaccine for trench mouth. It is not prevented by avoiding ordinary social contact with someone who has it.

- Avoiding smoking and other tobacco products
- Eating enough nutritious food
- Getting regular sleep where possible
- Seeking support for prolonged or severe stress
- Following care plans for conditions that affect immune function
- Attending recommended follow-up after an episode

Living with it and what to expect

Pain and bleeding often begin to improve within the first few days after professional cleaning and appropriate treatment. Complete healing takes longer and is influenced by how much tissue was affected and whether deeper gum problems are present.

You may need more than one dental visit. Early appointments focus on controlling the infection and making cleaning tolerable. Later visits may address remaining tartar, gum pockets,

damaged gum shape, or other dental needs.

Small changes in the contour of the gums may remain after ulcers heal. More significant tissue or bone loss is more likely when treatment was delayed or the infection reached deeper supporting structures.

Trench mouth can return. Recurrence is more likely if plaque continues to collect or if smoking, severe stress, poor nutrition, or reduced immune function remain important factors. Follow-up care is intended to reduce that risk, not simply to check whether the pain has stopped.

Most people can return to normal eating and oral care as tenderness settles. The condition does not usually require lifelong treatment, although any underlying gum problems may need ongoing care.

When to get medical help

Arrange a prompt dental assessment if you have sudden severe gum pain, spontaneous bleeding, crater-like ulcers, dead-looking tissue, or strong bad breath with painful gums. Do not wait for a routine checkup if symptoms are worsening.

Seek urgent same-day dental or medical care if you have:

Get emergency help if swelling makes it difficult to breathe or swallow, if saliva cannot be swallowed, or if you become confused, faint, or severely unwell. These signs can occur with a spreading infection and need immediate assessment.

Routine follow-up is still important after symptoms improve. Keep the dental appointments arranged for further cleaning, assessment of healing, and management of factors that may cause the condition to return.

- Fever or marked tiredness with the mouth symptoms
- Swelling spreading into the cheek, jaw, or neck
- Increasing difficulty opening your mouth
- An inability to eat or drink enough
- Symptoms while your immune system is significantly weakened
- Symptoms that worsen despite treatment

Common questions

Is trench mouth the same as gingivitis?

It is a severe, rapidly developing form of gum inflammation with infection and tissue damage. Ordinary gingivitis can cause redness and bleeding, but it usually does not cause severe pain, ulcers, or punched-out areas of gum.

Can trench mouth go away on its own?

Symptoms may change temporarily, but professional treatment is recommended. Cleaning removes bacterial buildup and dead tissue that home care may not reach. Delaying treatment increases the chance of deeper gum damage.

Is trench mouth contagious?

It is not generally considered contagious like a cold or flu. Bacteria can be exchanged through saliva, but developing trench mouth usually also requires factors such as plaque buildup and weakened local defenses.

How quickly does trench mouth heal?

Pain and bleeding often ease within days after treatment, but the gums may take longer to heal. Deeper infection, smoking, poor nutrition, or reduced immune function can slow recovery.

Can I brush my teeth when my gums are painful?

Gentle cleaning is usually part of recovery, but severely painful areas may need professional cleaning first. A soft toothbrush and any rinse recommended by your dentist can make early care easier. Avoid aggressive scrubbing.

Will trench mouth damage my teeth permanently?

The teeth themselves may be unaffected when treatment begins early. If infection spreads into the tissues and bone supporting the teeth, permanent gum recession, loose teeth, or tooth loss can occur.

Sources

- MedlinePlus Medical Encyclopedia: Trench mouth , U.S. National Library of Medicine
- Merck Manual Professional Edition: Acute Necrotizing Ulcerative Gingivitis , Merck & Co.
- StatPearls: Acute Necrotizing Ulcerative Gingivitis , StatPearls Publishing, NCBI Bookshelf
- Herrera D, Retamal-Valdes B, Alonso B, Feres M. Acute periodontal lesions and endo-periodontal lesions , Journal of Clinical Periodontology , 2018
- Malek R, Gharibi A, Khlil N, Kissa J. Necrotizing Ulcerative Gingivitis , Contemporary Clinical Dentistry , 2017