

Aphthous Ulcers

What is an Aphthous Ulcer?

Aphthous Ulcers are *canker sores*. These common ulcers are painful, white or yellow, open mouth sores with a bright red surrounding area. Varying in size from 1-2 mm to 1 cm. they may occur alone or in groups anywhere on the mucous membranes in the mouth including the gums, tongue and throat.

Twice as common in women than men, aphthous ulcers typically first appear between the ages of 10 and 40 in about 20 to 25 percent of the population. They may recur at any time. Aphthous ulcers do not occur on the skin outside of the mouth. Cold sores (fever blisters) on the lips are a different problem caused by the herpes virus.

What causes an aphthous ulcer?

We don't know what causes an aphthous ulcer but we do know that they are not an infection (viral or bacteria). Aphthous ulcers are probably due to an attack of your mucous membrane by your own body's immune system. The tendency to develop aphthous ulcers may be inherited. If your parents had aphthous ulcers, you have a 90% chance of developing them too. Since they are not caused by infection, you do not become immune to them. They are not contagious.

Frequently, aphthous ulcers first appear when a person is under physical or emotional stress, for example, during college exams. Trauma from dental procedures, aggressive tooth cleaning or accidentally biting your tongue or cheek, head colds, a deficiency in iron, folic acid, or vitamin B12, menstrual periods and other hormonal changes, food allergies and sodium lauryl sulfate found in toothpaste may be causes.

What are the symptoms?

You will first feel a tingling or burning sensation followed by a red spot or bump that soon erodes into a painful ulcer. The pain may continue for seven to fourteen days, sometimes with worsening pain until the end. Any acid drinks or food (for example colas and orange juice) increase the pain. Just before the ulcer heals, it may have a gray membrane.

Occasionally, with a severe occurrence, you may have fever and tender swollen lymph nodes. You may also have malaise ... a general, vague feeling that you are not well. Recurrence is common and may continue for years.

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Diagnosis

You or your doctor can diagnosis an aphthous ulcer based on it's distinctive appearance. Rarely your doctor will advise a biopsy of a lesion that has persisted for more than three or four weeks. There are not blood tests to diagnosis aphthous ulcers.

Complications

Complications are uncommon. You might develop a secondary bacterial infection from an aphthous ulcer or a mouth yeast infection from use of antibiotics but usually pain is the major problem.

When to call your doctor.

Most of the time you can diagnosis and treat an aphthous ulcer yourself. Once you have had one or two, they become obvious. Use home remedies but come see the doctor if the ulcer lasts for more than two weeks or recurs more than two or three times per year.

Less common causes of aphthous ulcers are cancer (rare), drug allergies, viral infections or a rare genetic condition called Behcet's Syndrome. The latter is mostly in people of Mediterranean or Japanese descent and associated with eye and genital ulcers.

Treatment

Since we do not know the cause of aphthous ulcers, we don't know the best treatment. There are no specific drugs for aphthous ulcers but the following may be helpful:

Over-the-counter mouthwashes and topical medications.

- For *pain relief* try benzocaine available as Anbesol®, Num-Zit® and Zilactin-B®.
- For *antiseptis* try chlorhexidine gluconate (Peridex®, Periogard®) and carbamide peroxide (Gly-Oxide®, Orajel®) Rinse your mouth for 60 seconds twice a day at the first hint of a sore.
- For *inflammation* try amlexanox (Aphthasol®) and hydrocortisone (Orabase-HCA®).

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Prescription medications

- Your doctor may prescribe an old remedy concocted by the pharmacist ... *Klax* (or *Klack*) solution. Klax has three or four liquid medications blended together ... for antiseptis, pain relief and inflammation ... just like the over-the-counter treatments but stronger. Four to six times per day, swish and gargle one teaspoon of Klax solution for as long as you can and then spit. Swallowing some of the medication is not harmful.
- For ulcers on the gums and other areas accessible near the front of the mouth, your doctor may prescribe *Kenalog in Orabase*. This dental paste with steroid can stick to the slick wet mucous membranes of the mouth. Apply as need.
- Another prescription medication is liquid *Carafate*, an anti-ulcer preparation. This liquid will bind to the ulcer and form a protective barrier.
- In very severe cases, your doctor may prescribe oral prednisone, a steroid pill.
- Sometimes doctors apply silver nitrate to cauterize the ulcer, killing the nerve endings and relieving the pain.
- Though stress may precipitate an ulcer, tranquilizers do not help.
- Surprisingly, thalidomide, the drug that caused birth defects in the 1960s may be effective for aphthous ulcers. This is reserved for severe cases like Behcet's syndrome.

Prevention

Some nutritional supplements and lifestyle changes may be helpful in treating or preventing canker sores. There is no proven evidence for these but people have reported relief with the following:

Vitamins

- **B vitamins** ... B1, B2 and B6. Take a daily B complex.
- **Lactobacillus acidophilus**: (Chew four Lactobacillus tablets three times per day to reduce soreness) Some people with recurrent canker sores have been reported to respond to Lactobacillus acidophilus and Lactobacillus bulgaricus.

Herbs

- **Aloe** (Aloe vera): 1–3 tablespoons of aloe vera juice used as a mouthwash, then swallowed, three times daily.
- **Licorice** (DGL) (from Glycyrrhiza glabra): Combine 200 mg of powdered DGL and 200 ml of warm water swished in the mouth and then spit out; continue each morning and evening for one week.
- **Chamomile** (Matricaria recutita): A diluted tincture or strong tea made from chamomile flowers can be swished in the mouth three to four times per day.

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- **Echinacea** (*Echinacea purpurea*, *E. angustifolia*, *E. pallida*): 4 ml of liquid echinacea can be mixed with warm water and swished in the mouth for two to three minutes, then swallowed; this can be repeated three times per day.
- **Myrrh** (*Commiphora molmol*): Mix 200–300 mg of herbal extract or 4 ml of myrrh tincture with warm water and swish it in the mouth two to three times per day.

Lifestyle changes

- **Dental work:** Irritation from poor-fitting dentures, rough fillings, or braces can aggravate canker sores and should be treated by a dentist.
- **Sodium lauryl sulfate (SLS):** SLS, a component of most toothpastes, is a potential cause of canker sores. SLS seems to attack the upper layers of the mucous membrane. Try an SLS-free toothpaste for several months to see if such a change helps. Some choices include: *Retardent* by Rowpar, *Biotene "Dry Mouth Toothpaste"* by Laclede, *Peri-Gel* by ZilaRembrandt, *NaturalFirst Teeth* by Laclede. One version of *Tom's Toothpaste* does not have SLS.
- **Good oral hygiene:** Flossing teeth daily and brushing teeth and gums for at least two minutes two to three times daily may help prevent canker sores.

Dietary changes

- Food sensitivities or allergies may aggravate canker sores. These are hard to figure out and you need to try various diet changes to see if something you are eating is aggravating the problem.
- In a 1990 study, oranges, tomatoes, nuts, eggplant, tea and cola were the dietary allergens found to trigger ulcer formation. Other foods anecdotally associated with aphthous ulcers are pineapple and cinnamon oil or flavoring.