

Canker Sores/Mouth Ulcers



Definition

Canker sores, mouth ulcers or *aphthous stomatitis* are common. According to Dr. Dan Petterson, canker sores occur in 80% of the population, while 20% of the population suffers from reoccurring canker sores. They typically appear between ages 10-20. They are a break in the mucosal lining of the mouth and appear to be small white dots. They can appear as single abrasions or clusters on the tongue and the movable parts inside the mouth. They are painful and typically sensitive to citrus fruits and hot or cold. An eruption of canker sores can last up to a week and less commonly for a few weeks. Liz Lipsky, PhD, suggests that if they do not resolve after several weeks to consult with a physician or dentists.

Etiology

Conventional medicine provides no clear cause of mouth ulcers, but there are many suspected triggers. Major triggers include nutritional deficiencies, allergies, stress, hormonal changes, lack of adequate intestinal flora and food sensitivities. It is interesting to note that 25% of people with reoccurring mouth ulcers are gluten sensitive and many people with celiac disease suffer from reoccurring bouts of canker sores. Due to hormonal changes, women are more susceptible than men. A person's immune status also may be related. There is also a genetic factor. Canker sores run in families.

Citric acid and tomatoes can agitate the mucosal lining of the mouth and can cause canker sores. A diet high in sugar, due to its acidic nature, can also be an important

trigger to consider. Toothpaste can act as a trigger due to Sodium Lauryl Sulfate (SLS), used as a foaming agent. Also, mouthwash, dental floss and cigarettes were also found to act as a trigger. Piroxicam, a Non Steroidal Anti-Inflammatory Drug (NSAID) also proved to be a trigger in some individuals.

Reoccurring mouth ulcers can indicate poor nutritional status. Inadequate intake of Vitamin C, iron and zinc are linked to mouth ulcers. According to Michael Murray, N.D., certain disease states are also associated with reoccurring mouth ulcers. These disorders are:

Crohn's Disease

Ulcerative colitis

Celiac disease

Corticosteroids use, which is used for inflammatory conditions

Acrodermatitis

Enteropathica

Anorexia nervosa

Pernicious anemia

Iron-deficiency anemia

Mercury poisoning

Nicotine withdrawal

I would also add excessive decay of the teeth, gingivitis and peritonitis disease. The teeth many times are our first sign that our bodies are not receiving adequate nutrition. When teeth begin to decay rapidly, according to Traditional Chinese Medicine, it is a signal that the stomach or digestive organs are not functioning well. Gingivitis and periodontal disease also signify the same condition. It may be that when enough of these triggers, in susceptible individuals come together, that it manifests in an eruption of mouth ulcerations, with the main trigger being the weakened state of the digestive track. Lack of healthy intestinal flora also hints at an underlying cause that originates in the gut. Although there is no clinical evidence, the over use of antibiotics, which causes a shift in healthy gut flora, may also play a role. Biting or trauma to the mouth can bring on canker sores.

Symptomology

Canker sores only occur inside the mouth on the tongue, inner lips and inside the cheeks (non keratinized parts). They do not show up on the hard pallet or gums. Canker sores begin as a small reddish swell that burst within a few days. Once the sore ruptures it is coated by a grey, white or yellow membrane surrounded by a small red halo that implies inflammation. These painful 1-2mm wide lesions are extremely painful and can be debilitating to some, especially when they occur monthly. Typically healing time takes 4-14 days.

Diagnostic Measures

Dr. Dan Petterson categorizes cancer sores into two types:

1. Simple - Appearing 2-3 times a year with duration of one week. This type is quite common.
2. Complex- They appear more often and are not as common.

Canker sores differ from cold sores and fever blisters in three important ways. Cold sores occur on the outside of the mouth or below the nose and are a form of herpes simplex virus. As such, they are contagious while cancer sores are not. In addition cold sore and fever blisters are made up of liquid filled blisters that usually appear in clusters. Canker sores are small ulcers that are gray or white with a red halo skirting them. Contact a doctor or dentists if large sores are present or if they are spreading, sores that last for longer than 14 days or when there is intolerable pain, even when food triggers were avoided. If there is a fever that appears with the canker sores, seek medical assistance.

Suggestions and Assessments

When one looks at the etiology of this disorder, canker sores appear to be a symptomology of deeper conditions. It suggests a telos originating from the digestive system, although other possibilities such an imbalance of the endocrine system is

likely, as well as a compromised immunity. A practitioner should take a careful client intake to assess if the underlying imbalance causing canker sores originates in the digestive track or in the endocrine system. Assessing the menstrual cycle of a client here would be critical. If the canker sores occur during menstruation or during irregular menstrual cycles, it may be acting as a trigger. Although stress alone is not an endocrine problem, it can cause considerable imbalance to the system. Since our body's stress response is to release hormones, particularly cortisol, a hormone imbalance can also occur at extremely stressful times in our life. It is important to note that physical and emotional stress are still stressors and one does not outweigh the other. Again, with a weakened digestive track, stress can have a profound action on it. Checking for dysbiosis, gut permeability and bacterial overgrowth should be considered. A licensed practitioner can perform these tests. A client could also be encouraged to see if they have any food sensitivities either with blood work or an elimination diet.

A diet rich in whole foods, copious amounts of fresh fruit, vegetables and following an 85/15 ratio of nourishing foods to depleting foods would be helpful. Eliminating sources of xenoestrogens, hormones and antibiotics found in commercially raised foods would be another consideration. Supplementation of the anti-oxidants C, zinc, the B-complex vitamins, iron, a multi-vitamin and probiotics would also be warranted. As well as eliminating all provoking foods such as citrus and tomatoes as well as identifying food sensitivities.

Allopathic and Holistic Approaches

Allopathic approaches include a rinse with antimicrobial mouthwash or warm water with salt and over the counter oral anesthetics. In addition Dr. Petterson includes this list of suggestion on his site that are both holistic and allopathic. I also add my comments (in italics) and additions when needed.

1. Numbing ointment such as benzocaine. *Homeopathic preparations for teething can be used as well as ice, honey or aloe vera gel. In addition,*

licorice root (deglycyrrhized, DGL) for soothing mucosal lining. Myrrh, goldenseal and castor oil are also useful in relieving pain.

2. Anti-inflammatory steroid gel like Denalog, Decadron rinse or Lidex gel. *However NSAIDs can also be a trigger. So avoiding them is prudent.*
3. *A mouth wash made from the teas of myrrh, Echinacea and goldenseal can have the same healing action. Essential oils can also be mixed into a carrier oil like grapeseed oil.*
4. Use a [antimicrobial](#) mouth rinse to help reduce the irritation. *Remember that canker sores are linked to inadequate gut flora, so an anti-microbial may not be the best choice.*
5. Avoid abrasive foods like potato chips and pretzels; acidic drinks such as lemonade or orange juice; chocolate, nuts, lemons, figs, tomatoes, apples, pineapples, strawberries, shellfish, soy vinegar and beer that trigger canker sores in susceptible people .
6. Avoid toothpastes containing [sodium lauryl sulfate](#) Sodium lauryl sulfate (SLS) is an irritant detergent commonly found in toothpaste. People with recurrent canker sores may benefit by switching to a brand of toothpaste that does not contain SLS, which is believed to abrade the protective mucus layer in the mouth and increase the likelihood of developing canker sores.
7. Avoid hot, spicy or acidic foods from further irritating the sore.
8. Brush your teeth gently so as not to irritate the area.
9. DGL is the herb licorice that has had the glycyrrhizic acid removed, the portion that can increase blood pressure. A mouthwash made of powdered DGL mixed with water. Alternately, DGL tablets can be chewed with water, swished in the mouth and swallowed.
10. Avoid things you know can trigger this condition.
11. Eat a healthy diet.
12. Identify and eliminate food sensitivities with an elimination and challenge diet. Food sensitivities, especially to gluten-containing foods (wheat, rye, barley, oats), have been found clinically to be associated with recurrent canker sores.

13. Consider a vitamin supplement. Thiamin (vitamin B1) deficiency has been linked to an increased risk of canker sores. Other nutrients that have been found to be low in people with recurrent canker sores include riboflavin (vitamin B2), pyridoxine (vitamin B6) and iron. A health practitioner can assess nutrient status.
14. Cured and processed meats, such as bacon, sausage and ham, are high in nitrites. Vitamin C works directly against viruses, in addition, it inhibits the formation of nitrosamines from dietary nitrites, found in bacon, ham, sausages and other processed meats, and from dietary nitrates, found in vegetables and other foods. *Zinc, also works to fight off infections and repair damage.*
15. Maintain excellent oral hygiene care.
16. Reduce stress.
17. Avoid injury to the inside of the mouth caused by toothbrushing, hard candy, hard food or chewing on pen caps and other objects.
18. Probiotics as well as fermented foods help re establish healthy gut flora. This can help prevent canker sores.

Healing Protocol

Preventative

Liz Lipsky in her book, *Digestive Wellness* makes these recommendations; She suggests probiotics, particularly *lactobacillus acidophilus* at 1-2 capsules or 1/4-1/2 teaspoons of powder a day. Also try adding in fermented foods like yogurt, sauerkraut and kefir into your diet regularly. A few ounces of each a day will be a tasty addition. An iron deficiency may also be an underlying cause, so consider 30-75 mg/day. Iron can be constipating, so Lipski suggests a time released supplement of the herbal iron supplement Floradix. The B-complex vitamins, specifically B1, B2, B6 and B12 should be included in a healing protocol. B-complex vitamins are used by the body during stress. Most Americans are deficient in B vitamins, so a supplement that contains at least 25milligrams of each B vitamin would be useful in general. To insure that zinc needs are meet, additional supplementation maybe needed. Michael Murray recommends on taking more than 150 mg/ a day to avoid adverse effects. An easy way to know if your body is receiving too much zinc is if you experience a metallic taste in the mouth. In addition a multivitamin with minerals that include the

following; 1,000 mg of calcium, 500 mg of magnesium, 400 IU of D, at least 250 mg of C, 100 IU of E, 100-200 micrograms chromium, 100-200 micrograms of selenium, 5-10 mg of manganese, 15 mg of zinc and at least 25 mg of each B vitamin. Min-rich tea available at www.poolridge.com is an alternative to taking a pill. You can drink it freely throughout the day in place of a multi vitamin. Vitamin C 500-1000 mg 1-3 times a day or to bowel tolerance. Take a minimum of 2,000 mg of vitamin C and continue to increase intake until you have loose stool. When this happens, you will know that you reached tissue saturation. You may need to take as much as 5,000 mg or more. Once you reach bowel tolerance, reduce the amount by 1/2-3/4 daily.

Healing Options During an Acute Case

C at 1,000 -2,000 mg a day and 50 mg of chewable Zinc healed one client's chronic canker sores in 5 days with minimal pain and debilitation.

A few herbs to consider are Echinacea, golden seal and myrrh. They can be made into teas and drunk or used as a gargle three times a day. Herbal salves made with these herbs can also be used topically to ease pain. Black cumin, *nigella sativa*, is another herb that can be used as a tea or the oil can be placed directly on the ulcer. Black cumin has many immune stimulating properties as well as naturally occurring vitamin E.

Again Dr. Petterson,

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Lipski also suggests an ice compress to quickly dry up the sores. She advises 45 minutes a day or several times a day for 5 minute periods. A scab will remain, but the pain will be gone. She also gives castor oil, used topically as an alternative.

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Bibliography

1. Harrar,, Sari and Sara Altshul O' Donald, *The Women's Book of Healing Herbs* (Rodale Press: Emmaus, Penn: 1999),188-189.
2. Murray, Michael, ND and Joseph E. Pizzorno Jr, ND *Textbook of Nutritional Medicine* (New York: 1999) 217-218
3. Lipski, Liz, P.h.D., *CCN Digestive Wellness* (McGraw-Hill: New York: 2005),178-181.
4. Stay, Flora DDS *The Complete Book of Dental Remedies* (Avery Press:1996) 70-72.
5. Petterson, Dan, Dr., (July 25, 2004) "Cancer Sores, Mouth Ulcers."
[http://www.dentalgentlecare.com/cancer_sores_copy\(1\).htm](http://www.dentalgentlecare.com/cancer_sores_copy(1).htm)