

The Most Common Oral Ulcers in Children

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Abstract

The most common oral lesion seen in childhood is Aphthous ulcer, which some children experience. This oral sore can be caused by the baby's immune system getting involved with various diseases and infections.

The misconception among some parents about the occurrence of this condition is that contamination of dental equipment can lead to such ulcers to appear. Usually, parents can help the patient's oral lesions healing by applying a series of home remedies.

Keywords: *Recurrent Dynamic Supination Deformity; Ponseti Method; Tibialis Anterior Transfer*

Introduction

In childhood, several ulcers may appear in the mouth of children, which can be caused by systemic diseases, infections, and even without any specific origin. Aphthous ulcers are one of the most common oral ulcers during this period. These sores are painful and a variety of factors can influence the formation of them. There are several strategies that can help prevent and relieve the pain of these lesions.

What is aphthous ulcer?

These lesions are the most common oral ulcers of all ages, especially in children, which are very painful [1]. Psychological factors and specific diets may be effective in causing them. Of course, it is hoped that with new treatments and supportive measures, their pain can be alleviated and treated, and prevented from recurring.

These sores often occur on the mucous membranes of the mouth, cheeks, back of the lips, under the tongue, and on the floor of the mouth [2]. Children with hypersensitivity may experience this condition several times in the year.

Most Aphthous ulcers are painful, which can be exacerbated by eating or drinking irritating liquids and pickles so that the child has difficulty in speaking [3]. Of course, children may also be allergic to certain dental anesthetics, which can lead to this lesion. In children with hypersensitivity and allergies, the wounds may be deeper. In this case, parents should seek a dentist and inform him.

Signs and symptoms

There are three major forms of aphthous ulcers, the most common of which are minor aphthous ulcers with a prevalence of 80% [4], major aphthous ulcers with a prevalence of about 10% [5] and the remaining with herpetic lesions are observed. Symptoms of aphthous ulcers are limited to the mouth, and the patient has no general symptoms (such as fever) [6]. The main symptom is pain or burning at

the site of the lesion. The pain may be exacerbated by certain foods and beverages (such as acids). As the wound heals, so does the pain. Patients complain of severe pain that is not commensurate with the size of the white spots that form in their mouths [3]. In some cases, it can be mistaken for herpes, but the truth is that herpes (herpes infection) is different from thrush [3].

Minor aphthous ulcers

These ulcers account for more than 80% of cases [4]. These sores appear only on the moving and non-keratinous parts of the oral tissues such as the lips, cheeks, floor of the mouth, sulcus or ventrum of the tongue [7]. These sores are small and about the size of a circle, less than a centimeter in diameter, and are extremely painful. These sores usually heal within 7 to 10 days without any specific scars [7].

Major aphthous ulcers

These lesions account for less than 10% of aphthous lesions [5]. They are usually larger and deeper than minor ulcers. Wounds are more painful than minor ones and are seen in any areas of the oral mucosa, such as the keratinized dorsum of the tongue or palate. It takes weeks or months to heal. Symptoms of the disease are usually seen after the recovery [7].

Herpetic ulceration

These wounds are usually in the form of numerous blisters, small and clustered [8]. It also appears on keratinous or immobile tissue [7]. These sores are similar to herpes in the baby's mouth and lips. They are often seen in the back of the mouth and can be treated within a month. The healing period may take in 10 days or longer [7]. These are often extremely painful and recur so frequently that ulceration appears to have a continuity routine [7].

Classifications

Occasionally there has been a sore on the mouth of a child that worries mothers. Children's mouth sores may be caused by trauma or illness. Of course, these wounds are less serious than the ones in the mouth of adults, but they need to be examined too. Intra-oral lesions in children are divided into two categories; lesion that is not a disease and a lesion which could be considered a disease.

Lesions that are not considered a disease

1. **Scratches on the child's tongue:** When the front teeth of the lower jaw protrude from the gums, the sharpness of the tooth may cause scratches and sores under the tongue. Such wounds are normal and heal on their own.
2. **Eruption cysts:** When a tooth is growing, usually there is a state of a hematoma on the surface of the gums, which is called an eruption hematoma [9]. Eruption cysts are not a disease, they do not have any specific side effects, and they may only cause a small amount of bleeding. They appear as circumscribed, fluctuant, and may contain blood which gives a purple or deep bluish appearance [9]. These types of cysts occur in the posterior teeth, such as the first molars teeth and the incisors. These cysts occur mainly in an age range of 6 - 9 years [10,11]. The point is that parents should not be worried about these cysts because the majority of them disappear after the eruption of the tooth; consequently, no special treatment is required [5,12].
3. **Some dental treatments:** Damage to the child's mouth may also occur as a result of dental procedures and injection of anesthesia. Numbness causes the child to chew inadvertently some part of the anesthetized oral mucosa. Wounds that come from chewing are unpleasant, and usually, heal in 2 weeks.

4. **Soft tissue damages:** Children are usually active, skipping, and jumping around, and may have a blow to the mouth which could sometimes lead to damage to the oral soft tissue of the child's mouth.

Lesions that are considered a disease

1. **Gingivitis:** Inflammation of the gum occurs due to the non-observance of oral hygiene in children which could lead to bleeding gums; however, teaching children how to brush and flossing could prevent the disease. Of course, severe vitamin C deficiency, which is less common in children, also causes gingivitis [13], but in these children, there is unexplained bleeding from the gums. Oral manifestations include ulcerated gums and mouth [13,14].
2. **Viral infections:** This type of infection can also cause sores in children's mouths. In addition to being commonly seen on the lips, herpes also develops inside the mouth too. It causes small, painful blisters commonly called cold sores or fever blisters [15,16]. No specific treatment eliminates this virus from the child's body; however prescribing the antiviral medications along with the application of ibuprofen and paracetamol can reduce the frequency, duration, and severity of outbreaks and also alleviate pain and fever significantly. Wounds do not require special medication and heal in a week or two, but if the viral infection is not well cared for, consequently, it can become a bacterial infection.
3. **Dental infections:** If a child's dental infection is not treated early and becomes chronic, it will come out like pus from the mucosa around the decayed tooth, causing inflammation and sores. Wounds also cause fistulas, cysts, and abscesses in the mouth. The cyst or fistula may disappear by treating the damaged or infected tooth, otherwise, the tooth has to be extracted as soon as possible so that the buds of permanent tooth underlying that, or the surrounding bone is not damaged.
4. **Chewing on the lips and mucous membranes of the mouth:** This is more common in children who are stressed, have bruxism (crooked teeth), or have irregular teeth. By chewing mucus (lips and cheeks), bleeding and sores in those areas are not unexpected.
5. **Fungal infections:** The most common fungal infection in children's mouths is *Candida albicans* [17]. Candidiasis may occur during infancy and when the baby comes out of the birth canal (thrush in the baby's mouth clears within 7 to 10 days) [18]. *Candida albicans* mainly have seen on the tongue and inside the mucus of the cheeks which appears as white patches. Thrush is white cheese-like lesions in the mouth that do not peel off easily [19,20]. Thrush is very common in babies, particularly in the first few weeks of life [19,21].

Dry mouth can also lead to *Candida* fungal infections in the mouth and cause thrush in the baby's mouth [22,23].

Stressed conditions, low immune system, seasonal allergies, and malnutrition are also important factors that cause dry mouth and make the oral environment suitable for the growth and reproduction of fungi [24,25].

Home remedies and early prevention of oral ulcers in children

Parents could use some remedies to prevent oral ulcers in children's mouth simply following these instructions:

- Prevent damage to the inside of the mouth, as this can be the starting point for aphthous ulcers.
- Avoid sour and hard foods such as some hard biscuits, potato chips and hard sweets.
- Avoid brushing hard! Too much brushing can damage the gums and mucous membranes of the mouth and cause ulcers.

- Do not use kinds of toothpaste that contain sodium lauryl sulfate an emulsifier that is added to tubes of toothpaste.
- Avoid stress.
- Avoid allergic foods such as chocolate, oranges, nuts and tomatoes.
- Oral hygiene guidelines should be followed by the mother during the prenatal period. The importance of maintaining a good level of oral health cannot be considered a trivial matter. In this regard, maternal oral hygiene can affect the baby's weight as well as her oral health.
- Mothers should be careful not to give sweet foods to the baby because sweets provide a suitable environment for fungal growth in the mouth. The baby's bottle should also be washed carefully. One way to disinfect milk bottles is to boil that in water for 20 minutes. Of course, the mother's nipple should also be clean, as it might have contaminated with the fungus before breastfeeding. Therefore, it is better to clean the nipple with antifungal solutions.

A child's mouth contains millions of bacteria, including the contagious bacterium *Streptococcus mutans*. This bacterium is the source of oral disease. In practice, when parents put a spoon of baby food in their mouths, the bacteria are passed from the parents' mouths to the baby's mouth, infecting the baby's teeth. This process may occur as early as 11 months after the baby is born. It should be noticed that the risk of a child developing a dental disease is even higher when the mother has oral problems.

In the past, children went to the dentist only when they had a serious problem. This method of late and passive treatment is no longer suitable for maintaining a child's health. Currently, child oral health care is one of the issues that should be considered even during the period when teeth are formed in the child's mouth. Keep in mind that small ulcers even if are not often a problem for parents and their beloved child, can sometimes be a sign of a serious illness. For this reason, it is advisable to see a dentist if these ulcers persist.

Conclusion

Oral diseases that may be caused by systemic diseases, infections (dental and systemic) can cause lesions in the mouth that have several symptoms and complications. The most common oral ulcer in children is oral aphthous, which is painful. Dentists can diagnose and treat these abnormalities with their expertise.

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