

Nutritional Reasons for Gingivitis

Asma Tabassum*

Banasthali Vidyapith, India

Abstract

Periodontal diseases inflame and destroy the structures surrounding and supporting the teeth, mainly gums, jawbones, and the outer layer of the tooth root.

Gingivitis is a kind of periodontal disease which is caused mainly by the accumulation of bacteria. People who have poor oral hygiene, who smoke or have certain illnesses, such as diabetes mellitus, poor diet, leukaemia and AIDS, are more likely to have such a disease.

A dental disease is considered to be a sign of systematic disease and its treatment and prevention has to focus on more of brushing and flossing teeth and gums. As dental diseases are affected by oral hygiene, lifestyle, health and wellbeing and what you eat.

Here in this article we will discuss the role of nutrition and supplements we intake via mouth prevents and treats gum disease.

Keywords: Gingivitis, Swollen gums, Inflammation of gums, periodontal diseases, plaque.

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Introduction

Gingivitis

Gingivitis is common dental disease in which the gums become red, swollen and bleeds easily. In the early stages, it induces a little discomfort and therefore stays unnoticed. However, it can lead to periodontitis if left untreated, which is a more serious gum condition that can lead to tooth loss.

Gingivitis is the inflammation of the gums (gingivae). Gingivitis results mainly from inadequate brushing and flossing. It may also often result from medical conditions or the use of such medications.

Frequent professional cleaning, good oral hygiene and proper nutrition can eliminate gingivitis.

Context/ main article

Gingivitis is divided into categories:

1. Gingivitis due to plaque
2. Gingivitis not due to plaque

Gingivitis due to plaque

Mainly due to dental plaque, gingivitis is (a film like substance primarily made of bacteria). Due to inadequate brushing plaque remains along the gum line and builds up between the gums and teeth. In the areas where there are no teeth, gingivitis does not grow as the plaque accumulates only in those regions where there are defective fillings, next around the teeth to poorly cleaned partial dentures, bridges and orthodontic appliances. If plaque remains on the teeth for more than 72 hours, it gets hardened into tartar (calculus), which cannot even be removed by brushing and flossing completely.

The plaque induces gum inflammation and develops pockets between the teeth and gums. Bacteria reside in these pockets and may cause cavities and gingivitis in the roots of the teeth.

The gums look red rather than a healthy pink because of this now. They swell and are no more firm and tight against the teeth rather they become movable. The gums may bleed especially while brushing or eating and person usually do not feel pain. Gingivitis due to plaque may also be developed by drugs, vitamin deficiency, hormonal changes, leukemia and leukopenia (low white blood cell count), diabetes, and AIDS.

Gingivitis due to drugs

1. Drugs such as Phenytoin (for controlling seizures) cyclosporine (given to those who have had an organ transplant) and calcium channel blockers such as nifedipine (taken to control blood pressure and heart rhythm abnormalities) may cause an overgrowth in the tissue gums and as a result removing plaque becomes more difficult.
2. Also oral or injectable contraceptives can aggravate gingivitis.
3. If a person is required to take drugs which cause gum tissue overgrowth, the excess gum tissue need to be removed surgically.
4. However meticulous oral hygiene at home and frequent cleanings by dentist may slow the rate of tissue growth and eliminate the surgery requirements for further.

Gingivitis due to vitamin deficiency

1. Gingivitis caused due to vitamin deficiency is found in rarest case. The deficiency of vitamin C can lead to inflamed and bleeding gums, and as a result red or purple dots or bruises may occur in mouth.
2. The deficiency of Niacin may also cause inflamed and bleeding gums and a predisposition to certain mouth infections like thrush, inflammation of tongue. In addition to that the lips become red and cracked, the tongue is smooth and bright red and also the lining of the mouth and tongue may have sores.
3. These deficiencies of vitamin C and Niacin can be treated with vitamin C and Niacin supplements plus a diet with fresh fruit and vegetables.

Gingivitis due to hormonal changes

1. Gingivitis may occur during frequent hormonal changes in the body especially in females during pregnancy and menopause.
2. During pregnancy due to the morning sickness women may unknowingly develop gingivitis. Also at that time minor irritation, buildup of tartar with a rough edge, may cause a soft, reddish lump like overgrowth of gum tissue termed as pregnancy tumor (pyogenic granuloma) on being injured the bloated tissue bleeds easily and may interfere eating.
3. If a woman is unable to concentrate on oral hygiene due to morning sickness gentle brushing without toothpaste, or even rinsing with salt water after brushing, can help.
4. During menopause a desquamative gingivitis can be caused, in this the outer layer of the gum bleeds easily and separate from the underlying tissue, exposing nerve endings. The outer layer of the gum tissue can be rubbed away with a cotton swab or can be blown by dentist's air syringe.
5. In desquamative gingivitis hormone replacement therapy may help or else dentist may suggest a corticosteroid rinse or paste which can be applied directly to the inflamed areas.

Gingivitis due to leukaemia:

1. Leukaemia can lead to gingivitis, an infiltration of leukaemia cells into the gums causes' gingivitis and deprived immunity against infections can worsens it.
2. The gums become swollen, painful, and red and bleed easily.
3. This bleeding may continue for several minutes as the blood do not clots easily in person suffering from leukaemia. Cancer can also develop in the gum tissue and spread to nearby lymph nodes.
4. The bleeding can be prevented by wiping the teeth and gums with a gauze pad or sponge, instead of brushing and flossing.
5. Dentist prescribes chlorhexidine mouth rinse to control plaque and prevent mouth infections.

Gingivitis not due to Plaque

It has caused diseases, allergies, disabilities and accidents in a very limited number of individuals.

Gingivitis due to infections

This can happen both because of a viral infection and because of fungal infections.

Viral infections

1. Due to viral infections, acute herpetic gingivostomatitis is caused. It is caused by a virus called herpes.
2. It is very painful and makes the gums bright red, and inside the mouth there are many small white or yellow sores.
3. Without care, it normally gets better within 2 weeks. Dentist may recommend an anesthetic mouth rinse to relieve discomfort during eating.

Fungal infection

1. Use of antibiotics or change in oral health can increase the number of fungi in mouth.
2. A common fungal infection in which overgrowth of fungi, especially candida albicans, forms white or red patches that irritate the gums, is thrush (candidiasis). The tongue and corners of the mouth can be coated with patches and leave a bleeding surface.
3. Thrush can be treated with an antifungal medication such as Nystatin (in the form of mouth rinse or lozenge intended to slowly dissolve in the mouth). Also dentures should be soaked overnight in Nystatin solution.

Gingivitis due to an impacted tooth (pericoronitis)

1. Gingivitis may grow around a tooth that has not completely emerged, the gum swells over the undeveloped tooth, fluids, bits of food, and bacterial pericoronitis may be caught by

the flap of gum over the partially emerged tooth.

2. It occurs primarily around the wisdom teeth (3rd molars), particularly the lower wisdom teeth. If prior to the lower one, the upper wisdom tooth emerges, Dentist may flush salt water under the flap of gum to rinse out debris and bacteria.
3. Dentists recommend the person to rinse at home with salt water, hydrogen peroxide, or antiseptic chlorhexidine.

Conclusion

The inflammation and oxidative stresses weakens the defenses, healing process and immunity of the body. By impairing the immune system's functioning and creating an area where bacteria can thrive, resulting in increased inflammation and oxidation. Hence this situation can be avoided or treated by proper nutrition intake and supplements as mentioned in the complete article.

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***Correspondence to:**

Asma Tabassum

Banasthali Vidyapith

India

E-mail: Asmara14860@gmail.com