

Review Article

Gingivitis and It's Homoeopathic Management

N.V. A. Divyarasi * and Rashmi Desarda

Guru Mishri Homoeopathic Medical College & PG Institute, Shelgaon, Jalna

ABSTRACT

Among all periodontal diseases, Gingivitis is one of the most common and neglecting condition which often leads to tooth loss. It is a nondestructive inflammatory disease of gums with accumulation of plaque or bacteria on teeth, due to poor oral hygiene it progresses to periodontitis. The prevalence is more in males and most commonly seen in children, but some women's during their pregnancies experienced this condition. This article deals with an overview of Gingivitis, its classification, Etiology, pathophysiology, signs and symptoms, diagnosis, differential diagnosis, complication, prevention and its treatment by homoeopathic approach.

Keywords: Gingivitis, periodontal disease, Homoeopathic management



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Address for Correspondence:

Dr. N.V. A. Divyarasi

Guru Mishri Homoeopathic Medical College & PG Institute, Shelgaon, Jalna

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INTRODUCTION

The gingiva is a part of the oral mucosa that covers the alveolar processes of the jaws and surrounds the neck of the teeth. Gingivitis is a non – destructive type of periodontal disease, Gingivitis means inflammation of gums or gingival. It commonly occurs due to a film of plaque or bacteria accumulates on the teeth. Plaque is a sticky material made up of bacteria, mucus and food debris that build up on the teeth. If plaques are not removed properly, it turns into harder deposit called tartar, both plaque and tartar irritate and inflame the gums but untreated gingivitis can progress to periodontitis. This is more serious and can eventually leads to loss of teeth.

Epidemiology

Gingivitis is the commonest periodontal diseases. The prevalence of gingivitis is more in males than in females and commonly seen in children and adults. An appreciable number of women exhibit more severe gingivitis during pregnancy. Studies have found that gingivitis to be more prevalent in people with low socioeconomic

status.

Classification

According to 1999 world workshop in clinical periodontitis, there are two types of gingival diseases

Dental plaque-induced gingival disease: This can be caused by plaque, systemic factors, medications, or malnutrition.

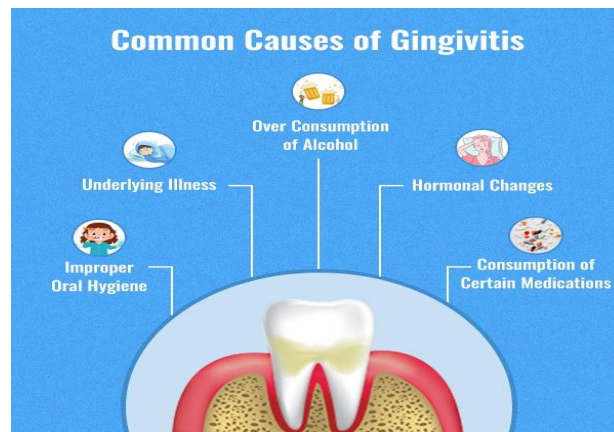
Non-plaque induced gingival lesions: This can be caused by a specific bacterium, virus, or fungus. It might also be caused by genetic factors, systemic conditions (including allergic reactions and certain illnesses), wounds, or reactions to foreign bodies, such as dentures. Sometimes, there is no specific cause.

Classification

As defined by the 2017 world workshop, periodontal health, gingival diseases/conditions have been categorized into the following

- Periodontal health and gingival health
- 1. Clinical gingival health on an intact periodontium.

2. Clinical gingival health on a reduced periodontium.
 - a. Stable periodontitis patient
 - b. Non periodontitis patient
- Gingivitis- dental biofilm induced
 1. Associated with dental biofilm alone
 2. Mediated by systemic or local risk factors
 3. Drug influenced gingival enlargement.
- Gingival diseases- non dental biofilm induced
 1. Genetic/developmental disorders.
 2. Specific infections
 3. Inflammatory and immune conditions
 4. Reactive processes
 5. Neoplasms
 6. Endocrine, nutritional & metabolic diseases.
 7. Traumatic lesions
 8. Gingival pigmentation.



AEITIOLOGY

- Bacterial infection-
- Poor oral hygiene habits such as not brushing and flossing daily.
- Bad habits such as Smoking, Drinking, chewing tobacco.
- Family History
- Breathing through the mouth,
- Dry mouth
- Vitamin c deficiency
- Hormonal changes, such as during puberty, menstruation, pregnancy, menopause, makes gums more sensitive which prone to early infection.
- Immunosuppressed diseases may also affect the condition of gums, such as Cancer and HIV.
- Diabetes affects the body’s ability to use blood sugar, patient with his disease are at higher risk of developing infection.
- Some medication can affect oral health such as anticonvulsant medication Dilantin and the antianginal drug.

Signs and symptoms



Many people aren’t aware that they have gingivitis. Its possible to have gum disease without any symptoms. However, the following can be the symptoms of gingivitis:

- Gums that are red, tender, or swollen.
- Gums that bleed on brushing or floss your

Stages /pathophysiology of gingivitis

Stage I-initial lesion – The first manifestations of gingival inflammation are vascular changes consisting essentially of dilation of capillaries and increased blood flow. These initial inflammatory changes occur in response to microbial activation of Leukocytes and endothelial cells. Clinically this initial response of the gingiva to bacterial plaque is not apparent.

Stage II – the early lesion: the early lesion evolves from initial lesion with about one week after the beginning of plaque accumulation.

Stage III – the established lesion – it characterized by plasma cells, B lymphocytes and probably in conjunction with a pocket epithelium. Clinical findings are changes of colour, size and texture.

Stage IV – the advanced lesion- the lesion in to alveolar bone characterized a fourth stage or periodontal breakdown.

teeth.

- Gums that pulled away from the teeth.
- Loose teeth.
- Pus between teeth and gums.
- Pain when chewing.
- Sensitive teeth.
- Partial dentures that no longer fit.
- Foul-smelling breath (halitosis) that doesn't go away even after brushing your teeth.

Diagnosis

Review of dental and medical history and conditions that may contribute to symptoms. Clinical examination of teeth, gums, mouth and tongue for sign of plaque and inflammation.

Dental x-ray to check for bone loss in areas of dental pocket.

Measuring the pocket depth of the groove between gums tooth by probe-



SULCUS BLEEDING INDEX

- Developed by **MUHLEMANN H.R AND SON.S** in 1971.
- Modification of **PAPILLARY – MARGINAL INDEX** of **MUHLEMANN** and **MAZOR Z**

SCORING CRITERIA

- Score 0 – healthy looking papillary and marginal gingiva no bleeding on probing;
- Score 1 – healthy looking gingiva, bleeding on probing;
- Score 2 – bleeding on probing, change in color, no edema;
- Score 3 – bleeding on probing, change in color, slight edema;
- Score 4 – bleeding on probing, change in color, obvious edema;
- Score 5 –spontaneous bleeding, change in color, marked edema.

Four gingival units are scored systematically for each tooth: the labial and lingual marginal gingival (M units) and the mesial and distal papillary gingival (P units). Scores for these units are added and divided by four gives the sulcus bleeding index.

Scores	Criteria
Plaque Index system	
0	No plaque in the gingival area
1	A film of plaque adhering to the free gingival margin and adjacent area of the tooth. The plaque may only be recognized by running a probe across the tooth surface
2	Moderate accumulation of soft deposits within the gingival pocket, on the gingival margin and/or adjacent tooth surface, which can be seen by the naked eye
3	Abundance of soft matter within the gingival pocket and/or on the gingival margin and adjacent tooth surface
Gingival Index system	
0	Normal gingiva
1	Mild inflammation: Slight change in color, slight oedema No bleeding on probing
2	Moderate inflammation: Redness, oedema and glazing. Bleeding on probing
3	Severe inflammation: Marked redness and oedema. Ulceration. Tendency to spontaneous bleeding

Differential diagnosis

- lupus Erythematous
- Oral lichen planus

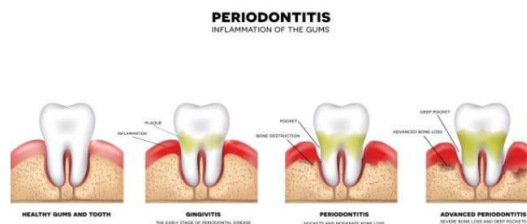
- Allergic reaction
- Drug Associated gingival enlargement
- Pemphigus

Prognosis

Gingivitis if identified and treated, can easily be resolved as the condition is reversible Once the dental biofilm has been removed. If gingivitis progress to periodontitis, connective tissue attachment loss, and bone destruction will occur, which may ultimately result in tooth loss.

Complications

1. Abscess or infection in the gingival or jaw bone.
2. Trench mouth, where bacterial infection leads to ulceration of the gums (NUG).
3. Periodontitis, a more serious condition that can lead to loss of bone and teeth Recurrent gingivitis.
4. Associated with premature birth and low birth weight.
5. Swollen lymph nodes
6. **Alzheimer's** and **dementia** – A new study from 2018 found that bacteria which are responsible for many forms of gum diseases can spread to brain from mouth that leads to characteristic features of Alzheimer's disease.



Prevention

People are advised to Maintain oral hygiene that includes:

- Brush teeth at least twice a day.
- Use soft brush or wash teeth by finger.
- Floss teeth at least once a day.
- Regularly rinse mouth with an antiseptic mouthwash.
- Avoid smoking
- Reduce stress
- Avoid excess use of mouth drying mouthwashes
- Maintain a well-balanced diet includes less sugar in diet
- Avoid clenching and grinding of teeth.
- Took food which contains vitamins like C, D and B complex which helps the growth and strength to the gums.

Homoeopathic therapeutics

1) KREOSOTUM – It is one of best remedy for bleeding gums with black blood. This remedy is used with profuse bleeding from small wounds. Offensive smell from discharges. It has burning pain associated with complaints. It is given in children in whom there is decaying of teeth very rapidly with spongy and bleeding gums. Putrid odour with bitter taste in mouth. Scorbutic ulcerated.

2) MERCURIUS SOL – This remedy is useful in many diseases such as Painful gums, marasmus, abscesses. All complaints are aggravated at night, from warmth of bed, from cold, rainy weather and when then has perspiration. It can also cure tendency of pus formation. Sweetish metallic taste. There is increased salivation. Saliva is fetid with coppery taste. It is very effective remedy for spongy, receding gums which gets bleeds easily. Gums are sore to touch and patient has difficulty in chewing and deglutition. It is also given when teeth are loose and feel tender. There is always bad smell from mouth.

3) NITRICUM ACIDUM – This is important remedy for pyorrhea, in which patient has putrid breath from mouth. Painful and Bleeding gums. It is given in patient whom has painful pimples on the sides of tongue. Various type of ulcers and blisters in mouth and tongue. They take cold things easily. Tongue of these patient is often clean, red and wet with central furrow. It is given when gums are soft and spongy and teeth become loose. In some patient often seen bloody saliva.

4) ARNICA – It is given in patient whom has soreness of gums after tooth extraction. It is good remedy for halitosis (bad smell from mouth). Patient has bitter taste, taste as if bad eggs. They have total lack of interest and inability to perform continuous work. They have fear of touch or approach of anyone. Nervous patient.

5) CARBO VEGETABILIS – This remedy is effective for inflammation of guns with scorbutic gums. Gums bleeds when brushing. Gums retracted and its bleed easily, pain while chewing. Gums colour turned black. Bad smell and bitter taste in mouth.

6) LACHESIS – Lachesis is effective for inflammation of gums with bluish appearance. Gums are spongy, swollen and bleeds easily. There is sour peppery taste with bad odour. In Toothache the pain extends to ears.

7) STAPHYSAGRIA - is indicated for inflammation of gums with teeth decay. The gums pale, swollen and bleeds easily. There is

much salivation. Teeth black and crumbling. Musty taste in mouth.

8) ALUMINA – Sore and bleeding gums with foul odor from mouth. Teeth are covered with dirty grey coating and dryness of mouth.

9) APIS MELLIFICA – Gums sacculated, look watery decreased thirst. Child awakes and screams violently. Swelling and redness of gums and cheeks with sore pain. Gums bleeds easily.

10) Thuja – indicated for inflammation of gums with tooth decay. Teeth decay at the edge of gums, crumble, turn yellow. Gums very sensitive and retract.

11) ARG. NITRICUM – Gums tender and it's bleeds easily, but neither painful not swollen. Gums inflamed and stand off from the teeth in the shape of indentation. Accompanied by canker sores on mouth. Tongue has prominent papillary with red and painful tip and altered state in mouth.

12) BORAX – Inflamed large swelling on outer side of gums, which pains severely. Painful gums and boils. There is dark redness in the lower portion of gum beneath the root of the teeth.

13) CALCAREA CARBONICA – Gums are painful tender with stitching, pulsating pain. Swelling, bleeding even at night. Foul breathing. Bleeding of gums after suppressed menses.

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