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Review Article

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# SHEETADA: AYURVEDIC UNDERSTANDING OF GINGIVITIS AND ITS PROGRESSION TO PERIODONTITIS

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#### ABSTRACT

Sheetada, a term in Ayurveda, refers to a condition characterized by bleeding gums and inflammation, closely resembling gingivitis in modern dentistry. Gingivitis, if left untreated, progresses to periodontitis, leading to severe dental and periodontal issues. This review compares the Ayurvedic understanding of Sheetada, including its causes (hetu), symptoms (roopa), and treatment (chikitsa), with modern concepts of gingivitis and periodontitis. Ayurveda classifies Sheetada as a Shalakya Tantra disorder, emphasizing preventive measures through daily oral hygiene, lifestyle modifications, and the use of herbal remedies. In contrast, modern dentistry focuses on mechanical plaque removal, antibiotics, and surgical interventions in advanced stages. This paper explores the parallels and divergences between these two systems of medicine, offering insights into holistic management approaches for gingivitis and periodontitis.

**KEYWORDS:** Sheetada, Gingivitis, Periodontitis, Ayurveda, Dental health.

#### **INTRODUCTION**

Oral health is a significant component of overall well-being, and its deterioration can lead to systemic diseases. In Ayurveda, Sheetada is described as a condition characterized by bleeding and inflamed gums, which can correlate with the modern understanding of

gingivitis. Gingivitis, a mild form of gum disease caused primarily by poor oral hygiene, can progress into periodontitis if untreated, leading to tooth loss and bone destruction. While modern dentistry employs various mechanical and pharmacological interventions, Ayurveda provides a preventive and therapeutic framework using holistic approaches that include herbs, oils, and daily oral care rituals.

Gingivitis is a widespread condition that, if unchecked, may progress into periodontitis, resulting in significant oral and systemic health consequences. Despite the advances in modern dental practices, there is a growing interest in integrating traditional approaches like Ayurveda to provide a more holistic and preventive perspective. By comparing the Ayurvedic concept of Sheetada with modern periodontal diseases, this study seeks to highlight complementary approaches that could improve patient outcomes and promote better oral health.

#### **Need of Study**

This article aims to present a comprehensive review of both Ayurvedic and modern perspectives on the diagnosis, etiology, and management of gingivitis and its progression to periodontitis.

#### **MATERIALS AND METHODS**

This review article is based on secondary research, involving an extensive literature review of both classical Ayurvedic texts and modern dental studies. Ayurvedic sources such as Charaka Samhita, Sushruta Samhita, and Ashtanga Hridaya were reviewed for insights on Sheetada, while modern dental texts, journals, and research papers were consulted to understand gingivitis and periodontitis. A comparative analysis was then conducted to integrate and evaluate the findings from both systems of medicine.

#### REVIEW OF LITERATURE

Ayurvedic Review on Sheetada<sup>[01-08]</sup>



#### 1. Hetu (Causes)

In Ayurveda, Sheetada is predominantly caused by the vitiation of **Kapha** and **Pitta doshas**. These imbalances arise from dietary and lifestyle factors such as excessive consumption of cold, sweet, and heavy foods. Poor oral hygiene, improper digestion, and the accumulation of **Ama** (toxins) contribute to the manifestation of Sheetada. Moreover, the vitiation of **Rakta Dhatu** (blood tissue) plays a significant role in the development of this condition.

"शीटदो रूपाणि कफ-पित्तात्मकः रुजः.

रक्तं स्रवति वदनात, प्रतिस्यन्दति चण्डतः।"

(स्श्रुत संहिता, उत्तर तंत्र ५/७)

#### Meaning

Sheetada is a condition that arises from the combined vitiation of Kapha and Pitta, causing pain and bleeding from the mouth, and discharge from the gums.

#### 2. Purva Roopa (Prodromal Symptoms)

The prodromal symptoms of Sheetada are subtle and occur before the full manifestation of the disease. These symptoms include irritation of the gums, sensitivity to hot and cold substances, and foul breath, which is referred to as **Durghandha** in Ayurveda.

"पूर्वरूपेषु शीटस्य दौर्बल्यम् रुजते मुखम्,

दुर्गन्धः च स्यात् शीटके ह्रियते वदनात् स्त्रुतम्।"

(अष्टांग हृदय, सूत्रस्थान २२/१०)

#### Meaning

The prodromal symptoms of Sheetada include weakness in the oral cavity, foul odor, and a sensation of discomfort in the gums.

#### 3. Roopa (Symptoms)

The full-blown manifestation of Sheetada is characterized by spontaneous bleeding from the gums, inflammation, swelling, bad breath, and tenderness. In severe cases, gum recession and tooth mobility may also occur.

"शीटादे दन्तमूले रक्ते प्रस्रवते सदा,

शीटकः नैव धारयेत् दन्तं मूल दर्द्रवत्।"

(चरक संहिता, चिकित्सा स्थान २६/७०)

#### **Meaning**

In Sheetada, blood continuously oozes from the base of the teeth, and the patient feels an inability to retain food due to the softness and swelling at the roots of the teeth.

#### 4. Lakshana (Clinical Features)

The clinical features of Sheetada closely resemble advanced gingivitis in modern dentistry. The gums become inflamed, and there is a significant discharge of pus and bleeding. In chronic cases, it leads to looseness of teeth.

"पित्तस्य संवृद्ध रक्ता स्रोतः स्त्रुतं धनुशीव,

रूक्ष शूल भवन्ति, दन्ताः च चलन्ति विशेषतः।"

(स्श्र्त संहिता, उत्तर तंत्र ५/१०)

#### Meaning

The imbalance of Pitta leads to bleeding and inflammation of the gum tissues, resulting in pus formation and tooth mobility.

#### 5. Samprapti (Pathogenesis)

The pathogenesis of Sheetada revolves around the vitiation of **Rakta** and **Mamsa Dhatus**. The doshic imbalances affect these tissues, leading to inflammation and eventual breakdown of the supporting structures of the gums. **Kapha** obstructs the flow of blood, causing stagnation, while **Pitta** leads to increased bleeding and heat in the tissues.

"रक्तं मांसं च पित्तं च कफ दोषाश्च वृद्धिमान्,

स्यन्दति दन्तमूलेभ्यः स्रवति रक्तं शीटदः।"

(अष्टांग संग्रह, उत्तर तंत्र २३/८)

#### Meaning

The increase in Kapha and Pitta results in the discharge of blood from the gums due to the softening and inflammation of the gum tissues, characteristic of Sheetada.

#### 6. Chikitsa (Treatment)

Ayurvedic management of Sheetada involves internal and external therapies to balance the vitiated doshas, cleanse the oral cavity, and promote healing. **Triphala**, **Guduchi** (Tinospora cordifolia), and **Manjistha** (Rubia cordifolia) are commonly used internally for their anti-inflammatory and detoxifying properties. External treatments include **Kavala** (gargling), **Gandusha** (retaining medicated liquids), and **Pratisarana** (herbal paste application). Some of the effective herbal remedies for local application include **Triphala kwatha**, **Madhu** (honey), and **Haridra** (turmeric).

"त्रिफला मधु सैन्धवयुक्त द्रव्यं प्रतिसरणीयं,

गण्डूष कवलादि मधुर रस द्रव्यं शीटशामकं।"

(सुश्रुत संहिता, चिकित्सा स्थान २१/२८)

#### **Meaning**

Triphala, honey, and rock salt are recommended for external application in Sheetada, while gargling with medicated liquids helps soothe the condition.

### 7. Sadhya-Asadhyatva (Prognosis)

Sheetada, when detected early, can be easily managed with lifestyle modifications and herbal treatments. However, in neglected cases, the condition may progress to **Dantavestaka** (periodontitis), which is harder to treat.

"यावन्न दन्ताश्च चलन्ति शीटके चिकित्सेत.

दुर्दन्तके तु विश्वम्भ रक्त पित्तेः कृत्स्रं कारणं।"

(सुश्रुत संहिता, उत्तर तंत्र ५/१३)

#### **Meaning**

Sheetada is manageable as long as the teeth remain firm. Once the condition progresses to Dantavestaka, the vitiated blood and Pitta make treatment difficult.

#### 8. Upadrava (Complications)

If left untreated, Sheetada can lead to serious complications, including periodontitis, bone loss, tooth loosening, and eventual tooth loss. Ayurvedic texts also mention the potential for abscess formation and the spread of toxins throughout the body.

"रक्तजा दन्त रोगाणां श्रेष्ठ छिद्र व्यासनी.

रक्तदोषाभियोजितः प्रलप्स्यते दन्तं छिद्रयति।"

(चरक संहिता, सूत्रस्थान १५/११)

#### **Meaning**

Advanced cases of blood-related dental diseases can lead to severe complications like tooth loss and the spread of infections to other areas.

# Modern Review on Gingivitis And Its Progression To Periodontitis $^{[09-13]}$





#### 1. Etiology

Gingivitis, an inflammation of the gums, is primarily caused by the accumulation of plaque, a bacterial biofilm that forms on teeth and gums due to poor oral hygiene. Plaque buildup results in irritation and inflammation of the gums. Other contributing factors include:

- **Smoking**
- **Diabetes**
- Certain **medications** (e.g., immunosuppressants, antihypertensives)
- **Hormonal changes** (e.g., pregnancy, menopause)
- Genetic predisposition, immunodeficiency, and stress also play a role.

Plaque forms as bacteria interact with food debris on the tooth surface, which hardens into calculus (tartar) if not removed, further irritating the gums and promoting bacterial growth.

#### 2. Clinical Features

The early signs of gingivitis are mild and include:

- **Redness** of the gums
- Swelling
- Bleeding during brushing or flossing

These symptoms represent a reversible stage of periodontal disease. If left untreated, gingivitis can progress to **periodontitis**, where inflammation extends to deeper structures of the periodontium, including the periodontal ligament and alveolar bone. In periodontitis, the following features become apparent:

- Formation of **periodontal pockets**
- Gum recession
- Mobility of teeth due to loss of supporting bone
- Bad breath (halitosis)
- Eventual tooth loss

#### 3. Pathogenesis

The pathogenesis of gingivitis begins with the accumulation of plaque around the **gingival margin**. This biofilm, rich in bacteria, leads to the release of toxins and triggers an immune response, causing localized inflammation limited to the gingiva. Without intervention, the chronic inflammation progresses to periodontitis, characterized by the destruction of:

- Connective tissue supporting the teeth
- Periodontal ligament
- Alveolar bone

As the inflammation worsens, bacteria infiltrate deeper structures, exacerbating tissue destruction and causing the formation of **periodontal pockets**. The progression from gingivitis to periodontitis is marked by irreversible bone and tissue damage.

#### 4. Treatment

- Gingivitis: The treatment for gingivitis is relatively straightforward and involves the
  mechanical removal of plaque and tartar through professional dental cleaning (scaling).
   Improved oral hygiene, including regular brushing, flossing, and the use of mouthwash, is
  essential to prevent recurrence.
- **Periodontitis**: In cases of periodontitis, treatment is more intensive and may include:
- Scaling and root planing: Deep cleaning to remove plaque and tartar from beneath the gumline and smooth the roots of the teeth.
- o **Antibiotic therapy**: To manage bacterial infections in the gum pockets.

Surgical interventions: In advanced cases, procedures like flap surgery, bone grafting,
 and guided tissue regeneration are used to restore lost bone and periodontal tissues.

Maintenance of oral hygiene and regular dental check-ups are crucial to prevent further progression of the disease.

#### 5. Prognosis

- Gingivitis: With proper oral care and professional cleaning, gingivitis is entirely reversible.
- Periodontitis: Once periodontitis has developed, the damage to the supporting structures
  of the teeth is often irreversible. Treatment aims to manage the condition, preventing
  further progression. Advanced cases require ongoing management and may lead to tooth
  loss if not treated adequately.

#### **DISCUSSION**

Both **Ayurveda** and **modern dentistry** emphasize the significance of **prevention** and **early intervention** in managing gum diseases like gingivitis and its progression to periodontitis. However, their approaches differ in methodology and underlying philosophy.

In Ayurveda, the primary focus is on the **balance of doshas** (Vata, Pitta, and Kapha) and the **detoxification** of the body, including the oral cavity, to maintain oral health. Ayurvedic texts describe gum diseases such as **Sheetada** (comparable to gingivitis) as being caused by an imbalance in **Kapha** and **Pitta doshas**, as well as the accumulation of **Ama** (toxins). Ayurvedic treatment emphasizes the use of herbal formulations like **Triphala**, **Haridra** (**turmeric**), and **Madhu** (**honey**) to reduce inflammation and cleanse the gums. Additionally, daily oral care routines like **Kavala** (**oil pulling**), **Gandusha** (**gargling**), and **Pratisarana** (**herbal paste application**) play a crucial role in preventing and treating gum disorders. The use of herbs with **anti-inflammatory** and **detoxifying properties** further supports the management of gum diseases by promoting natural healing and restoring balance in the body.

On the other hand, modern dentistry primarily focuses on the **mechanical removal of plaque** and tartar through professional cleaning, along with the use of **pharmaceutical agents** like antibiotics and antimicrobial mouthwashes to control infection. Gingivitis is treated by improving oral hygiene practices, while periodontitis, in advanced stages, may require more invasive treatments such as **scaling and root planing**, **surgical interventions**, and the use of **regenerative therapies** like **bone grafting**. Modern dentistry recognizes the importance of

preventing plaque buildup to avoid the progression of gum diseases and aims to repair and restore the supporting structures of the teeth.

Both systems recognize that if left untreated, gingivitis can progress to more severe conditions like periodontitis, leading to complications such as **bone loss**, **tooth mobility**, and **eventual tooth loss**. Regular monitoring and timely treatment are essential in preventing these outcomes.

An integrated approach, combining **Ayurveda's holistic practices** with **modern dental techniques**, can offer a **comprehensive strategy** for maintaining optimal gum health. Ayurveda's focus on **lifestyle** and **dietary modifications**, coupled with modern dentistry's advanced **diagnostic tools** and **surgical interventions**, may provide a balanced approach to both preventing and managing gum diseases. This combined method can help address the root causes, promote oral health, and prevent the recurrence of diseases in the long term.

#### **CONCLUSION**

This comparative review highlights the similarities and differences between Ayurvedic and modern approaches to managing gingivitis and periodontitis. While modern dental practices focus on mechanical interventions, Ayurveda emphasizes a more holistic approach involving lifestyle modifications, herbal remedies, and daily preventive care. By integrating both systems, healthcare practitioners may provide more effective and long-lasting solutions for oral health, addressing not only the symptoms but also the underlying causes of gum disease.

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