

## SHĪTĀDA VIS-A-VIS GINGIVITIS: A CRITICAL REVIEW

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### ABSTRACT

Now-a-days, the diseases affecting the gums have gained a prime importance and continue to be a major global oral health problem. Among them, Gingivitis is a more common and more irritating disease. If left untreated, it can progress to periodontitis and ultimately lead to tooth loss. Similar to this, there is a condition known as *Shītāda* in Ayurvedic Science. It is a type of *Dantamūlagata Rogā* (gingival disease) described under the heading of *Mukha Roga* (oral disease). The disease is reversible and the gingival harmony can be restored with successful treatment and good oral hygiene. Here, an attempt has been made to compile the knowledge of ancient Āyurvedic Physicians which is scattered in Āyurvedic texts so as to present it systematically and critically analyze the Ayurvedic concept and management of *Shītāda* with special reference to Gingivitis.

**Keywords:** Gingivitis, *Shītāda*, *Dantamūlagata Rogā*, Oral hygiene

### INTRODUCTION

Oral diseases are worldwide oral health problem since ancient era. Now a day, they have gained an importance and considered as a major health problem world-wide particularly in developing countries due to increased incidence. Among them, the disease Gingivitis (papillary or marginal) is a common and more irritating disease. The epidemiological studies conducted by American Academy of Periodontology show that Gingivitis of varying severities is nearly universal and it is estimated that over 80% of the world's population suffers from Gingivitis.<sup>1</sup> Among children and adolescents the incidence rate is

52.03%. In the 3<sup>rd</sup> National Health and Nutritional Examination Survey, it was found that 50% of adults had gingivitis in at least 3-4 teeth.<sup>2</sup> In Gujarat, the prevalence of gingivitis was found to be 74.45%.<sup>3</sup> Global studies show that prevalence of gingivitis is more common among males.<sup>4</sup>

Gingivitis was recognized as a clinical disorder in the mid 19<sup>th</sup> century.<sup>5</sup> It is the most common form of non-destructive periodontal disease. It is caused mainly by the accumulation of debris, plaque and calculus at the tooth margin due to ignorance and lack of oral care and hygiene. It is characterised by

inflammation of the gingival tissue. It may occur in an acute, sub-acute or chronic.<sup>6</sup> If left untreated or not controlled, it may progress to more serious conditions like periodontitis and ultimately lead to tooth loss.<sup>5</sup> However, the disease is reversible and gingival harmony can be restored with successful treatment and good oral hygiene. Similar to this, there is a condition known as *Shītāda* in Ayurvedic science on the basis of symptomatology. Here, an attempt has been made to compile the knowledge of ancient Āyurvedic Physicians which is scattered in Āyurvedic texts so as to present it systematically and critically analyze the Ayurvedic concept and management of *Shītāda* with special reference to Gingivitis.

The word *Shītāda* is composed from two words i.e., *Shit* and *Aad*. The word *Shit* means cold and *Aad* means to eat.<sup>7</sup> The disease *Shītāda* manifests due to

intake of cold foods. It is a type of *Dantamūlagata Rogā*<sup>8</sup> (gingival disease) described under the heading of *Mukha Roga* (oral disease). It occurs due to vitiated *Kapha* (phlegm) and *Rakta* (blood) which affect the *Dantamūla* (gum/gingiva) and degenerates it by manifesting clinical features like spontaneous bleeding from the gums (*Raktasrāva*), swelling (*Shoṭha*) of the gums, blackish discolouration (*Krishnatā*) of the gums, halitosis (*Daurgandhya*) and so on.<sup>9</sup>

#### **NIDĀNA (Etiological Factors):**

The aetiological factors of *Shītāda* are not mentioned separately in the classical Ayurvedic texts. But, the general aetiology (*sāmānya nidāna*) of oral disease (*mukha roga*) can be considered as the etiological factors for *Shītāda*.

**Table.1:** Common etiological factors of *Mukha Roga* acc. to Āyurvedic texts

No	<i>Mukha Roga Sāmānya Nidānās</i> <sup>10</sup> (Common Etiology)	<i>A S</i>	<i>A H</i>	<i>M N</i>	<i>K S</i>	<i>B P</i>	<i>Y R</i>
<b><i>Āhāraja Nidānās</i></b>							
1	<i>Matsya Sevana</i>	+	+	-	-	-	-
2	<i>Ati māmsa (Anupa, Mahisha, Varaha) Sevana</i>	+	+	+	-	+	+
3	<i>Ikshu rasa, Shukta, Phanita Ati Sevana</i>	+	+	-	-	-	-
4	<i>Ati &amp; Apakwa balāmūlaka, māsha Sevana</i>	+	+	-	-	-	-
5	<i>Ati Guru, Madhura, Shita, &amp; Ruksha Ahāra Sevana</i>	+	+	-	+	-	-
6	<i>Ati Shītāmbu Sevana</i>	-	-	-	+	-	-
<b><i>Vihāraja Nidānās</i></b>							
7	<i>Avak shayyā</i>	+	+	-	-	-	-
8	<i>Ati pārsva shayyā</i>	-	-	-	+	-	-
9	<i>Vishama danta dhāvana / danta dhāvana dwesha</i>	+	+	-	-	-	-
10	<i>Anuchita - dhūma, gandūsha, vama, siravedha</i>	+	+	-	-	-	-
	<i>Snāna after Guru ahāra Sevana / in Ajirna</i>	+	+	-	+	-	-
11	<i>Vegadhārana</i>	-	-	-	+	-	-
12	<i>Avrita Mukha Shayyā</i>	-	-	-	+	-	-

*A S* = Astānga Samgraha; *A H* = Astānga Hridaya;  
*K S* = Kāshyapa Samhitā; *B P* = Bhāva Prakāsha;

*M N* = Mādhava Nidāna;  
*Y R* = Yoga Rātnākara

Sushruta (Ancient Ayurvedic Surgeon) has mentioned that the disease *Shītāda* is occurred due to *Kapha* and *Rakta Prakopaka* factors.<sup>9</sup> Accordingly, the factors which cause aggravation of *Kapha* and *Shonita* (blood) are to be taken as etiological factors for *Shītāda*. Therefore, the general causes of *Shwayathu* (swelling), *Sotha* (inflammation) can also

be considered as the etiological factors of *Shītāda*. Charaka (Ancient Ayurvedic Physician) has mentioned gingival recession (*Shiryamānatā*) as one amongst the complication of poisonous *Datūna* (toothbrush) (Ch.Chi.23/16-18) which is one of the important symptoms of *Shītāda*. The improper administration of *Vamana* (emesis therapy), *Virecana*

(purgation therapy), *Dhūmapāna* (medicated smoking therapy), *Siravedha* (blood-letting therapy) etc., are considered as iatrogenic causes of *Kapha* and *Rakta Prakopa*.

The endogenous and exogenous toxins enter the body through contaminated foods-drinks-air, junk food habits, irregular food habits, addictions like tobacco-gutakha chewing, smoking, alcohol intake, soft drinks and mental stress etc. Gradually they re-

sult accumulation of toxins in the oral cavity and cause bacterial invasion (RB Hosamani 2017). This further leads to accumulation of debris, plaque and calculus at the tooth margin and cause poor oral hygiene. So, inadequate or poor oral hygiene can be considered as a prime cause in occurrence of Gingivitis. The risk factors will also play an important role in the manifestation of Gingivitis (table 2).

**Table 2:** The Risk factors of Gingivitis

No	Risk factors <sup>11</sup>
1	Poor oral care habits
2	Smoking or chewing tobacco or gutakha
3	Dry mouth
4	Older Age
5	Pregnancy
6	Genetic factors
7	Psychosocial stress
8	Diabetes
9	Poor nutrition, including vitamin C deficiency
10	Certain medications (oral contraceptives, steroids, anticonvulsants, aspirin, calcium channel blockers)
11	Dental appliances that don't fit properly or crooked teeth that are difficult to clean, broken fillings
12	Compromised immunity (such as Leukaemia, Wegner disease, Addison disease and HIV/AIDS patients) or chemotherapy

**PŪRVARŪPA (Pre-clinical Symptoms):**

The specific *Pūrvarūpa* of *Shītāda* are not mentioned separately in the classical Ayurvedic texts. In many diseases, the symptoms are *Avyakta* (not manifested or deficit) prior to its complete manifestation. Here *Avyakta* can be taken as *Ishat* or *Alpa vyakta* or *Asampurna lakshana* (Chakrapāni, Ch.Chi.11/12) which means mildness in the symptoms. Hence, the slight appearance of the manifestation or the mild symptoms in the initial stage of the disease can be taken as premonitory symptoms of that particular disease. So in *Shītāda* the *Ati lālāsrava* (excessive salivation), *Daurgandhya* (halitosis) and *Aruchi* (lack of taste) etc. can be considered as the premonitory symptoms.

The disease gingivitis is totally asymptomatic in the initial stage. It can be painless. So it is important to be aware of some of the common warning signs such as swollen gums or dusky reddish gums or bleeding

gums, persistent bad breath, bad taste in mouth, etc. can be taken as premonitory symptoms of gingivitis.

**RŪPA (Clinical Symptoms):**

The cardinal features of *Shītāda*<sup>9</sup> are:

1. *Akasmāt Rakta Srāva*: Spontaneous Bleeding from gums
2. *Shotha* : Inflamed or Swollen gums
3. *Shiryamāna Dantamānsa* : Receding gums
4. *Krishnatā* : Dusky red or Dark red gums
5. *Daurgandhya* : Bad breath or Halitosis
6. *Dantamānsa Mridutā*: Spongy or tender gums
7. *Prakleda* : Exudation from of gums

Symptoms such as *Pāka* (suppuration), *Shiryamāna* (recession) and *Chaladanta* (tooth mobility) may be seen in the later stage of the disease.

Table 3 highlights cardinal features of *Shītāda* according to different Ayurvedic texts.

**Table 3:** Cardinal features of *Shūtāda* according to different *Āyurvedic* texts

S. No.	Lakshanas	Su.Sam. <sup>8</sup>	A.H. <sup>11</sup>	Sha.Sam. <sup>12</sup>	M.N. <sup>13</sup>	B.P. <sup>14</sup>
1	<i>Akasmāt Raktasrāva</i>	+	+	+	+	+
2	<i>Daurgandhya</i>	+	+	+	+	+
3	<i>Prakledana</i>	+	+	+	+	+
4	<i>Mridutā</i>	+	+	-	+	+
5	<i>Krishnatā</i>	+	+	+	+	+
6	<i>Shiryānatā</i>	+	-	-	-	+
7	<i>Paraspara Pāchana</i>	+	+	+	+	+

Su.Sam=Sushrut Samhitā; A.H.=Astānga Hridaya;  
M.N.=Mādhava Nidāna; B P = Bhāva Prakāsha;

Sha.Sam=Shārangadharā Samhitā;

The disease *Shūtāda* can be correlated with general marginal and papillary gingivitis in modern dentistry on the basis of symptomatology. The symptoms of gingivitis are somewhat non-specific. It is usually caused by a bacterial infection. The gums become inflamed. They become swollen and may appear shiny. They are bright red or purple in colour. They emit an unpleasant odor. There will be bad taste in the mouth. The epithelial lining of the gingival crevice becomes ulcerated when the gingiva are swollen. They will bleed more easily with even gentle brushing and flossing. And sometimes they can be tender. Another sign of gingivitis is gums that have receded or pulled away from the teeth, giving the teeth an elongated appearance. If gingivitis is not treated properly then it may progress into periodontitis and ultimately lead to tooth loss.

#### **SAMPRĀPTI (Pathogenesis):**

Though the *Samprāpti* of *Shūtāda* has not been explained directly in *Āyurvedic* classics, but keeping in mind all the general etiological factors explained under oral disease (*mukha roga*) and *doshic* involvement of the disease, here an attempt has been made to explain the pathogenesis of *Shūtāda*. Even though the factors responsible for increase in *Kapha* and *Shonita (Rakta)* are the main factors in the manifestation of *Shūtāda*, the etiological factors responsible for the vitiation of *Rasavaha, Raktavaha* and *Māmsavaha Srotas* also play a definite role directly

or indirectly in the pathogenesis of *Shūtāda*. Hence these factors should not be neglected.

Over indulgence in *Āhārajanya nidāna* i.e., intake of *Kapha-prakopakara, Agnimāndhyakara* and *Rakta prakopaka ahāra* causes *Kapha dushtī* (vitiation of *kapha dosha*), *Āma utpatti* (formation of toxins), *Rakta dushtī* (vitiation of blood) and obstruction in the *Rasa-Raktavaha Srotasa*. *Dushita Rakta* (vitiated blood) interacts with *Dushita Kapha* (vitiated *kapha*) and finally ascends to *Urdhwajatru* (above the shoulder) and gets localized in *Dantaveshta* (gingiva). As a result of this, the *Māmsa* (muscle) and *Sirās* (vessels) of *Dantaveshta* become *Dushtī* (vitiated). The causative *Doshās* get excessive accumulation in *Dantaveshta* and thereby cause significant damage to the *Dantaveshta* and manifests the definite clinical symptoms of *Shūtāda*.

The *Vihārajanya nidāna* includes *Āgantuja* causes and lack of oral hygiene. Over indulgence in *Āgantuja* factors like *Ativamana, Anuchita Dhūmpāna*, etc. can result into direct injury to *Dantaveshta* (gingiva). It causes *Sthāna samsraya* (relocation) of *dosha* in *Dantaveshta*. Further the disease progression occurs in the same way as above. Lack of oral hygiene leads to impaction of food debris in the interdental spaces and leads to *Kapha dosha Prakopa*. By this, formation of *Danta Sharkarā* (calculus, plaque) occurs and which leads to *Māmsa* and *Sirādushtī* in *Dantaveshta*. Further the progression of disease occurs in the same way as above.

The most common cause of gingivitis is poor oral hygiene. It encourages the formation of plaque on teeth. Furthermore the inadequate oral hygiene can harden the plaque under gum line. Then it turns into tartar (calculus) and collects the bacteria. Tartar makes plaque more difficult to remove and creates a

protective shield for bacteria. It irritates along the gum line and causes inflammation of gingival. In time, gums become swollen and bleed easily. If not treated then gingivitis can advance to periodontitis and eventual tooth loss.

**Table 4:** Samprāpti Ghatakas of Shītāda

No	Samprāpti Ghatakas of Shītāda	
1	<i>Dosha</i>	- <i>Kapha - Rakta (Pitta)</i>
2	<i>Dushya</i>	- <i>Rasa-Rakta-Māmsa of Dantamula</i>
3	<i>Agni</i>	- <i>Jatharāgnimāndya, Dhātwāgnimāndhya</i>
4	<i>Srotas</i>	- <i>Rasavaha, Raktavaha, Māmsavaha</i>
5	<i>Srotodushti</i>	- <i>Sanga, Vimārga gamana</i>
6	<i>Udbhava sthāna</i>	- <i>Amāshaya, Mukha kuhara</i>
7	<i>Dosa mārga</i>	- <i>Sandhi</i>
8	<i>Roga mārga</i>	- <i>Bāhya</i>
9	<i>Vyaktasthāna</i>	- <i>Dantamula</i>
10	<i>Vyādhi adhishtāna</i>	- <i>Dantamula</i>
11	<i>Sādhyāsādhyatā</i>	- <i>Sādhyā</i>

**Table 5:** Biomarkers in Gingivitis (or Periodontology)

No	GSF Biomarkers in Gingivitis (or Periodontology) <sup>16</sup>	
1	Host Derived Enzymes	Aspartate aminotransferase (AST), Alkaline phosphatase (ALP), Beta-Glucuronidase (BG), Elastase, Cathepsin B, Matrix Metalloproteinases (MMPs), Leptin, Hepatocyte Growth Factor (HGF)
2	Inflammatory mediators and host response modifiers	Cytokines, Substance P (SP), Tumor necrosis factor-a (TNF-a), Monocyte chemo-attractant protein (MCP)
3	Tissue breakdown products	Laminin, Osteopontin (OPN), Osteocalcin (OC)
	<b>Saliva Biomarkers in Gingivitis (or Periodontology)<sup>16</sup></b>	
4	Salivary enzyme biomarkers	Aspartate aminoTransferase (AST), Alanine aminoTransferase (ALT), Gamma GlutamylTransferase (GGT), Alkaline Phosphatase (ALP), and Acid Phosphatase (ACP).

**Table 6:** Indices in Gingivitis (or Periodontology)<sup>17</sup>

1	Simplified Oral Hygiene Index (OHI-S) 1. Debris Index 2. Calculus Index	By John C Greene and Jack R Vermillion in 1964
2	Gingival Index (GI-S)	By Silness P and Loe H in 1963
3	Gingival Bleeding Index (GBI-S)	By Carter and Barnes in 1974
4	Plaque Index	By Silness P and Loe H in 1964

#### INVESTIGATIONS:

1. **Oral examination:** This involves checking the teeth and the gums. The dentist examines the integrity, colour, shape and consistency of the

gums. Redness, puffiness and bleeding upon probing indicate inflammation.

2. **Laboratory:** It is not usually helpful in diagnosing gingivitis. But the following routine labora-

tory tests should be carried out in order to rule out any systemic disease or toxin exposure is suspected.

Haematological: Hb%, TC, DC, CT, BT, Platelet Count, ESR.

Biochemical: RBS

Urine and Stool: Routine and Microscopic

3. **Radiological:** In case of tooth mobility or otherwise, an X-ray reveals the severity of bone destruction (if any signs of periodontitis).
4. **Culture:** A smear to identify the causative agent may be helpful. Gingival Crevicular Fluid (GCF) swab culture is useful.
5. **Biopsy:** Tissue samples may be examined when the patient does not respond to initial therapy.

### **CHIKITSĀ (MANAGEMENT):**

*Chikitsā* is the measure which brings about the homeostasis of imbalanced *Doshās*. In the pathology of *Shītāda*, *Kapha* and *Rakta* is the main *Dosha*. *Rakta* and *Māmsa* of *Dantamula* is the main *Dushya*, while *Agnimāndya* takes place at *Dhātawāgni* level. So, that type of drug or therapy should be selected which has *Kapha* and *Rakta (Pitta) nāshaka* property and have efficacy to correct the function of *Dhātawāgnimāndya*. Ayurvedic classics have been mentioned several treatment modalities for the management of *Shītāda* which includes:

1. *Nidāna Parivarjana* (Avoidance of etiological factors)
2. *Rakta Nirharana* (Blood Letting Therapy)<sup>18,19,20,21</sup>
3. *Pratisārana* and *Pralepa* (Rubbing and Application Therapy)<sup>18,20,21</sup>
4. *Gandūsha – Kavala dhārana* (Mouth Full & Gargles Therapy)<sup>13,15,18,19,20,21</sup>
5. *Nasya Karma* (Nasal Instillation Therapy)<sup>18</sup>
6. *Pathyāpathya* (Do's and Don'ts)

1. ***Nidāna Parivarjana* (Avoidance of etiological factors):** Avoidance of etiological factors has been given prime importance behind success of many treatment in *Āyurveda*. The basic principle “Prevention is better than cure” is the first step

in the management of *Shītāda*. Avoiding the indulgence in the causative factors of *Shītāda* (table.1) and attaining the good oral hygiene prevents the risk of many disorders of the oral cavity including *Shītāda*. Avoiding *Atisīta āhāra* (too cold foods), *Atiushna āhāra* (too hot foods), *Atisnigdha āhāra* (too unctuous foods) is necessary in the management of *Shītāda*. *Vihāra* like improper cleaning of the oral cavity, improper brushing and flossing method which cause trauma to the oral cavity are also to be avoided.

### **Preventive Measures:**

1. Maintain good oral hygiene by brushing teeth in the morning and night. Daily flossing. Clean the tongue. Gargle the mouth daily.
2. Build up the body's immune system.
3. Reduce the amount of Carbohydrates in the diet.
4. Increase the intake of Vitamin C & K in the diet.
5. Avoiding Cigarettes and other forms of tobacco.
6. Visit a Dentist for Dental care at least once in six months.

2. ***Rakta Nirharana* (Blood Letting Therapy):** It is one among the *Panchakarma* procedures which is exclusively indicated in *Raktaja* and *Pittaja* disorders. It removes vitiated or toxic blood (*Dushita Rakta*) from the body (or affected area) and stimulates new blood formation (*Suddha Rakta*). It is done by using *Shrunga* (cowhorn), *Jalaukā* (leeches), *Ghati* (cupping glass), *Alābu* (white gourd) and *Sirāvyadana* (venesection or vein puncture).

The treatment of *Shītāda* begins with *Rakta Nirharana*.<sup>17,18,19,20</sup> It will act as a bio-purification (*Shodhana*) therapy. It removes small amount of vitiated (toxic) blood quickly from the affected gums and stimulates the new blood formation in that area which further helps in abatement of the disease *Shītāda*. It gives prompt relief from swelling (and pain if present). Various antiseptic properties of saliva heal the periodontal tissue very fast and local defence mechanism will be increased. In this way *Rakta nirharana* therapy gives relief from inflammation of gin-

giva, stops the further progression of disease and restores the gingival harmony.

3. **Pratisārana and Pralepa (Rubbing and Application Therapy):** These are the local treatment methods of application of drugs. *Pratisārana* is a procedure of rubbing with drugs in the affected part. *Pralepa* is an application of drugs in the form of *lepa* (layer or paste) in the affected part. Vagbhat and has recommended that after *Rakta nirharana* from the gums, the gums should be rubbed with the paste of *Mustā*, *Arjunatwak*, *Triphalā*, *Phalini*, *Tārکشya* & *Nāgara* added with *Madhu*.<sup>19</sup> The combination of *Priyangu*, *Mustā* and *Triphalā* is applied locally.<sup>18,20</sup> The churna (fine powder) of combination of *Kāsisa*, *Lodra*, *Pippali*, *Shuddha Manashila*, *Priyangu*, and *Tejohwā* is applied on the gums.<sup>21</sup>

*Pratisārana* and *Pralepa* mainly possess the therapeutic effects such as *Shodhana* (cleansing) & *Ropana* (growing). Here the prepared paste is massaged or applied on the gums with mechanical pressure exerted in a specific direction. This process removes the food debris and plaque, which are the main causative factors of the disease. Further, they help to increase local blood circulation and enhances gingival defense mechanism. They maintain the gingival and the periodontal health by providing strength to the gingival fibres. Thus they stop the further progression of disease and restore the gingival harmony.

4. **Gandūsha – Kavala dhārana (Mouth Full & Mouth Gargles Therapy):** *Gandūsha* is the process of holding any medicated liquid in the mouth to its full capacity without allowing any movement inside the mouth for a certain time or until tears and nasal watering starts. *Kavala* is the process of holding any medicated liquid in the mouth and allowing movement inside the mouth for a certain time.

*Gandūsha* and *Kavalgraha* with following *yogas* (preparations) are recommended in the management of *Shūtāda*.<sup>13,18</sup>

1. *Nāgara(Shunthi)*, *Sarshapa*, *Triphalā*, *Mustā* and *Rasānjana*.<sup>13,18</sup>
2. *Shunthi* and *Parpataka*.<sup>21</sup>
3. *Nāgara(Shunthi)*, *Sarshapa*, *Triphalā*.<sup>15,20</sup>
4. *Ksheeri vriksha Kashāya*.<sup>19</sup>

Both the therapeutic procedure expel the localized *Doshas* from the oral cavity and are an effective detoxifying measure in many oral diseases. They are useful in removing accumulated toxins safely and controlling plaque and calculus. Retention of the medicine in the oral cavity exerts the cleansing action and absorption of the medicine reduces the swelling and prevents the infection. Thus they will maintain and promote the oral hygiene (gingival and periodontal health) by increasing the defence mechanism in the oral cavity and help to stop the further progression of disease and restore the gingival harmony.

5. **Nasya Karma (Nasal Instillation Therapy):** It is one among the *Panchakarma* therapy in which the medicated drugs in the form of oil, ghee, juice or powder are instilled through the nasal route in a specific manner. It is indicated in *Urdhwa jatrugata Rogas* (diseases of the above shoulder region i.e., head and neck). The drug which is administered by nasal route pervades and destroys the diseases of head and neck. Sushruta has recommended *Nasya* (insufflation) therapy as a systemic therapy in the management of *Shūtāda*. *Taila* (oil) or *Ghrita* (ghee) cooked with *Triphalā* along with *Madhuka*, *Utpala* and *Padmaka* should be used as *Nasya* in *Shūtāda*.<sup>18</sup>
6. In *Shūtāda*, there is local inflammation (*Swayathu*) of the gingival occurs. Hence, the general line of treatment of *Swayathu* can also be applied in managing *Shūtāda* (Ch.Chi.12/6). Use of *Vāta nāshaka Taila* (oil) or *Ghrita* (ghee) is beneficial in *Shūtāda*.<sup>21</sup> The Internal *yogas*

(oral medicine) such as *Triphalā guggulu* etc., *Lagu suthasekara rasa*, *Kāmadugha (mouktika-yukta)*, *Chandanāsava*, *Sārivadyāsava*, *Sārivādivati*, *Trijāthakād vati* or *Khadirādivati* are beneficial. They are having *Shoolahara* (analgesic), *Shothahara* (anti-inflammatory), *Vrinaropana* (wound healing) property. A number of single drugs are also beneficial in the case of *Shūtāda* such as *Āmlā*, *Haritaki*, *Yashtimadhu*, *Lajjālu*, *Sārivā*, *Manjisthā*, Raisins and *Mustā*.

7. **Pathyāpathya (Do's and Don'ts):** Once the treatment is adopted it becomes essential to advocate *Pathyāpathya* to the patient for the purpose of efficient results. The diet and regimen

that is congenial to the body and mind, both in healthy and diseased are referred by the name *pathya*. It becomes beneficial to the body when taken in an appropriate time with proper proportions. This helps to correct the morbid condition of *Dhātus* bringing them to Homeostatic state. Thus the diseased condition can be cured and further complications can be prevented. Quite opposite to this, the food and regimen that is not suitable to mind and body is called *Apathya*. Considering above points it can be inferred that *Nidānās* of *Shūtāda* are itself *Apathya* for that disease. The healthy dietetics and lifestyle to be followed in *Shūtāda* can be summarized as under:

**Table 6:** *Pathyāpathya* of *Shūtāda*<sup>21,22</sup>

	<i>Pathya</i>	<i>Apapthya</i>
<b>Ahara</b>	<i>Trinadhānya</i> , <i>yava</i> , <i>mudga</i> , <i>nimba</i> , <i>tambūla</i> , <i>ush-najala</i> , <i>khadira</i> , <i>ghrita</i> , <i>katu</i> and <i>tikta rasa prad-hān dravya</i> .	<i>Āmlarasa</i> , <i>matsya</i> , <i>anupa pashu paksi māmsa</i> , <i>dadhi</i> , <i>dugdha</i> , <i>guda</i> , <i>māsha</i> , <i>rukshānna</i> , <i>kathina</i> , <i>guru</i> and <i>ab-hisyandi padārtha sevana</i> .
<b>Vihara</b>	<i>Swedana</i> , <i>Gandūsha-Kavala dhārana</i> , <i>Pratisārana</i> , <i>Raktamokshana</i> , <i>Nasya karma</i> , <i>Dhūma-pana</i> , <i>Shastrakarma</i> , <i>Agnikarma</i> .	<i>Dantadhāvan</i> , <i>Adhomukha Shayana</i> and <i>Divāswapna</i>

The drugs mentioned in the various treatment modalities of *Shūtāda* are having the pharmacodynamic properties such *Katu rasa* (pungent taste), *Tikta rasa* (bitter taste) and *Kashāya rasa* (astringent taste); *Laghu guna* (light), *Ruksha guna* (dry), and *Tikshna guna* (strong); *Katu vipāka* (pungent metabolic property); *Shīta vīrya* (cold potency). They are *Kapha-Pitta Shamaka* (pacify) in nature. They possess pharmacological actions such as *Srotoshodhana* (cleansing of channels), *Lekhana* (scarificant activity), *Sthambhana* (styptic activity), *Krimighna* (anti-microbial activity), *Shothahara* (anti-inflammatory activity) and *Rasāyana* (immuno-promotive activities) which would help to remove the gingival pathology and manages the disease *Shūtāda* (Gingivitis).

As per the modern 'Dentistry' is concerned, the management of Gingivitis includes mechanical removal of causes by scaling, root planning, laser ther-

apy, use of Antibiotic mouth wash, irrigation, broad spectrum of antibiotics, analgesics, haemostatics etc. and surgery (Flap surgery & Bone and tissue grafts). In spite of the medical and surgical advances, the treatment for most of the gingival diseases may not be satisfactory and often producing adverse effects on prolonged use, which is not completely safe in all cases. Hence the safe remedy is the need. Moreover, these modalities do not focus on regenerating and improving the health of the gingiva. Gingivitis can be prevented through regular oral hygiene that includes daily brushing and flossing, hydrogen peroxide, saline, alcohol or chlorhexidine mouth washes may also be employed.<sup>23,24,25</sup>

#### COMPLICATIONS:

If the disease *Shūtāda* is not treated or controlled properly then it may results in further progress of similar symptoms resulting in a different disease with more severe form of periodontal pathology such



as *Dantapupputaka*, *Dantaveshtaka* and *Upakusha*. These diseases can occur as a sequel of gingival disease as well as an independent disease. Suppuration (*Pūyasrāva*), Tooth mobility (*Chaladanta*) and Exfoliation of tooth (*Dantapātan*) are the advanced clinical features of *Shītāda*. Tooth loss or decay, recurrence of gingivitis, periodontitis, infection or abscess of the gingiva or the jaw bones, trench mouth (bacterial infection and ulceration of the gums) and swollen glands are some of the complications.<sup>23,24,25</sup>

## CONCLUSION

*Shītāda* is one of the *Dantamulagata roga* caused by vitiation of *Kapha* and *Rakta*. Inadequate oral hygiene can be considered as a prime cause for manifestation of Gingivitis. If left untreated, it can become a more serious condition known as periodontitis. However, the disease is reversible and the gingival harmony can be restored by early detection, proper investigation, proper medication and consistent oral hygiene. Ayurvedic therapeutic strategies would help to remove the gingival pathology and manages the disease *Shītāda* (Gingivitis). The repeated advocacy of such different therapeutic strategies will provide better result. The dietetics and lifestyle should be followed strictly to avoid the incidence of *Shītāda*. Further, there is need to increase awareness about oral hygiene in the society.

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