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Role Of Gandush In The Management Of The Dantharsh (Tooth Sensitivity)

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**ABSTRACT:** Introduction: In this era due to disturbance of life style and increased amount of the fast food, persons are getting affected with dental problems. *Charka* has explained the *Dantharsh* (Dentin hypersensitivity) in the perspective of *Gandush* method.

**Aim:** The objective of this article is to review the literature of *Dantharsh* (DH), Dentin hypersensitivity, *Gandush* (Oil Puling) and its management.

**Materials and Methods**: Article reviewed from the Ayurvedic Text book, journals related to Ayurveda, different search engine, PubMed, Wikipedia and other source material related to this article.

**Discussion:** *Gandush* is simple and cost effective method as explained in different Samhita. According to Ayurveda *Dantharsh* is caused by the provocation of *Vata Dosh*. Sneha used in *Gandush* is best to pacify Vata Dosh. Sneha strengthens the tissue and increases rich blood supply to periodontal tissue.

**Conclusion:** *Gandush* with Sesame indicum is effective against pacification of *Vata Dosh* aggravated in *Dantharsh. Sneha Gandush* is simple and cost effective method as explained in different Samhita for Dantharsh (Dentin hypersensitivity).

Keyword: Dantharsh, Dentin hypersensitivity, Gandush, Oil puling, Sesame indicum,

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## **INTRODUCTION:**

Ayurveda is a science of life. Ayurveda has explained the way of healthy life living rules and treatment for the diseased person. In this era due to disturbance of life style and increased amount of the fast food, persons are getting affected with dental problems. Charka has explained the Dantharsh (Dentin hypersensitivity) in the perspective of Gandush method. Susruta has explained *Dantmoolagat* (gum) 15 diseases and 8 Danta (Tooth) related diseased in Sushruta Nidana Sthana 16 chapter. Astang Hridya in his treatise explained 10 tooth related diseases in which Danta harsh (Tooth sensitivity) is one. Acharya Kashyapa has explained types of teeth on the basis of origin, time period of primary and secondary teeth eruption, arrangement of teeth in upper and lower Jaw, deformities of teeth and so many

things in Sutra Sthana Dantjanmika Adhyaya 20.

#### What Is *Dantharsh* (Tooth Sensitivity?):

Dentin hypersensitivity can be defined as a short, sharp pain that arises from exposed dentin in response to stimuli (typically thermal, evaporative, tactile, osmotic or chemical) and that cannot be ascribed to any other form of dental defect or pathology.<sup>1</sup>Acharya Charak has explained only Dantharsh word in fifth chapter (Matrasheeteeya) of Sutrasthan. Where he explained Sneha Gandush is beneficial in reliving *Dantharsh* (Dentin sensitivity) symptom<sup>2</sup>. *Dantharsh* is most common type of Dental disorder. In this disease due to provocation of Vata Dosh patients feels pain during exposer of hot or cold foodstuff<sup>3</sup>.

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#### Cause:

According to Acharya Vagbhatta cold air, acidic food, cold food and liquid substance are the cause of *Dantharsh* <sup>4</sup>(Dentin hypersensitivity). In modern text Gum recession and tooth wear are the main cause of the dentine degeneration. The main cause Dantharsh is Gum recession of (Dantveidarbha) with exposure of root surfaces, loss of the Cementum layer and smear layer. Receding Gums are sign of repeated injury due to excessive or brushing with hard brushes, abrasive Toothpaste or Chronic Periodontitis<sup>5</sup>. Dentin degeneration may also occur due to acid erosion by Gastro esophageal Reflux diseases (GERD) acidic foodstuff and drinks. Dental bleaching, smoking tobacco cracked teeth and grinding of teeth are also the cause of the dentine degeneration<sup>6</sup>. The substance which can trigger the pain in the dentin hypersensitivity patients are below<sup>7</sup>.

- More consumption of cold drinks or cold food
- More consumption of hot foodstuff or drinking hot drinks
- More consumption of sweets or sour foodstuffs
- Exposer in cold air

Brushing teeth so many times or with hard brush.

#### **Sign And Symptoms:**

Dentin hypersensitivity is a sign of acid erosion and normally occurs in patients with meticulous oral hygiene. The presenting symptoms of this disease is a sharp and sudden short duration pain after taking triggering substance<sup>8</sup>. According to Acharya Sushrut in Dantharsh patient is unable to beer cold and hot touch or only touch. Acharya Vagbhatta has told presence of pain in *Dantharsh* (Dentin hypersensitivity). Most common site of Dentin hypersensitivity is the cervical margins of teeth and cervical wear is the most common cause of it<sup>9</sup>. On exposer to cold stimuli 75% patients suffer from pain<sup>10,11</sup> Sushrut has Acharya chronologically explained *Dantmoolagat Vyadhi* i.e. Chronic Periodontitis after that he explained tooth related diseases. Erosion, and abrasion due to improper method of brushing are the cause of the Dentin hypersensitivity.

## What Is Gandush ?

According to *Astang Hridya* filling of mouth completely with medicated liquid, which can't be move in mouth known as

*Gandush*.<sup>12</sup> Acharya *Sharangdhara* has explained same definition of *Gandush*, but the uniqueness of *Sharangdhara* is that he separately described that liquid will be fill in *Gandush* process and medicine paste (*kalka*) will be fill in *Kaval*  process<sup>13</sup>.Liquid substance is required for *Gandush*, and *Kalka* (medicine paste) is required for *Kaval* process. If any *Churna* (Powder) medicine has to require to mix in *Gandush Drava* it will be 1 *Kola* (6g) and 1 *Tola* (12g) is for *Kaval* process.

## Types Of Gandush:

S.No.	Types of Gandush	Pacification of <i>Dosha</i>	Drugs used
1.	Snigdha Gandush	for pacification of Vata Dosha	medicated with <i>Madhura</i> and <i>Amla Rasa</i> substance (As.Hr.)
			With Snigdha Drva (Sharangdhara)
2.	Shaman Gandush	for pacification of <i>Pitta Dosha</i>	Decoction made with <i>Tikta</i> , <i>Kashaya</i> , and <i>Madhura Rasa</i> substance (As.Hr.)
			Prasarana with Swadu and Shital substance (Sharangdhara)
3.	Shodhana Gandush	for pacification of Kapha Dosha	Made with <i>Tikta, Katu, Amla, Lavana</i> and <i>Ushna Veerya</i> substance (As.Hr.)
			Shodhana Gandush with Katu, Amla, Lavana and Ushna Dravyas (Sharangdhara)
4.	Ropana Gandush	for healing of wound in oral cavity	Made with <i>Kashaya</i> and <i>Tikta</i> <i>Rasa</i> substance (As.Hr.)
			Kashaya, Tikta, Madhura, Ushna substance are indicated in Kaphaj Roga (Disease) (Sharangdhara)

Astang Hridya has explained 4 types of Gandush i.e.<sup>14</sup>.

## Procedure Of Gandush Dharana<sup>15</sup>:

- Advice to patient to sit in the place where direct exposure of sunlight occurs, but not in direct contact with wind.
- Shoulder and neck region will be fomented (*Swedana*), with counter Massage. But *Acharya Sharangdhara* has explained fomentation on head and throat region.
- 3. Drink medicated liquid on moving head to upward direction.(Due to this activity medicated oil will be show effect mouth to neck region.)

## Duration<sup>16,17</sup>:

- 1. Until mouth will fill with mucous.
- 2. Until secretion comes from nose and mouth after spit that.

#### Frequency:

- 1. 5 to 7 times<sup>18</sup>
- 2. 3,5,7 times or till pacification of *Dosh*<sup>19</sup> (Disease)

#### **Age Determination:**

*Sharangdhara* has told that *Gandush* and Kaval can be taken after the age of 5 years<sup>20</sup>

Characters Of *Heena Yog Of Gandush* According To *Sharangdhara*<sup>21</sup>:

- It increases Kapha Vrudhi (mucous), Aruchi (anorexia)
- 2. Numbness in Rasa Grahi Strotas.

#### Characters Of Atiyoga<sup>22</sup>:

- 1. *Mukhpak* (Stomatitis)
- 2. Shosh
- 3. *Trushna* (thirst)
- 4. Sushti (laziness)

## Character Of Samyaka Yog<sup>23</sup>:

- 1. Pacification of diseases.
- 2. Paritosh (Appeasement) in Hridya.
- 3. Vishadta (feeling of goodness).
- 4. *Indriya prasadan* (Happiness of sense organ)

#### Indication (Dentine Sensitivity):

- According to Charak Gandush is useful in<sup>24</sup>-
- 2. Gives strength to *Hanu* (Jaw region) and *Swara* (Larynx region), and mouth.
- 3. Purification of tongue, which increase test buds activity and decreases anorexia.
- 4. Mouth and throat never becomes dry.
- 5. Stopping lip cracks.
- Stops tooth degradation, give strength to tooth root, stops tooth ache.
- 7. Stops Dantharsh (Dentin Sensitivity).

- According to Sushrut Gandush of Sneha (oil) is useful in<sup>25</sup> –
- 9. Strengthen the teeth and suppress the anorexia.
- According to Astang Hridya has indicated Sesame Indicum paste with lukewarm water or cold water in<sup>26</sup> –
- 11. Dantharsh (Dentin Sensitivity),
- 12. Dantchal (mobile teeth),
- 13. Vataja Mukhroga.
- 14. Gandush with Sesame Indicum oil or Maans Rasa is indicated in healthy individual.

## Treatment:

Acharya Charak has indicated Snaihika Gandush in the prevention of Dantharsh (Dentin hypersensitivity) even taking of Acidic food<sup>27</sup>.*Acharya* Sushrut has explained Kaval Dharana (holding medicated liquid in mouth) with four types of Sneha i.e. Ghrita, Tail, Vasa, Majja or Taivrutghrut (Su.Chi.22/34 Mahvaatvyadhi Adhya) and decoction of Vataghna Dravyas, lukewarm water for Dantharsh<sup>28</sup> hypersensitivity). Snaihika (Dentin Dhooma, Nasya, Snigdha food, Maans Rasa, Yavagu medicated with Maans Rasa, Doodha, Milk cream, Ghee, Shirovasti and *Vatnashak* activity is useful in *Dantharsh*<sup>29</sup> (Dentin Sensitivity).

Acharya Vagbhatta has told that, Vatnashak activity is best for the Dantharsh and Dantbheda. Gandush Dharana of Tila, Yashtimadhu Siddh ghrut (milk medicated with Tila (Sesame Indicum) and Yashtimadhu<sup>30</sup> (Glycyrrhiza Glabra). (As.h.utr.22/13)

## **DISCUSSION:**

Gandush method for dental hygiene and dental disease are very well explained in Avurvedic text which are oldest text available in the world. As we know that these procedure are very simple, any kind of man can perform this at home, after general guidance of Ayurvedic practitioner. Ayurvedic practitioners required to tell about the type of *Sneha* according to disease, right method and precaution taken during procedure. *Gandush* is simple and cost effective method as explained in different Samhita. According to text it is simple method but on doing with wrong procedure it may be harmful so right method selection of drug, oil according to *Dosh* and precaution is needed. *Sesame* oil has the capacity to decrease plaque induced gingivitis<sup>31</sup>.Sesame Indicum gives strength the root of Tooth and Gums. According to Charaka Gandush with Sesame Indicum Oil is able to reduce *Dantharsh*. According

to Ashtanga Hridya line of treatment of Dantharsh is pacifying Vata. Sneha present in Sesame indicum can reduce symptoms of Dantharsh. Root of Sesame (Sesame *indicum*) contains chlorosesamone which activity<sup>32</sup>. has antifungal Also polyunsaturated fatty acids present in sesame oil reduces free radical injury occurring in oral cavity<sup>33</sup>.It was also proposed that the alkalis in the saliva can react with the oil leading to saponification and formation of a soap like substance which can reduce the adhesion of plaque<sup>34,35</sup>.According to Avurveda Dantharsh is caused by the provocation of Vata Dosh, Sneha used in Gandush is best to pacify Vata Dosh. Sneha strengthens the tissue and increases rich blood supply to periodontal tissue.

**CONCLUSION:** *Sneha* used in *Gandush* method is effective against microbial activity, which is the cause of Gum recession. So the *Gandush* is effective against chronic periodontal tissue damage. Action of Sneha in not fully understand against tooth wear.

So the mechanism of tooth wear is difficult to explain.

But Ayurvedic text shows that Sneha is in effective Dantharsh (Dentin hypersensitivity). On the basis of available text and research article it may be concluded that *Gandush* perform in right manner, time duration, with suitable liquid or medicated oil with proper brushing procedure is effective in reducing the sign and symptom of *Dantharsh* (Dentin So *Gandush* with hypersensitivity). Sesame indicum is effective against pacification of Vata Dosh aggravated in Dantharsh. Sneha Gandush is simple and cost effective method as explained in different Samhita for Dantharsh (Dentin hypersensitivity).

**FURTHER SCOPE** Examination of mouth Ph. after *Gandush* method, to check effectiveness of different oil in different bacterial and fungal infection. Calcium and fat metabolism explanation will take this research to a new dimension.

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