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# PREVENTIVE MEASURES OF ORO-DENTAL DISEASES THROUGH AYURVEDIC REGIMES

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#### **ABSTRACT**

The *Mukha* i.e. oral cavity, work as reflector of the body health by acting as gateway of the alimentary canal and in that way it is considered to be one of the most important part of the *Urdhwa Jatru*. Not only it acts as a reflector but it also guards from infections, helps in digestions of food, adjunct role in proper speech. Nature has taken very much care to maintain these functions by providing special arrangement of organs in oral cavity. But one's duty to take good care of these special organs situated in oral cavity, by failing it results into oro-dental diseases which may be a potential risk factor for serious systemic diseases, such as Cardio-vascular disease, Bacterial Pneumonia etc. In today's era, it is not possible to radically cure any disease by prevailing its side effects also. So, rather than treatment it is always better to prevent. Our great sages had already well enumerated preventive measures viz. *Dantadhavana*, *Jihwanirlekhana*, *Kawala*, *Gandusha*, *Pratisarana*, *Swedana*, *Nasya* etc. for oro-dental diseases in *Samhitas* at scattered places. These procedures are not only applied as preventive purpose but also fulfill curative aspects of oro-dental diseases. Hence an attempt has been made to compile these procedures at one place for serving society.

**KEYWORDS:** Mukha, UrdhwaJatru, Dantadhavana, Jihwanirlekhana, Kawala, Gandusha, Pratisarana, Swedana, Nasya.

#### INTRODUCTION

Protection of health by prevention of disease in healthy person is the primitive aim of *Ayurvedic* Life Science. Population of world is seeking for healthy life style by adopting eastern culture in their daily regime. *Yogasana* and *Pranayama* are most popularized in today's generation for rejuvenation and maintenance of healthy life. This has been served by increased use of social interactive media. But is it safe to anonymously follow information provided through internet media? The answer is of course No. then where and how to find real, safe and scientific way of living a healthy life? In this regards, our great sages has given direction to live a healthy life by adopting daily regimes mentioned in ancient text.

Primary requirement for maintenance of healthy body is to take adequate dietary supplements and care of personal hygiene. Processing of food starts in oral cavity is the first step of mechanical digestion in body. Unless the teeth pulverize the food, the enzymes cannot chemically digest it. Hence, painful teeth, absence of teeth or diseased teeth and soften gum lead to indigestion and insufficient utilization of the undigested food results in malnutrition. So, proper care should be taken for cleansing and maintaining healthy oral cavity. Our

acharyas had given more attention towards care of oral hygiene by following as a daily regime. Here an attempt has been made to elaborate daily regimes in detail for oral care.

#### 1. DANTADHAVANA

Animals never clean their teeth; probably man in ancient times also never cleaned his teeth, as his food contained lot of hard and rough substances, which had a natural cleansing action on teeth. With civilization, man started using more cooked food and hence the need to chew the food grew less and less, as a result, the third molars have become a vestigial structure in most persons and the cooked food sticking to the dental cervices serves as good medium for bacterial growth. Therefore, it is essential to clean and brush the teeth in the morning after getting up, after lunch and dinner or after eating anything for that matter.

#### **DEFINITION**

It means cleaning teeth by means of brushing, *Manjana*, *Pratisarana*, etc., each tooth should be brushed individually by *Kurchaka*, which is a soft tooth brush made from medicated plants. The tooth brush should be rotated over the gums and the teeth in a vertical manner

i.e. from below upwards in the lower jaw and from above downwards in the upper  $jaw^{[1]}$ .

**SYNONYMS:** Dantapavana<sup>[2]</sup>, Dantashodhana, Dantasana.<sup>[3]</sup>

#### **METHOD:**

**DANTAPAVANA** (TOOTH BRUSH): Dantapavana is a mechanical device used in ancient time to keep the Gingiva in healthy state and clean the oral cavity. Biting and chewing the tips of fresh stems can make a soft brush.

**INDICATED STEMS:** Arka, Malati, Nyagrodha, Asana, Khadira, Karvira, Karanja, Amra, Arjuna, Katunimba, Apamarga<sup>[4-6]</sup>.

The stems mentioned above should be healthy, soft, and straight without any leaves and knots and picked from a tree growing in a clean place. The stem should not be dry, sticky and foul smelling. The stems should be 1 finger in breadth, 10-12 fingers in length<sup>[7]</sup> and should have bitter, pungent or astringent taste. *Swadu*, *Amla*, and *Lavana Rasa* should be avoided.

The above stems are best for *Dantadhavana* according to *Prakriti*. A person with *Pitta* constitution should use a bitter stem like *Katunimba*, *Arjuna*. A person with *Vata-Pitta* constitution should use a stem of *Nyagrodha* etc. A person with *Kapha* constitution should use pungent such as *Karanja* or *Arka*. Children and adults with *Vata-Pitta* constitution should use sweet stems of Glycerrhiza. The stem should be chewed until it is broken into a soft brush like form.

CONTRA INDICATED STEMS: Sleshmantaka, Tilva, Arishtaka, Tinduka, Vibhitaka, Kovidara, Dhava, Shami, Bilva, Pilu, Nirgundi, Pippali, Shigru, Ingudi, Paribhadra, Guggulu, Mocha, Shana<sup>[8]</sup>.

Above stems are contraindicated for *Dantadhavana*. The stems should not be dry, sticky or foul smelling.

**TIME OF** *DANTADHAVANA*: *Dantadhavana* should be done twice a day<sup>[9]</sup> followed by rinsing of mouth with hot water or cold water according to constitution.

#### ADVANTAGE OF DANTA DHAVANA

- It cleans the oral cavity.
- It keeps the oral cavity healthy by its taste. Taste neutralizes the *Kapha* and helps to clear the viscid mucous secretions in the mouth.
- It is good exercise for periodontal ligament by masticating the stem.
- It removes food particles.
- Perceives the taste better.
- Cheap and readily available.
- Prevents pocket formation.
- Cleansing agent and gum massage action.

 Leads to anchorage of teeth in bony socket and makes them immobilized<sup>[10]</sup>.

#### CONTRAINDICATIONS FOR DANTA DHAVANA:

Jwara, Ajirna, Chardi, Swasa, Trishna, Aruchi, Mukhagataroga, Kasa, Netraroga etc<sup>[11]</sup>.

In the above diseases, *Dantadhavana* is contraindicated which does not specifically mean that oral care is to be avoided in these disorders. While going through the literatures minutely one clearly finds different medicated formulas mentioned as a therapeutic measure and for oral hygiene even in the alone contraindicated diseases.

## 2. PRATISARANA (TOOTH POWDER OR TOOTH PASTE)

They are substances used with toothbrush or other applicator on tooth surface and gingiva for cosmetic and sanitary purposes and for applying specific agents to tooth surface for preventive and therapeutic purposes. It is also used as tongue cleaner by *Pratisarana*. If a person is contra indicated for *Dantadhavana* with *Dantapavana*, then he is advised for *Pratisarana*.

#### TOOTH PASTE

As general measure, one can use tooth powder consisting of equal quantity of *Shunthi*, *Maricha*, *Pippali*, *Twak*, *Lavanga*, *Tamalapatra*, *Triphala*, *Khadira* and *Saindhava* which should be used as a paste after mixing it with *Tila Taila*<sup>[4]</sup>. Before use, powder must be filtered through a fine cloth.

## SELECTION ACCORDING TO CONSTITUTION

One can use powders of *Triphala*, *Trijataka* with honey and *Saindhava* for person with *Kapha* and *Pitta* constitutions. For those with *Kapha* constitution, *Trikatu* with honey and *Saindhava* can be used as tooth paste. Massaging the gums daily with *Triphala* mixed with *Tila Taila* maintains them in healthy state.

#### ADVANTAGES OF PRATISARANA

- It removes food particle.
- It removes also Impacted food between inter dental space.
- It decreases secretion of excess Saliva.
- It regenerates the gingiva and increases the keratinization.
- It increases in mitotic activity of epithelium.

#### 3. JIHVA NIRLEKHANA

It is also a part of cleaning the oral cavity. Cleaning of tongue is known as 'Jihva Nirlekhana'.

#### MATERIAL FOR JIHVA NIRLEKHANA

- A thin plate of gold, silver, copper or leaf or a thin wooden plate may be used as a tongue cleaner<sup>[12]</sup>.
- It should be soft and smooth with rounded edges. Its length should be ten fingers<sup>[13]</sup>.

## ADVANTAGES OF JIHVA NIRLEKHANA [14-18]

- It helps to get rid of waste products of food.
- It helps to reduce foul smell of the mouth.
- It improves taste sensation.

## 4. KAVALA AND GANDUSHA (GARGLING OF THE MOUTH)

*Kavala* and *Gandusha* both are types of local therapeutic measure for treatment of oral cavity disorders. Both are auxiliary methods; that are used for rinsing to dislodge food debris and for other therapeutic purpose.

Detailed description of *Kavala* and *Gandusha* is as given below:-

**KAVALA:** Medicated fluids are kept in the mouth incompletely and asked to rotate in the mouth for a specific time and then asked to spit it out.

*GANDUSHA*: It is the process of holding any medicated liquid like *Kwatha*, *Swarasa*, *Madhu*, *Ghrita*, *Taila*, *Gomutra*, *Ushnodaka* etc. in the mouth to its full capacity for a specific time without any movement inside and then asked to spit it out.

As per *Sharangadhara*, *Kalka* (medicated bolus) drugs are used in *Kavala* and Liquids are used in *Gandusha*<sup>[14]</sup>.

MATRA OF GANDUSHA: One Kola for Churna dravya. [19]

**DURATION OF** *GANDUSHA*: In *Gandusha*, one should hold the fluid in the mouth, till it is felt that the mouth is filled with kapha, nose and eyes start watering<sup>[20-21]</sup>.

INDICATIONS OF GANDUSHA: Manyastambha, Kantharoga, Shirahshula, Tandra, Hrillasa, Karnashula, Mukhadosha, Praseka, Netraroga, Pinasa, Aruchi.

**CONTRA INDICATIONS OF** *GANDUSHA***:** Unconscious person, Poisonous condition, Weak person, Children under five years of age.

**BENEFITS OF** *KAVALA* **AND** *GANDUSHA*: It helps to remove viscid secretions and impacted food particles, it helps to perceive the taste better, to heal the ulcer and keep the tooth immobilized. *Gandusha* leads to anchorage of teeth in bony socket. It increases purity of voice and gives nutrition to gingival, periodontal ligament, oral mucosa.

### DIET HARMFUL FOR TEETH

Curd, lemon, tamarind, sour fruits, Mustard, Cold water, dry and hard food items and eating starchy food and sugars in excess are bad for teeth. These sour dietary items expose the teeth to various acids, which might dissolve the enamel of the teeth making them prone to various dental disorders.

#### CONCLUSION

The earliest historical records dealing with medical topics reveal an awareness of orodental disease and the need for treating it because oral cavity acts as a gateway for alimentary canal. So, one should have to take extra care to prevent oro-dental disease by adopting proper daily regime. Scattered references in ancient texts are available regarding oral hygiene and oral diseases. So, here an attempt has been made by author to reveal this ancient science to serve society better.

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