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A REVIEW ON THE CONCEPTUAL STUDY OF ROLE OF AYURVEDA IN ORAL HYGIENE

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ABSTRACT

Oral hygiene is very much important and is a major part of *Dinacharya*. Ayurveda has mentioned some measures in order to keep oral cavity healthy like *Dantadhawana* (brushing the tooth), jihwanirlekhana, Gandusha and Kavala as described in *Charak Samhita* under the heading of *Dinacharya*. Acharya Charak has mentioned principally *Tikta*, Katu and Kashaya Rasa for *Dantadhawana* drugs. Acharya Sushruta has mentioned *Dantashodhana chuna* in the context of *Dinacharya* for maintaining the oral hygiene. These three Rasa pacifies Kapha dosha, which is responsible for the Mukhagata rogas (oral problems). Jihwanirlekhana helps in removing dirt and food debris from the tongue. Gandusha and Kavala are the therapeutic measures which are used to treat the Mukhagata rogas as well as to maintain the oral health. Gandusha and Kavala has various effects on mucosal lining of mouth as mucosal healing, mucosal scarifying. Daily practices of ayurvedic procedures like Dantadhawan, Gandush, Kavala and Jihwanirlekhana not only helps in maintaining the oral hygiene but also prevent from the consequences of bad oral hygiene.

KEYWORDS: Ayurveda, Dantadhawan, Gandusha, Jihwanirlekhana, Kavala, Kapha dosha.

INTRODUCTION

Ayurveda is the holistic science which mainly emphasizes on two aspects i.e. preventive and curative. The preventive aspect of the Ayurveda follow an unfolding concepts of Dinacharya (Daily regimen) and Ritucharya (seasonal regimen) which is to be followed by a healthy individual for maintaining the health. Dantadhawan is one of the common routine practice which is followed to maintain the oral hygiene.

In *Ayurveda*, ancient acharyas has mentioned about Dentistry under the heading of *Shalakya Tantra*. *Dantadhawana* is one of an important step of *Dinacharya*. *Dantadhawana* means cleaning teeth. This removes the foul smell and tastelessness. It removes the dirt of the tongue, teeth and mouth causing thereby the taste of food. [1]

The concept of *Ayurveda* believes in three *Doshas* i.e. *Vata,Pitta* and *Kapha*. The dental disease or *Mukhagata Rogas* as named by *Acharyas* involve an imbalance of *Kaphaja dosha* located in oral cavity. ^[2]

As Oral cavity is one of the nine openings of the physical body. Being the chief entrance of the main gateway, oral cavity should be kept clean and healthy. That's why, oral hygiene is very much important and is a major part of Dinacharya. Ayurveda has mentioned some measures in order to keep oral cavity healthy like Dantadhawana (brushing the tooth), Jihwanirlekhana, Gandusha and Kavala as described in Charak Samhita under the heading of Dinacharya. It is a true fact that if a person does not follow the rules of oral hygiene, then he suffers from various Mukhagata Rogas. There is no doubt, oral hygiene has an important role in the maintenance of body health.

Method of Dantadhawana

According to ancient *Acharyas*, the *Dantadhawana* twig should be twelve *Angula* in length and thickness should be equal to *Kanishthika Anguli*(little finger). ^[4] Also, it should be fresh and straight. In the ancient literature, *Acharya Charak* has mentioned *Dantadhawana Karma* to be done twice a day. One time in morning while other one after meal in the evening. ^[4] *Dhantadhawan* should be done in a vertical manner over gums and teeth, from below upwards in the lower jaw and from above downwards in the upper jaw. ^[5]

Stems to be indicated for Dhantadhawan

Acharya Charak has mentioned principally *Tikta*, *Katu* and *Kashaya Rasa* for *Dantadhawana* drugs. [6] *Madhura Rasa* along with these previous *Rasa* has been mentioned by *Acharya Sushruta*. [7] Some indicated stems of

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medicated plants has been mentioned by *Acharyas* like *Arka, Karanja, Khadira, Arjuna* etc.

Acharya Sushruta has explained some most effected stems based on rasa — [8]

Tikta Rasa — Nimba

Kashaya rasa — Khadir

Katu Rasa — Karanja

Madhura rasa — Madhuka

Dantashodhana Chuna

Acharya Sushruta has mentioned Dantashodhana chuna in the context of Dinacharya for maintaining the oral hygiene, Power of Tejovati mixed with honey, Trikatu and Trijataka, oil and rocksalt should be used daily for cleaning the teeth. [9] Every tooth should be rubbed with soft brush and tooth powder without injuring the gums.

Advantages of Dantadhawana

It brings about freshness, takes away bad odour, and coating on teeth. It produces alleviation of *Kapha*, cleanliness in mouth and desire for food. [10]

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 a good exercise for periodontal ligament by masticating the stem. It removes food particles. Perceives the taste better. Cleansing agent and gum massage action leads to anchorage of teeth in bony socket and makes them immobilized. It

In Ayurveda, non-practice of Dantadhawana, Jihwanirlekhana, Gandusha etc are said to be the major cause for oral problem. But generally, it is observed that despite practicing Dantadhawana, the incidence of oral problem has not reduced considerably. Indirectly, it infers the importance of Jihwanirlekhana, Gandusha and kavala because the physical, thermal and chemical causes of injury to oral cavity can be better counteracted by practicing these procedures daily. It has an advantage as health promotive, disease preventive, cuative and restorative aspects.

Tongue Scraping (Jihwanirlekhana)

After cleaning of teeth, tongue scraping should be done by a smooth, thin and flexible foil of gold or silver made by wood which should be ten *angulas* in length. [13] *Jihwanirlekhana* helps in removing dirt and food debris from the tongue, As a result, it improves the taste perception of food and also maintains oral hygiene.

Gandusha and Kavala (Gargling of mouth)

Gandusha and Kavala are the therapeutic measures which are used to treat the Mukhagata rogas as well as to maintain the oral health. When medicated fluids are kept in the mouth incompletely and asked to rotate in the mouth for a specific time period and then asked to spit it out, this is known as Kavala process. [14] Usually, Kalka (medicated bolus) is used in Kavala.

Gandusha is the process in which medicated liquid like Kwath, swaras, oil etc is kept in mouth to its full capacity for a specific time without any movement in the mouth. [15] Gandusha should be kept in mouth till the Lakshan of 'Kaphapurnaaasyata yaavat sravat Ghrana akshtaa athva", means mouth is filled with kapha and eyes and nose start watering. [16]

DISCUSSION

The bacteria present in the oral cavity produce acid from the food debris which is present in the oral cavity. This acid along with the accumulated debris causes teeth decay and bad odour which in turn causes periodontal diseases. This acid formation phenomenon is responsible for the dental decay, so to prevent this, good health habits of brushing the teeth twice a day are necessary.

The herbal twig using for *Dantadhawan* alter the salivary pH and become alkaline which in turn neutralize the acid. The herbal twig of *Arka*, *khadira*, *neem* etc. having antimicrobial activity. Taxifolin, the main contitutent of *Khadira* having anti- oxidant activity. Also, the latex of *Arka* having inhibitory effect against microorganisms. As mentioned by *Acharya*, *Tikta*, *Katu* and *Kashaya rasa* to be used for *Dantadhawan*, These three *Rasa* pacifies *Kapha dosha*; *Tikta Rasa* having *Krimi nashaka* property, *Katu Rasa* purifies oral cavity and *Kashaya Rasa* having *Vranashodhana* and healing property.

Nowadays, some toothpaste and mouthrinses are available to maintain the oral hygiene. They contain chemicals like triclosan, chlorehexidine, calcium carbonate, sorbitol. Among these, some chemical like sodium lauryl sulphate which is having foam formation property, may have toxic effect. [21]

Hence, to avoid the harmful effect of these chemicals, chewing herbal twig should be practiced in our day to day life. By this phenomenon of chewing herbal twig, the herbal extract of *Tikta, Kutu* and *Kashaya rasa* comes out and mixed with saliva. As a result, it pacifies *Kapha dosha*, alter the salivary pH and is mainly responsible for antimicrobials activity.

Jihwanirlekhana (tongue scrapers) has a significant improvement on eliminating anaerobic bacteria and decreases bad odour. Also, by tongue scraping, the reflex point of the tongue get stimulated and removes bad odour which in turn improves the sense of taste and stimulated the secretion of digestive enzymes.

Gandusha and Kavala (oil pulling)

Gandusha and Kavala has various effects on mucosal lining of mouth as mucosal healing, mucosal scarifying. By Gandusha, the oral cavity becomes get rid of bacteria and toxins .Usually Tila tail(sesame oil) is used for Gandush (oil swishing) as per Ayurvedic classics, which has sesamin, sesamolin, having anti-oxidant property and potentiate vitamin-E action. [22] Oil pulling is an effective

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defense mechanism against dental cause and is beneficial for bleeding gums, fastening of loose teeth. The bacteria of the oral cavity are attracted to lipid structure of the oil, pulled from the oral tissue by adhering to the molecules of the oil, then flushed away through the act of oil pulling and spitting out the oil.

CONCLUSION

Dantadhawan along with Gandusha, Kavala and Jihwanirlekhana are very much beneficial in maintaining the oral hygiene. It prevents by maintaining the salivary pH and promotion of salivary secretions. Also, the herbal twigs used for these procedures are having antimicrobial and healing property and also, it pacifies Kaphadosha which is responsible for the Mukhagata rogas (oral problems). Hence, it can be concluded here that daily practices of ayurvedic procedures like Dantadhawan, Gandush, Kavala and Jihwanirlekhana not only helps in maintaining the oral hygiene but also prevent from the consequences of bad oral hygiene.

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