



ORAL HEALTH & HYGEINE- A REVIEW ARTICLE

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ABSTRACT

Beautiful teeth look attractive whereas Oral health also reflects the body health. This is quite natural, because healthy teeth and a pure breath have always been regarded as an expression of vitality and beauty. Traditional medicine can treat various infectious and chronic conditions. Research has shown that all kinds of chewing sticks described in ancient Ayurveda texts have medicinal and anti-cariogenic properties. Its oil pulling (Kaval, Gandush) practice is claimed to cure about 30 systemic diseases. Amla (Emblic myrobalan), is a general builder of oral health. Bilberry fruit (*Vaccinium myrtillus*) and hawthorn berry (*Crateagus oxyanthus*) stabilize collagen, strengthening the gum tissue. Liquorice root (*Glycyrrhiza glabra*) promotes anti-cavity action, reduces plaque, and has an antibacterial effect. Preventive dental care and intensive oral hygiene are important for your health. Therefore, an attempt was made to validate the review which are mentioned in classics on various therapeutic procedures for the prevention and maintenance of oral health and hygiene.

KEY WORDS: oral health, oil pulling, traditional classics.

INTRODUCTION

Oral diseases are one of the most important problems in public health and are on the rise in developing countries. Oral health is integral to general well-being and relates to the quality-of-life that extends beyond the functions of the craniofacial complex. The link between oral diseases and the activities of microbial species that form part of the micro biota of the oral cavity is well established. Despite several chemical agents being commercially available, these can alter oral micro biota and have undesirable side-effects such as vomiting, diarrhoea and tooth staining.^[1] Oral health is integral to general well-being and relates to the quality-of-life that extends beyond the functions of the craniofacial complex. Oral diseases continue to be a major health problem worldwide.^[2] Dental caries and periodontal diseases are among the most important global oral health problems, although other conditions like oral and pharyngeal cancers and oral tissue lesions are also of significant concern.^[3] Oral health is integral to general well-being and relates to the quality-of-life that extends beyond the functions of the craniofacial complex. The link between oral diseases and the activities of microbial species that form part of the micro biota of the oral cavity is well-established.^[4] The global need for alternative prevention and treatment options and products for oral diseases that are safe, effective and economical comes from the rise in disease

incidence (particularly in developing countries), increased resistance by pathogenic bacteria to currently used antibiotics and chemotherapeutics, opportunistic infections in immunocompromised individuals and financial considerations in developing countries.^[5,6] Ayurvedic treatment is aimed at patient as an organic whole and treatment consists of salubrious use of drugs, diets and certain practices.^[7] Currently, Ayurveda is widely practiced in the Hindustan peninsula (India and the neighbouring countries) and in recent years, has attracted much attention in economically developed countries such as those in Europe and in the United States and Japan.^[8] Here are some references which clearly mentioned how to prevent from oral diseases.

An oil mouthwash prevents dryness of throat and lips, protects the teeth, and strengthens gums.” – Charaka Samhita, Sutrasthan 5, 78-80

For this mouthwash, use a tablespoon full of ripened sesame oil (ripen by heating briefly up to 100°C), rinse your mouth for a short while and then „swish“ the oil vigorously between the teeth for 2-3 minutes. Do not swallow the oil, but spit it out, because now it contains debris and harmful bacteria dislodged from the mouth. Avoid spitting it out into the sink, because the oil can clog the drain. This mouthwash, done regularly, nurtures

the mouth and throat and is said to prevent caries and periodontal disease.

A natural way to keep your breath fresh, say the Ayurvedic texts, is by chewing certain spices after eating, for example, anise and fennel seeds, cardamom and cloves. These spices not only have a cleansing and disinfecting effect, but also taste good and stimulate digestion.

A good, practical alternative to the above is the Ayurvedic mouthwash. This pleasant tasting mouthwash is based on a traditional Ayurvedic formula, and is BDIH certified, certified natural cosmetics.

“Deposits formed at the root of the tongue, affect the sense of taste and cause bad breath. The tongue should therefore be cleaned regularly.”

– Charaka Samhita, Sutrasthan 5, 75

Sushruta Samhita, the surgical compendium of Ayurveda, defines health as “the equilibrium of the three biological humors (*doshas*), the seven body tissues (*dhatu*s), proper digestion and a state of pleasure or happiness of the soul, senses and the mind.”^[9]

A balance among the three *doshas* is necessary for health. Together, the three *doshas* govern all metabolic activities. When their actions in our mind-body constitution are balanced, we experience psychological and physical wellness. When they go slightly out of balance, we may feel uneasy. When they are more obviously unbalanced, symptoms of sickness can be observed and experienced.^[10,11]

According to the *Shalyatantra* and *Shalakyatantra* (one of the branches of Ayurveda), 65 varieties of oral diseases can arise in seven anatomic locations-eight on the lips, 15 on the alveolar margin, eight in connection with the teeth, five on the tongue, nine on the palate, 17 in the oropharynx and three in a generalized form.^[12]

For the treatment of these diseases Ayurveda advocates procedures such as oral cleansing, extractions, excisions, flap surgeries etc., Along with the treatment of orofacial diseases, Ayurveda recommends some daily use therapeutic procedures for the prevention of and maintenance of oral health. These include: *Dant Dhavani* (Brushing), *Jivha Lekhana* (Tongue scrapping) and *Gandoosha* (gargling) or oil pulling and tissue regeneration therapies. Some of the scientifically proven beneficial effects of these procedures are described below:

- **Dant Dhavani (brushing):** *Ayurveda* recommends chewing sticks in the morning as well as after every meal to prevent diseases. *Ayurveda* insists on the use of herbal brushes, approximately nine inches long and the thickness of one's little finger. These herb sticks should be either “*kashaya*” (astringent), “*katu*” (acid) or “*tikta*” (bitter) in taste. The method

of use is to crush one end, chew it and eat it slowly.^[13] The *neem* (*margosa* or *Azadirachta indica*) is a famous herbal chewing stick. Fresh stems of *liquorice* (*Glycyrrhiza glabra*), *black catechu* or the *cutch tree* (*Acacia Catechu* Linn.),^[14] *Arjuna* tree (*Terminalia arjuna*), *fever nut* (*Caesalipinia bouduc*) and *milkweed plant* (*Calotropis procera*)^[15] can also be used for brushing. Chewing on these stems is believed to cause attrition and leveling of biting surfaces, facilitate salivary secretion and possibly, help in plaque control while some stems have an anti-bacterial action.^[16] Present-day research has shown that all the chewing sticks described in ancient *Ayurveda* texts (Circa 200 BC) have medicinal and anti-cariogenic properties.^[17]

- **Jivha Lekhana (tongue scrapping):** It is ideal to use gold, silver, copper, stainless steel for the scrapping of the tongue. Tongue scrapping stimulates the reflex points of the tongue. Removes bad odor (halitosis). Improves the sense of taste, stimulate the secretion of digestive enzymes. Removes millions of bacteria growth (approximately 500 varieties) Clinical evidence also shows that use of tongue scrapers on a regular basis, has a significant Improvement on eliminating anaerobic bacteria and decreases bad odor.^[18]
- **Gandusha (gargling) or oil pulling:** Oil pulling is an ancient *Ayurveda* procedure that involves swishing oil in the mouth for oral and systemic health benefits. It is mentioned in the *Ayurvedic* text *Charaka Samhita* where it is called *Kavala* or *Gandusha* and is claimed to cure about 30 systemic diseases ranging from headache, migraine to diabetes and asthma. Oil pulling has been used extensively as a traditional Indian folk remedy for many years to prevent decay, oral malodor, bleeding gums, dryness of throat, cracked lips and for strengthening teeth, gums and the jaw.^[19,20] Oil pulling therapy can be done using oils like sunflower oil or sesame oil.^[21] Oil pulling therapy is very effective against plaque induced gingivitis both in the clinical and microbiological assessment.^[22,23]
- **Tissue regeneration therapies:** In *Ayurveda*, the well-known herb, *Amla* (*Phyllanthus emblica*) is considered a general rebuilder of oral health. *Amla* works well as a mouth rinse as a decoction. One to two grams per day can be taken orally in capsules for the long-term benefit to the teeth and gums. *Amla* supports the healing and development of connective tissue when taken internally.^[24] Regular use of *Bilberry* and *hawthorn berry* fruits stabilize collagen and strengthens the gum tissue.^[25] *Liquorice* root promotes anti-cavity action, reduces plaque and has an anti-bacterial effect.^[26] Herbs such as *yellow dock root*, *alfalfa leaf*, *cinnamon bark* and *turmeric root* are taken internally to strengthen *Astidharu*, for example, the

skeleton and the joints, have proven to be good for long term health of teeth.^[27]

DISCUSSION AND CONCLUSION

Ayurveda oral health practices and scientific researches indicates that Ayurveda health promotive, modalities have sound scientific base and these scientific validation could justify their incorporation into modern oral health care. Oral diseases are one of the most important problems in public health and are on the rise in developing countries. Most of the oral diseases are caused due to the bacterial infections. The anti-bacterial activity of medicinal plants are due to the presence of potential bioactive compounds, which help to reduce bacterial load in the oral cavity and thus prevent the formation of plaque, dental caries and ulcers. Use of indigenous plants in oral health and hygiene has a long history in different parts of the world. Therefore, this knowledge is likely to vanish soon as many of these ethno-phytotherapeutic remedies are followed only by a few in rural areas. New generation is ignorant of this traditional knowledge because of younger generation's lack of knowledge on the identification, collection, preservation and processing of the plant species for medicinal use it is therefore very crucial to conserve these ethno-cultural practices before they are lost definitively.

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