



Review Article on Maintenance of Oral Health through Ayurveda

Lakshmanan L*

Consultant Physician at Chakrapani Ayurveda Center, India

*Corresponding author: Lakshmi Lakshmanan, Consultant Physician at Chakrapani Ayurveda Center, Jaipur, India, Tel: +91 9024902101; Email: lakshmianoop3@gmail.com

Review Article

Volume 5 Issue 2

Received Date: May 22, 2021

Published Date: June 25, 2021

DOI: 10.23880/jonam-16000308

Abstract

Oral diseases are becoming more prevalent now a days and can pose a serious health risk, increasing economic burden and reducing the quality of life among people worldwide. The holistic science of Ayurveda has gained global attention in the recent years as oral diseases are largely preventable through Ayurveda routines. *Shalaky Tantra* is a branch of Ayurveda which deals with the treatment of organs located above shoulders. Although dentistry is not explained as a separate subject in *Ayurveda*, it is included under *Shalaky Tantra*. There are nine openings of physical body and oral cavity is one among them. Ayurveda suggests frequent and regular cleaning of these openings. Digestion process begins in the mouth, oral cavity being the chief entrance, its hygiene is important. Oral cavity includes teeth, gingiva and other supporting structures of the tooth, palate, throat, oral mucosa and lips. The traditional knowledge of Ayurveda to prevent and treat diseases was passed by word of mouth from generation to generation over the centuries and is accessible to common man. Preventive aspects through diet and lifestyle modifications have been emphasized in *Ayurveda*. Ayurveda oral hygiene techniques are safe, effective, economical, easily available, usually without side effects and has long lasting results. They are self-care methods which can be carried out at home easily.

Keywords: Oral Hygiene; Oral Health; *Ayurveda* Oral Health

Introduction

The principles of this 5000-year-old science of *Ayurveda* hold good even today. Primary aim of *Ayurveda* is improving the health of the person and preventing the occurrence of diseases. *Ayurveda* uses herbs to prevent and treat illnesses. Daily rules of conduct and rules for preservation of health have been explained in *Ayurveda* texts under the headings 'Dinacharya' and 'Swasthavritta'. Among those rules, the ones with special reference to oral health and hygiene are explained here. The practice of *Ayurveda* techniques for oral health and hygiene helps prevent various oral and dental problems. *Ayurveda* daily use therapeutic procedures for oral health and hygiene include *Danta Dhavana* (Brushing), *Pratisarana* (Massaging the gums & teeth), *Gandusha* (Oil pulling), *Shiro & Mukha Abhyanga* (Head and Face Massage),

Pratimarsha Nasya (Oil Application in Nostrils), *Dhumapana* (Herbal smoke inhalation), *Mukhwas* (Mouth Freshener) and *Kavala* (Gargle).

Causes of Oral Health Problems

- Following are the common causative factors for oral and dental health problems.
- Unhealthy diet & habits such as excess intake of sugary food, caffeinated beverages, frequent snacking, too much processed food, alcohol, smoking, tobacco
- Pre-existing health problems such Diabetes, Rheumatoid Arthritis, GERD, AIDS, Bulimia, Osteoporosis, Alzheimer's disease, Sjogren's syndrome
- Breathing through mouth in conditions such as Sleep Apnoea, Nasal Polyp, DNS, Nasal Congestion due to

Sinusitis or Respiratory Allergies

- Mental stress affects metabolism leading to oral health problems
- Genetics
- Prolonged use of certain medications such as OCP, Immunosuppressants, Antiseizure medications, Antihypertensives, Antihistamines, Pain killers, Diuretics, Antibiotics, Steroidal inhalers, Asthma medications, Cough drops, some chemotherapy medications, Cough drops, Antacids, Anti - fungal agents containing sugar. Also regular use of toothpastes containing Sodium lauryl sulfate (SLS), mouth rinse contain alcohol may cause tooth discoloration, canker sores and certain other oral health problems.

Symptoms

Common Symptoms include discomfort or pain in teeth or around mouth, difficulty biting certain foods, sensitivity to cold or hot temperatures or sweet foods, stains or spots on teeth, loose teeth, cracked or broken teeth, pus pockets, bad breath, frequent dry mouth, sores on mouth or lips, food trapped between teeth frequently, swelling of cheek, receding gums, swollen & painful gums, gum inflammation, gum bleeding which occurs especially during brushing or flossing or while eating.

Importance of Diet & Nutrition in Oral Health

Oral health affects overall health and vice versa. Mouth is the entry point to digestive and respiratory tracts, hence its health and hygiene is very important. Harmful bacteria will increase in the oral cavity if oral hygiene is poor. And there is possibility of swallowing of the bacteria along with the saliva or food leading to the passage of bacteria into the digestive tract or it could be breathed into the lungs and travel through the blood stream from there. Thus good oral hygiene is necessary to prevent oral and systemic diseases [1,2]. In dry mouth syndrome or when we breathe through the mouth, saliva production will decrease and hence moistening of food will be compromised. Also when we miss a teeth or there is misalignment, our ability to masticate will be affected. In metabolic disorders such as diabetes or obesity or in leaky gut, the undigested food substances / endotoxins weaken the immune system thus leading to build up of harmful bacteria in the body causing oral health problems. In malabsorption syndrome, there will be impairment in the absorption of nutrients in the body leading to tooth decay or tooth loss.

Effect of Different Tastes on Oral Health

Ayurveda has explained about six tastes and their effects on the body. *Ayurveda* emphasizes on eating a diet comprising of all six tastes as they have essential functions

in the body. However excess or less use of a taste may lead to health issues [3].

- Sweet taste is anabolic, gives satisfaction to sensory faculties and nourishes the tissues of the body. However, its overuse may impair metabolism, affecting oral health causing excess sweet taste in mouth and coating in tongue.
- Sour taste stimulates taste perception, improves appetite and aids in digestion. Its overuse increases salivation, causes burning sensation in throat and chest and increases thirst.
- Salty taste stimulates salivation and helps relish taste of food. Its excess use causes burning sensation in throat and increased thirst.
- Pungent taste cleanses the mouth and stimulated digestion but its overuse causes ulceration, irritation and burning sensation in mouth and throat.
- Bitter taste causes clarity of mouth and helps in cancer prevention. Its excess use causes dryness of mouth and tastelessness. Astringent taste has antimicrobial, anti-inflammatory and healing effects. Too much use of astringent tastes in food may causes stiffness and numbness of the tongue, obstruction in throat, and increased thirst.

Ayurveda Daily Use Procedures for Oral Health & Hygiene

Materials used, daily frequency, duration, method and benefits of therapeutic daily use procedures for oral health and hygiene mentioned in *Ayurveda* has been explained below.

Danta Dhavana (Brushing)

- **Material Used:**
 - Herbal twigs of astringent or bitter taste such as neem, Khadira (*Acacia catechu*) which are straight, without knots, with thickness of little finger are taken and cut at a length of 12 inches. One end is made to a smooth bristle by biting it [4,5].
 - Alternatively tooth brush with soft bristles can be used.
 - Herbal toothpaste or Herbal tooth powder mixed with honey.
- **Daily Frequency:** Twice a day, after waking up and before going to bed.
- **Duration:** 2 Minutes.
- **Method:** Herbal tooth paste or powder is taken in the twig or brush and brushing is done in a circular motion and up-down motion by inserting the brush in the oral cavity at an angle of 45 degree. Rinse mouth with water.
- **Benefits:** Twigs have antibacterial action and help in plaque control, also chewing on twigs helps to cause levelling of biting surfaces and facilitate salivary

secretion.

Pratisarana (Massaging the Gums & Teeth)

- **Material Used:**
 - Fine powders of *Triphala* (*Haritaki*, *Bibhitakil*, *Amalaki*), *Trikatu* (Ginger, Long pepper, Black pepper) and *Trijataka* (Cinnamon, Cardamom and Bay leaf) or *Ayurveda* tooth powder is mixed with honey or lukewarm water.
 - Alternatively sesame oil.
- Daily Frequency: Once a day, after brushing, either in the morning or at night.
- Duration: 2 Minutes.
- Method: The herbal mixture or sesame oil is taken in index finger and gently massaged on the gums and teeth in side to side motion. Then rinse with water.
- Benefits: Increases blood circulation and strengthens the gums [6,7].

Jihva Nirlekhana (Tongue scrapping)

- Material Used: Copper or Stainless steel tongue cleaner.
- Daily Frequency: Once a day, after brushing in the morning.
- Duration: Done 2 to 3 times.
- Method: Tongue is scrapped gently from root to tip. Rinse mouth with water.
- Benefits: Removes accumulated dirt on tongue and halitosis, helps to appreciate the taste of food [8].

Gandusha (Oil pulling)

- Material Used: Sesame oil.
- Daily Frequency: Once a day, after tongue scrapping.
- Duration: About 4 to 5 minutes.
- Method: The mouth is filled to its full capacity with sesame oil without permitting movement until there is uncontrollable salivation, secretions of tears from the eyes or mucous/watery discharge through the nose and then the oil is spit out. Then rinse with lukewarm saline water.
- Benefits: Plaque and bacteria are fat soluble, hence binds with oil and is then disposed when we spit it out [9,10].

The active ingredients present in the oil is absorbed in the oral mucosa & builds resistance against oral health problems. Treats and prevents dry mouth, dry & cracked lips, tooth sensitivity, tooth decay, toothache, receding gums. Strengthens the teeth, gums & jaw.

Shiro & Mukha Abhyanga (Head and Face Massage)

- Material Used: Lukewarm coconut oil.

- Daily Frequency: Once a day, preferably after oil pulling or before bedtime [11].
- Duration: 10 - 15 Minutes.
- Method: Wash face with water & pat it dry with a towel. Apply oil on the face using your fingertips. Massage the scalp, forehead, nose, cheeks, ears and neck using gentle and firm strokes in circular motion while applying pressure in upward direction. Wipe off excess oil using a towel.
- Benefits: Enhances functioning of the sense organs, improves circulation to the oral cavity and reduces stress.

Pratimarsha Nasya (Oil Application in Nostrils)

- Material Used: Sesame oil or ghee.
- Daily Frequency: Twice a day, preferably after tongue scrapping & before bedtime.
- Dose: 1 - 2 drops.
- Method: Apply one to two drops of sesame oil or ghee in little finger and smear inside each nostril or can apply directly using a dropper.
- Benefits: Strengthens the sense organs and the parts above the neck including the oral cavity, prevents halitosis [12].

Dhumapana (Herbal smoke inhalation)

- Material Used: Using Dhumavarti (herbal wick) prepared from herbs such as Guggulu, turmeric, etc.
- Daily Frequency: Once a day, after oil instillation in nostrils.
- Duration: About 5 Minutes, Done 3 times in each nostril.
- Method: The herbal wick is lighted and fire is put off. Smoke emitted is inhaled through one nostril at a time, closing the other and it is done alternatively, 3 times in each nostril. Every time the inhaled smoke is to be expelled through the mouth.
- Benefits: Gives firmness of teeth, pleasant smell and clarity of the mouth. It prevents loss of taste and exudations of mouth [13].

Mukhwas (Mouth Freshener)

- Material Used: Cardamom / Fennel seeds / Cloves.
- Daily Frequency: After every meal.
- Duration: About 5 Minutes.
- Method: Chew any one of the above - 1 cardamom or 1 cloves of 1 tsp of fennel seeds.
- Benefits: Aids digestion, prevents bad breath, reduces GERD symptoms, stimulates salivary flow in the mouth thereby neutralizing the acids and washing away the bacteria and provides protection against dental erosion [14].

Kavala (Gargle)

- Material Used: Lukewarm Water.
- Daily Frequency: After every meal.
- Duration: 10 seconds.
- Method: Mouth is filled half of its capacity with lukewarm water and the water is swished / moved briskly inside the mouth and spit out quickly.
- Benefits: Removes the food debris and plaque which are the main cause of oral health problems. Also removes bad taste and excess salivation [15].

Conclusion

Maintaining oral health is not only important for prevention of oral diseases but also for improving general health. *Ayurveda* includes preventive health care and explains the importance of hygiene while emphasising upon maintenance and promotion of positive health. Oral hygiene procedures well explained in classical text books of *Ayurveda* have been proved effective in oral and overall health in various research studies. Thus oral health relates to the quality of life.

References

1. Li X, Kolltveit KM, Tronstad L, Olsen I (2000) Systemic Diseases Caused by Oral Infection. *Clin Microbiol Rev* 13(4): 547-558.
2. Kane SF (2017) The effects of oral health on systemic health. *General Dentistry*, pp: 35.
3. Rao SP (2005) *Ashtanga Sangraha* of Vagbhata English commentary Volume I 1st (Edn.), Chowkhamba Krishnadas Academy, Varanasi, UP, India, *Sutrasthana*, Chapter XVIII, Sutra 5, pp: 243.
4. Sharma RK (2008) *Caraka Samhita* English commentary based on Cakrapani Datta's *Ayurveda Dipika* Volume I, Chowkhamba Sanskrit Series Office, Varanasi, UP, India, *Sutrasthana*, Chapter V, Sutra 71-73, pp: 122.
5. Murthy SKR (2010) *Susruta Samhita* English commentary Volume II, Chawkhambha Orientalia, Varanasi, UP, India, *Chikitsasthana*, Chapter XXIV, Sutra 4-9, pp: 222.
6. Rao SP (2005) *Ashtanga Sangraha* of Vagbhata English commentary Volume I 1st (Edn.), Chowkhamba Krishnadas Academy, Varanasi, UP, India, *Sutrasthana*, Chapter III, Sutra 16, pp: 25.
7. Rao SP (2005) *Ashtanga Sangraha* of Vagbhata English commentary Volume I 1st (Edn.), Chowkhamba Krishnadas Academy, Varanasi, UP, India, *Sutrasthana*, Chapter XXXI, Sutra 13, pp: 409.
8. Rao SP (2005) *Ashtanga Sangraha* of Vagbhata English commentary Volume I 1st (Edn.), Chowkhamba Krishnadas Academy, Varanasi, UP, India, *Sutrasthana*, Chapter III, Sutra 17-18, pp: 25.
9. Sharma RK (2008) *Caraka Samhita* English commentary based on Cakrapani Datta's *Ayurveda Dipika* Volume I, Chowkhamba Sanskrit Series Office, Varanasi, UP, India, *Sutrasthana*, Chapter V, Sutra 78 - 80, pp: 123.
10. Murthy SKR (2010) *Susruta Samhita* English commentary Volume II, Chawkhambha Orientalia, Varanasi, UP, India, *Chikitsasthana*, Chapter XXIV, Sutra 14, pp: 223.
11. Murthy SKR (2010) *Susruta Samhita* English commentary Volume II (Reprint) by Chawkhambha Orientalia, Varanasi, UP, India, *Chikitsasthana*, Chapter XXIV, Sutra 25 - 28, pp: 224.
12. Rao SP (2005) *Ashtanga Sangraha* of Vagbhata English commentary Volume I 1st (Edn.), Chowkhamba Krishnadas Academy, Varanasi, UP, India, *Sutrasthana*, Chapter XXIX, Sutra 19, pp: 399.
13. Rao SP (2005) *Ashtanga Sangraha* of Vagbhata English commentary Volume I 1st (Edn.), Chowkhamba Krishnadas Academy, Varanasi, UP, India, *Sutrasthana*, Chapter XXX, Sutra 3, pp: 401.
14. Sharma RK (2008) *Caraka Samhita* English commentary based on Cakrapani Datta's *Ayurveda Dipika* Volume I, Chowkhamba Sanskrit Series Office, Varanasi, UP, India, *Sutrasthana*, Chapter V, Sutra 76-77, pp: 123.
15. Rao SP (2005) *Ashtanga Sangraha* of Vagbhata English commentary Volume I 1st (Edn.), Chowkhamba Krishnadas Academy, Varanasi, UP, India, *Sutrasthana*, Chapter XXXI, Sutra 10-11, pp: 408.

