

CONCEPT OF MUKHA SWASTHYA (ORAL HYGIENE) WITH SPECIAL REFERENCE TO KAVALA

Rakesh Shukla^{1*}, Sanjeev Khuje²

¹Lecturer, Dept of Swasthivritta, Global Institute of Ayurveda, Rajkot, Gujarat, India

²Reader & HOD, Dept of Roga Nidan evam Vikriti Vigyan, Govt. Ayurveda College, Rewa, Madhya Pradesh, India

Email: drrakesh.ayur@gmail.com

Published online: March, 2019

© International Ayurvedic Medical Journal, India 2019

ABSTRACT

Mukha Swasthya (oral hygiene) has gained importance now a day, because *Mukha* is such *Anga*, which is exposed to many risk factors in day-to-day life. Habits like tobacco chewing, smoking etc. have increased incidences of diseases pertaining to oral cavity. There are some *Upaya* are mentioned in Ayurveda for *Mukha Swasthya* like *Mukhaprakshalana*, *Dantadhavana*, *Jivha Nirlekhana*, *Nasya*, *Kavala*, *Gandusha*. The quantity that will facilitate the movement of liquid inside the mouth is known as *Kavala*. *Gandusha* helps in prevention of *Mukhadaurgandhya* (bad odor from mouth), *Asyavairasya*, *Dantamala* (debris), *Dantamalinta* (plaque) and *Aruchi*. Diseases of neck, head, ears, mouth and eyes, excess salivation, diseases of throat, dryness of the mouth, nausea, stupor, anorexia and rhinitis are curable especially by *Kavala* (mouth gargle). Present study is only limited to literature review from Brihatrayi & Laghutrayi. The act of *Gandusha* and *Kavala* gives proper exercise to the muscles of cheeks, tongue, lips and soft palate there by increasing the motor functions of these muscles. Its overall benefit is to strengthen the *Mukha* at both anatomical and physiological aspects.

Keywords: *Kavala*, Oral Hygiene, *Mukha Swasthya*.

INTRODUCTION

Ayurveda, the science of life has observed all the changes and was proved much effective in each stage of change. Man has changed his habits of eating, sleeping, working etc. Ayurveda is always in connection with habits & rules of community.

In *Swasthavritta*, to maintain personal hygiene, *Dinacharya* and *Ritucharya* are elaborated. By following these rules, one can avoid the bad effects of *Kala* that is environment or climate. By following rules of *Dinacharya*, we can take care of our *Indriya* that is necessary organs and keep them clean so they can do

their functions normally. *Nasya*, *Karnapurna*, *Anjan*, *Dantadhavana* are some of activities described in *Dinacharya* for cleanliness of sensory organs.

As *Mukha* is one of the main nine openings of our body. It is beginning of important gastrointestinal system of our body. *Mukha Swasthya* is very essential to remain healthy, because many of the infections start from the *Mukha*.

In modern life, however due to lack of time and negligence Oral hygiene not properly maintained. In slum areas due to low hygiene, there are same problems. Hence, *Kavala Upakrama* mentioned in *Dinacharya* can play important role in present situation.

Many remedies are prescribed in modern medicine for the treatment of oral hygiene problems. However, these methods are quite costly and causing lots of inconvenience to the patients. Hence, it became necessary to develop an easy and economic Ayurvedic medical measure.

Objectives:

- To study the concept of *Kavala* from various *samhitas*.
- To study the concept of *Mukha swasthya*.
- Probable mode of action of *Kavala*

Methodology:

This is literary study.

- For fulfilling the above aims, the literary materials were collected from different *Ayurvedic* texts i.e. *Bruhatrayi* & *Laghutrayi* were searched out.
- Text of modern science & information from various research papers, journals, articles and internet

Mukha Swasthya Rakshak Dinacharya Upakarma

1. *Mukhaprakshalana*.
2. *Dantadhavana*
3. *Jivha Nirlekhana*
4. *Nasya*
5. *Kaval*
6. *Gandusha*

Dantapavan/Dattuna (Chewing sticks/brushing teeth)-

Brushing of tooth helps to remove dental plaque and tartar from teeth to prevent cavities, gingivitis, and

gum disease. According to *Ayurvedic* texts, it is recommended that *Datuna* (Chewing Sticks) in the morning as well as after every meal prevent oral diseases. The method of use is to crush one end, chew it, and brush with it slowly. It is better to take from fresh plant. The stems used for *Dantapavan* should be healthy, soft, without leaves and knots. After cleaning the teeth with *Datuna* it is torn into two parts and used to scrap the tongue coatings. According to *Acharya Sushruta*, *Dantapavan* should be fresh and straight. Its length should be 12 *Angul* (9 inches), while thickness should be equal to *Kanshtika Anguli* (little finger).^[1] These herb sticks should be either '*Kashaya*' (astringent), '*Katu* (acid), or '*Tikta*' (bitter) in *Rasa*.^[2] *Acharya Sushruta* also includes *Madhura Rasa*.^[3] The benefit of *Dantpavan* is to get rid from bad odour of mouth along with increase interest towards food due to removal of *mala* from tooth, tongue and mouth.^[4]

Jivha nirlekhana (tongue scrapping):

It is to be done after *Danta pavana* (brushing tooth) using soft tongue scraper or massages over tongue. Tongue scrapping is done gently with a metal scrapper from root to tip. It is ideal to use gold, silver, copper, stainless steel or branches of the tree for the scrapping of the tongue. Its length should be twelve fingers. Its margin should be blunt so that it will not damage the tongue and should be curved so can be use easily.^[5] This stimulates the whole digestive tract and increases the *Agni* (digestive fire).^[6]

KAVALA

Kavala is a variety of the gargling. It is important to gargle the mouth after meals, eating any food and after brushing the teeth. One should use cold or lukewarm water, *Tila tail* or cold milk for gargling. Gargling with lukewarm water exerts cleaning action on the mouth, teeth, gums and tongue. It imparts a light and fresh feeling to the mouth. Gargling with oil exerts a cleansing and strengthening action on tongue, teeth, mouth and voice.

Definition:

The quantity that will facilitate the movement of liquid inside the mouth is known as *Kavala* and that

which does not facilitate such movement is *Gandusha*.^[7]

Sharangadhara explains *Gandusha* as *asanchara Mukha purna* where-as *Kavala* is *chalanasheela*. He also tells if *drava dravya* is held in *Mukha* it is called *Gandusha* and if *kalka* is held in mouth it is known as *Kavala*.^[8]

Quantity of Kavala and Gandusha dravyas:

The quantity of powder of drugs to be added to the liquid for *Gandusha* is one *kola*, and that of the paste to be put into the liquid for *Kavala* is one *karsha*.^[9]

Method and duration of Kavala:

The person should sit in a place devoid of breeze but in bright sunlight with his shoulders and neck massaged and fomented, keeping face slightly lifted up, he should hold the liquid in his mouth till the mouth gets filled with *Kapha* or till the nose and eyes become secretory. Later one should spit out the contents and mouth cleaned with *Sukhoshna Jala* followed by *Mrudu Swedana* for shoulders and neck.^[10]

Filling the mouth with half its capacity with liquids, which mitigate *Vata*, *Pitta* or *Kapha* and moving it inside and spitting out, is known as *Kavala Vidhi*. This procedure helps in desire for foods, mitigates *Kapha*, *Trishna*, dryness and bad taste in the mouth and prevents shaking of teeth.

First *Svedana*, *Mardana* of *Gala*, *Kapola*, *Lalata Pradesha* should be done then *Kavala Dharana* should be done.^[11]

Gargle should be retained in the mouth with concentrated mind and raised body until cheeks are filled with *Dosha (Kapha)* and discharge appears from nasal passage and eyes.

Then it should be thrown out, replaced by another one. The liquid should be retained in the mouth until the cheeks show signs of *Kapha* accumulation; exudation

appears in the nostril and eyes or till the disappearance of *Kapha* by the action of drugs. In this way three, five or seven gargles.^[12]

Classification of Kavala:

Kavala is of 4 kinds namely,

1. *Snaihika*
2. *Shamana*
3. *Shodhana*
4. *Ropana*

Unctuous gargle is made of unctuous and hot substances and is used in *Vata* pacifier that which consists of sweet and cold items is used in *Pitta*; cleanser one is made of pungent, sour, salty; rough and hot substances and is used in *Kapha* while healing gargle is used in wound and consists of astringent, bitter, sweet, pungent and hot substances. Thus, the differentiating features of the four-fold gargle are said.^[13]

1. Snehika Kavala:

Tila kalka, water, milk and *sneha* are useful for the *Vataj* diseases of the mouth i.e. diseases associated with dryness and roughness in the mouth.

2. Shaman or Prasadana Kavala:

Milk and sugar medicated with sweet and old medicines is used for its soothing action on *Pittaj* diseases of the mouth. E.g. stomatitis or ulcers in the mouth and gums.

3. Shodhan Kavala:

Decoction of medicines with astringent, sour or salty taste is used for its cleansing action in *Kaphaj* diseases of the mouth, characterized by excessive salivation and stickiness in the mouth.

4. Ropan Kavala:

The healing gargles should be composed of bitter, astringent, sweet, pungent, heat making articles and should be employed in cases of ulceration of the mouth.

Table 1: Classification of *Kavala* & their indication

Type	Guna of Dravya	Indication
<i>Snaihika</i>	<i>Snigdha</i>	<i>Vataj Mukharoga</i>
<i>Shamana</i>	<i>Madhura, Shita Virya</i>	<i>Pittaj Mukharoga</i>
<i>Shodhana</i>	<i>Katu, Amla, Lavana Rasa, Ushna Virya</i>	<i>Kaphaj Mukharoga</i>
<i>Ropana</i>	<i>Kashaya, Tikta, Madhura Rasa, Ushna Virya</i>	<i>Vrana Ropana</i>

Indications and Kavala Dharana Guna:

Diseases of neck, head, ears, mouth and eyes, excess salivation, diseases of throat, dryness of the mouth, nausea, stupor, anorexia and rhinitis are curable especially by *Kavala* (mouth gargle).^[14]

In conditions like tingling of the teeth, shaky teeth, and diseases of mouth caused by *Vata*, gargling of water mixed with paste of *tila* either lukewarm or cold is good.

Keeping the mouth filled with oil daily (a few minutes in the morning) will prevent cracking and roughness of the lips, dryness of the mouth, diseases of the teeth and disorders of voice.

Kavala Dravya:

Sneha, *Ksheera*, *Madhoodakam* (honey water), *Saktu* (fermented gravel), *Madhya*, *Mamsa Rasa*, *Mutra* (of animal), *Dhanyamla* (wash of grains fermented by keeping overnight)

Some daily usable Kavala Dravya:

- For daily use *Taila (Tila)* or *Mamsa Rasa* can be preferred.
- Water mixed with *Kalka* of *Tila* in *Danta Shoola*, *Danta Chaala*, and *Mukha Rogas*.
- *Kshira* or *Ghrita* can be used for *Osha*, *Daha*, *Paka*, *Kshataja Vrana* and contact of *Visha*, *Kshara*, burns of fire.
- *Madhu* for removing sliminess, burning sensation, thirst and *Mukhapaka*.
- *Dhanyamla* to remove *Asyavairasya*, dirt and bad smell from the mouth.
- *Sukhosna jala* to get *Vaktra Laghavata*.

Samyak Kavala lakshana^[15]

Swasthya (restoration of health), Diminution of disorders, filling of non-sliminess (cleansing in the mouth), lightness of the mouth (freshness), clarity of sense organs (increased perception).

Hina Yoga Lakshana:

Appearance of *Jadhya* (lassitude), *Arasa Jnana* (loss of taste perception), *Aruchi* (bad taste), *Praseka* (excessive salivation), *Upalepa* (coating of dirt inside the mouth), *Kaphothkesha* (excitation of *Kapha*).

Ati Yoga Lakshana:

Mukha Shosha (dryness of mouth), *Paka* (Ulceration of oral cavity), *Klama* (weakness), *Aruchi* (loss of

taste), *Hridaya drava* (Discomfort in the chest region), *Svarasada* (weakness of voice), *Karnanada* (ringing in ears), *Trishna* (thirst).

Contraindication:

Visha, *Murchita*, *Madarta*, *Shoshita*, *Rakta-Pitta Rogi*, *Kshina*, *Ruksha* persons are *Anarha* for *Kavala*.^[16]

DISCUSSION

Among various *Mukha Roga Pratishedopaya (Dantadhavana, Jiwhanirlekhana, Kavala - Gandusha)* *Kavala* has an advantage over the remaining two as it possesses fourfold benefits like health promotive, preventive, curative and restorative.

First benefit that is health promotive benefit is achieved by following *Sneha Kavala* as explained in *Dinacharya*, which strengthens the *Mukha Pratyangas* like *Danta*, *Oshtha*, *Danta Mamsa*, *Jiwha* and *Hanu Sandhi*. Its overall benefit is to strengthen the *Mukha* at both anatomical and physiological aspects. Then second benefit is achieved as some of *Kavala yoga* explained in *Dinacharya* will maintain *Mukha Vaishadyata*, *Laghuta* by removing *Mala Puti* (morbid material) and prevent various *Vyadhis* of *Kapha* origin that occurs in *Mukha*. Third benefit i.e. curative is fulfilled as the *Kavala Yoga* explained in *Dinacharya* can also be practiced in diseased condition. The *Pradhana Sthanika Chikitsa* for *Mukha Roga* is *Kavala* and *Gandusha* only.

A Study by *AG Ravishanker et al.* was done & it concluded *Tankan Bhasma Kavala* showed significant relief of symptoms of chronic tonsillitis. Study on *Yavaksharadi vati & Panchvalkala Kwatha* in (*Deepak Ahuja; 2014*); it concludes, enlarged tonsils were relieved by 46.51 %; congestion over tonsils was relieved by 90.38 %.

Kavala also has an advantage in the following aspects. It can be popularized as one among the routine procedure in daily regimen (*Dinacharya*).

A study conducted with *Jambu Patra Kwatha* on stomatitis with parameters like, *Ruja*, size of *Vrana*, number of *Vrana*, *Mukhadaurgandhya*, *Asyavairasyata*, Oral Hygiene Index; 43.33% patients

have shown good response, 56.67% moderate response.^[19]

Conclusion from Study conducted with *Kshirivriksha Hima Kavala*; statistical analysis shows there is reduction in *Asyavairasyata*, *Mukhdaurgandha* & *Danta Malinta*.^[20]

1. Easy or simple procedure

Unlike other procedures as *Abhyanga*, *Udhwartana*, *Karnapurana*, *Nasya* (which requires assistance) *Kavala* is very simple procedure, which does not require any assistance or guidance by expert. In any place, one can perform it. The *Atiyoga Lakshanas* are not that much serious as compared to others.

2. Economical

Yogas explained for the *Kavala* are not of high cost. Most of these are *Nitya Sevaniya Dravyas* like *Sukoshna Jala*, *Dugdha*, *Madhu*, *Tila Taila*, *Gomutra*. In developing countries like India where nearly 70% of people are of poor socio economic group needs treatment, which are affordable to them.

3. No time consuming

The total time duration required for this procedure is hardly 5-10 mins. Even nowadays life has become more mechanical and busy. Every one prefers modality, which are not time consuming and with minimal hospital stay. In this regard, *Kavala* holds good.

4. Higher efficacy

The quantity of *Kavala* is very small; even then, its action is appreciated satisfactorily. Reason behind this may be the method of procedure, which possesses both local and systemic action.

General mode of action of *Kavala*:

Even though *Kavala* is *sthanika Chikitsa* its action can be understood as both

1. Local action:

Kavala has many actions locally they are as follows

- Increases local defense mechanism.
- Enhancing both mechanical and chemical digestion of food that starts in the mouth.
- Removing of metabolic wastes (urea and uric acid),
- Soothing effect.
- Strengthening of muscles of oral cavity.

The action of *Kavala* (holding mouthful of liquid) exerts increased mechanical pressure inside the oral cavity.

Therefore, this increased pressure stimulates pressoreceptor (stretch reflex) that are present in the mouth. Once the pressoreceptor is stimulated, they send signals to salivary nuclei in the brain stem (pons and medulla). As a result, Para sympathetic nervous system activity increases and motor fibres in facial (VII) and glossopharyngeal (IX) nerve trigger dramatically increased output of saliva. Chemical constituent present in the drug also stimulate chemoreceptors present in the mouth, which in turn increases salivary secretions. An enzyme called lysosome present in saliva is bacteriostatic in action. It will not allow for the growth of pathogenic microorganisms in the oral cavity. Antibody IgA present in saliva also provide protection against microorganisms. Thus, *Kavala* increases local defense mechanism.

The enzyme salivary amylase present in saliva and lingual lipase secreted by the lingual gland present at the dorsum of the tongue initiates digestion of carbohydrate and fats respectively. *Kavala* increases secretions of these enzymes.

Excessive salivary secretion, which predominantly contains water, removes metabolic wastes present in oral cavity.

Some of dravyas used for *Kavala* like *panchavalkala* produces soothing effect on lesions like ulcers thus prevents ulcers from physical and chemical injury.

The act of *Gandusha* and *kavala* gives proper exercise to the muscles of cheeks, tongue, lips and soft palate there by increasing the motor functions of these muscles.

Systemic action

Mucosal layer inferior to the tongue (sublingual) is thin and vascular enough to permit the rapid absorption of the lipid soluble drugs into systemic circulation. Some of the drugs irritates the oral mucosa (by their chemical nature) and increases vascular permeability. Thus, an active principle of dravya gets absorption in systemic circulation. Most of the *dravas (kwatha)* given for *Kavala* are warm (*sukhoshna*) so raised temperature causes the increased vascular permeability thereby enhancing systemic absorption of drugs.

CONCLUSION

In modern life, however due to lack of time and negligence Oral hygiene not properly maintained. Many remedies are prescribed in modern medicine for the treatment of oral hygiene problems. However, these methods are quite costly and causing lots of inconvenience to the patients. Hence, it became necessary to develop an easy and economic Ayurvedic medical measure. Among various, *Mukha Roga Pratishedopaya (Dantadhavana, Jiwhanirlekhana, Kavala - Gandusha) Kavala* has an advantage over the remaining two as it possesses fourfold benefits like health promotive, preventive, curative and restorative. The act of *gandusha* and *kavala* gives proper exercise to the muscles of cheeks, tongue, lips and soft palate there by increasing the motor functions of these muscles.

REFERENCES

- Jadavaji T, Narayana R. Sushruta Samhita, Chikitsa 24/4, Chaukhambha Surbharati Prakashana Varanasi; 2008. P 487
- Jadavaji TA. Charaka Samhita, Sutrasthana 5/71. Chaukhamba Surbharati Prakashana Varanasi, 2008. p125
- Jadavaji T, Narayana R. Sushruta Samhita, Chikitsa 24/6, Chaukhambha Surbharati Prakashana Varanasi; 2008. P 487
- Jadavaji T, Narayana R. Sushruta Samhita, Chikitsa 24/7-9, Chaukhambha Surbharati Prakashana Varanasi; 2008. P 487
- Jadavaji TA. Charaka Samhita, Sutrasthana 5/74-75. Chaukhamba Surbharati Prakashana Varanasi, 2008. p126
- Dr. Shiv Prasad Sharma, Astang Samgraha, Sutra Sthana 3/13-15, Chaukhamba Sanskrit Series Office, Varanasi., Reprint (2012) pp. 17
- Tripathi Ravidutt, Ashtanga Samgraha, Sutra Sthana 31/10, Chaukhamba Sanskrit Pratisthan, Delhi. 2003, pp
- K. R. Srikantha Murthy. Sharangadhara Samhita, Uttar Khanda 10/3, Chaukhambha Orientalia, Varanasi. P 201
- K. R. Srikantha Murthy. Sharangadhara Samhita, Uttar Khanda 10/4, Chaukhambha Orientalia, Varanasi. P 201
- Ashtanga Hrudayam of Srimadvagbhatta*, Sutra Sthana 22/10-11 “*Nirmala*” Hindi commentary edited by Dr Brahmanand Tripathi, Chaukhambha Sanskrit Pratisthan, Delhi, 2015.
- Jadavaji T, Narayana R. Sushruta Samhita, Chikitsa 40/61, Chaukhambha Surbharati Prakashana Varanasi; 2008.
- Jadavaji T, Narayana R. Sushruta Samhita, Chikitsa 40/63, Chaukhambha Surbharati Prakashana Varanasi; 2008
- K. R. Srikantha Murthy. Sharangadhara Samhita, Uttar Khanda 10/1, Chaukhambha Orientalia, Varanasi. P 201
- Ashtanga Hrudayam of Srimadvagbhatta*, Sutra Sthana 22/12 “*Nirmala*” Hindi commentary edited by Dr Brahmanand Tripathi, Chaukhambha Sanskrit Pratisthan, Delhi, 2015.
- Jadavaji T, Narayana R. Sushruta Samhita, Chikitsa 40/64, Chaukhambha Surbharati Prakashana Varanasi; 2008
- Vaishya Rupalal, Bhvaprakash Samhita, Purva Khanda 5/43, Chaukhamba Sanskrit Pratisthan, Varanasi. 2010. p 112
- AG Ravishanker, TS Manish. Tankana bhasma kavala in chronic tonsillitis. Unique journal of Ayurvedic and herbal medicines. 2013;1(2):41-4.
- Ahuja DK. clinical study on Yavaksharadi vati and Panchvalkal Kwath in the management of Tundikeri WSR to tonsillitis. Journal of Ayurveda and holistic medicine (JAHM). 2014 Jul 5;2(6).
- Shukla R, Patil AA, Patil VA. Observational Study on the Role of Gandusha (Jambu Patra Kwatha) in the Management of Mukhapaka. Journal of AYUSH:- Ayurveda, Yoga, Unani, Siddha and Homeopathy. 2014 Feb 18;3(1):1-9.
- Shukla Rakesh R, Patil Vipul C, Mishra Preeti. An observational study on the effect of Kavala on Mukha Swasthaya with special reference to Kshiri Vriksha Hima. Int. J. Res. Ayurveda Pharm. 2013;4(6):836-840.

Source of Support: Nil

Conflict Of Interest: None Declared

How to cite this URL: Rakesh Shukla & Sanjeev Khuje: Concept Of Mukha Swasthya (Oral Hygiene) With Special Reference To Kavala. International Ayurvedic Medical Journal {online} 2019 {cited March, 2019} Available from: http://www.iamj.in/posts/images/upload/1644_1649.pdf