

MUKHA KRIYAKALPA - PROCEDURES FOR PREVENTION AND MANAGEMENT OF ORAL CAVITY DISORDERS

Sujata Magi¹, Veerayya R Hiremath², Shashikala D K³, Gururaj N⁴

¹PG Scholar, ²HOD & Professor, ³Associate Prof, ⁴Assistant Prof
Department of Shalakya Tantra, Shree Jagadguru Gavisiddeshwara Ayurvedic Medical College,
Koppal, Karnataka, India

Corresponding Author: SujataMagi5@gmail.com

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ABSTRACT

Mukha (oral cavity) is considered as a gateway for the alimentary canal, health of the oral cavity reflects the body health as healthy oral cavity aids in proper digestion of the food consumed. The oral cavity also takes part in bodily functions like respiration and speech. It also contributes to the beauty and confidence of an individual. *Mukha* is comprised of *Osta* (lips), *Dantamula* (Gums), *Danta* (Tooth), *Jinhva* (Tongue), *Taal* (Palate), *Gala* (Throat). Since the Oral cavity is constantly exposed to the external environment, there are more chances of trauma and infections. Hence to avoid the chances of oral cavity diseases it is very important to maintain good oral hygiene. *Kriyakalpa* is the therapeutic procedure applied locally and are considered under *bahirparimarjana chikitsa*. *Kavala*, *Gandusha* and *Pratisarana* are *kriyakalpas* explained for good oral hygiene. These can be used as a daily regimen to maintain good oral hygiene and in *mukharoga* as therapeutic procedures. These *mukha kriyakalpa*-due to their cleaning action and by increasing defence mechanism, promotes oral health and prevents many oral disorders. Various formulations for *mukha kriyakalpa* are available for a healthy person based on *prakriti* and for treatment based on vitiated *dosha avastha*.

Keywords: *Mukha kriyakalpa*, Oral hygiene, *kavala*, *Gandusha*, *Pratisarana*.

INTRODUCTION

The oral cavity is constantly exposed to many risk factors in day-to-day life viz, exogenous toxins like external environmental toxins and endogenous toxins like the formation of ama due to consumption of contaminated foods-drinks-air, junk food habits and addictions like tobacco-guthaka chewing, smoking, alcohol intake, irregular food habits etc. results in accumulation of toxins in the oral cavity and cause bacterial invasion leading to bad oral hygiene. The basic activities of the individual like chewing and swallowing food, social communication like smiling, speaking is dependent on oral health. Oral health plays an important role in preventing systemic diseases also. Hence in order to maintain good oral hygiene, it is very important to remove such toxins from the mouth. Mukha is one among 9 *bahirmukha srotas* (external openings), Part of *Urdhwajatru* (head & neck), which gives shelter to *rasanendriya* (organ of taste perception) and *vagindriya* (organ of speech production). It is our prime duty to take good care of the oral cavity, failure of which results in oro-dental diseases. Ayurveda recommends the use of *mukha kriyakalpa* such as *kavala*, *gandusha*, *pratisarana* to

remove accumulated toxins safely from the oral cavity.

GANDUSHA AND KAVALA

Definition ¹

Gandusha: One should hold the liquid (*Swarasa, Kashaya, Taila, Sukoshna jala, Grita, Kanji*) inside the mouth to its full capacity without any movement is known as *gandusha*.

Kavala: Half of the mouth is filled and should move *kalka* or liquid in mouth and oropharynx is known as *kavala*.

TYPES ^{2,3,4}

Table 1 - Types of *kavala* and *gandusha* according to different *acharyas*

<i>Sushruta</i>	<i>Vagbhata</i>	<i>Sharangadhara</i>
1. <i>Snehana</i>	1. <i>Snigdha</i>	1. <i>Snaihika</i>
2. <i>Prasadana</i>	2. <i>Shamana</i>	2. <i>Shamana</i>
3. <i>Shodhana</i>	3. <i>Shodhana</i>	3. <i>Shodhana</i>
4. <i>Ropana</i>	4. <i>Ropana</i>	4. <i>Ropana</i>

- *Dravya* used for *kavala* and *gandusha* ⁵

For *kavala*: *Kalka* (paste)

For *Gandusha*: *Drava* (liquid)

Table 2: *Rasa, Guna* and *doshagnata* of *kavala* and *gandusha* ^{6,7}

<i>Kavala / Gandusha</i>	<i>Doshagnata</i>	<i>Rasa</i>	<i>Guna</i>
1. <i>Snigdha</i>	<i>Vata</i>	<i>Madhura, Amla, Lavana</i>	<i>Snigdha, Ushna</i>
2. <i>Shamana/Prasadana</i>	<i>Pitta</i>	<i>Tikta, Kashaya, Madhura</i>	<i>Sheeta</i>
3. <i>Shodhana</i>	<i>Kapha</i>	<i>Katu, Amla, Lavana</i>	<i>Ruksha, Ushna</i>
4. <i>Ropana</i>	<i>Vrana</i>	<i>Kashaya, Tikta, Madhura, Katu</i>	<i>Ushna</i>

Dharana vidhi (Procedure) ^{8,9}

PURVAKARMA

- The patient is made to sit comfortably in a place that is devoid of breeze with light.
- The patient is advised not to drink the liquid.
- The patient must have completed *Dantadhavana, Jihwanirlekhana, Malavisarjana Karmas*.
- The patient is to be given *Abhyanga* and *Mrudusvedana* above the shoulder region that is neck, cheeks and forehead.
- The patient should concentrate only on the procedure.

PRADHANA KARMA

- The medicated liquid (*Taila, Kashaya, Grita-manda, sukoshna jala*) or *kalka* of the desired drug (lukewarm) should be measured and given to the patient.
- In *kavala*, the Patient is advised to move the *dravya* (*kalka*) in between cheeks and then to the oropharynx by tilting the head backwards.
- In *gandusha*, the Patient is advised to hold the *drava* (*Kwatha*) in *Mukha Kuhara* to its full capacity without moving it.

Duration: Procedure should be done till the accumulation of kapha in the mouth or until the person gets watery discharge from the nose and eyes (Hardly 5-10 minutes).

- In this way 3 or 5- or 7-days gargles should be conducted or till he gets *samyak laxana*.

Paschat Karma

- After *samyak laxana*, the medicine is spit out.
- The mouth should be cleaned with warm water.
- *Dhumapana* should be given.

Pramana:

According to *Asthanga Sangraha* ¹⁰

1. Pravar Matra

- Here the quantity of liquid used for gargles should be ½ of the capacity of the buccal cavity.

- It is indicated in strong patients and the disease exhibiting all the signs and symptoms.

2. Madyama Matra

- The quantity of liquid used for gargles should be 1/3rd of the capacity of the buccal cavity.
- It is indicated for medium personalities and also in the disease of medium symptoms.

3. Heena Matra

- The quantity of liquid used for gargles should be 1/4th of the capacity of the buccal cavity.
- It is indicated in delicate persons, mild diseases and persons with pitta prakriti.

According to *Shaarangadhara Samhita* ¹¹

- *Gandusha dravya*: 1 Kola (6gms)
- *Kavala dravya*: 1 Tola (12gms)

Table 3 - Samyak, Heena, Ati Yoga ¹²

SAMYAK YOGA	HEENA YOGA	ATI YOGA
<ul style="list-style-type: none"> • <i>Vyadherapachaya</i> (Alleviation of disease) • <i>Tusti</i> (freshness of mouth) • <i>Vaktra vaishadya</i> (Clearness of mouth) • <i>Vaktra laghava</i> (Lightness of mouth) • <i>Indriyaprasadana</i> (Nourishment of sensory organs) 	<ul style="list-style-type: none"> • <i>Kaphotklesha</i> (Increases kapha in mouth) • <i>Rasajnyana</i> (Loss of taste sensation) • <i>Aruchi</i> (Anorexia) 	<ul style="list-style-type: none"> • <i>Paaka</i> (Ulceration in mouth) • <i>Shosha</i> (Dryness) • <i>Trushna</i> (Thirst) • <i>Klama</i> (Giddiness)

Table 4: Dravya Used In Kavala And Gandusha

Kavala/Gandusha	Dravya
1. <i>Snehana</i>	<i>Mamsarasa, Tilakalka, Milk, jala</i>
2. <i>Shaman/Prasadana</i>	<i>Patol, asrista, jambu, amra, maltipatra, utpala, madhukakwath, shitodak, iksurasa, milk, honey and ghrita etc.</i>
3. <i>Shodhana</i>	<i>Sukta, Madhya, kanji, mutra and other kalkas etc.</i>
4. <i>Ropana</i>	<i>Honey, milk, ghrita and daruhaaridra, guduchi, triphala, draksha, chamelipatra, yavaskwath</i>

Table 5: Indication ¹³ And **Contraindication** ^{14,15}

Indication	Contraindication
<ul style="list-style-type: none"> • <i>Manyasthamba</i> (neck stiffness), <i>Shiroroga</i> (diseases of head), <i>Karna roga</i> (diseases of the ear), <i>Mukha roga</i> (diseases of mouth), <i>Akshi roga</i> (diseases of the eye), <i>Praseka</i> (excessive salivation), <i>Kantha roga</i> (diseases of the throat), <i>Vaktra shosha</i> (dryness of the mouth), <i>Hrillasa</i> (Nausea), <i>Tandra</i>(laziness), <i>Aruchi</i> (Anorexia), <i>Peenasa</i> (Running nose) 	<ul style="list-style-type: none"> • Below 5years of age • In <i>Visha</i> (poison), <i>Moorcha</i> (Fainting), <i>Mada</i> (Intoxication), <i>Shosha</i> (Emaciation), <i>Raktapitta</i> (bleeding disorder), <i>Ksheena</i> (weakness) and <i>Rooksha Rogi</i> (Patient with a dry body).

Mode of Action of *Gandusha* ¹⁶

Gandūsha is a form of drug administration into the oral cavity in which the active ingredients and chemical constituents of the drugs are absorbed through the buccal mucosa and reach the bloodstream. It is having both local and systemic action but generally more in local effect. The probable mode of action is explained in the following actions:

Exerts increased mechanical pressure: *Gandūsha* increases mechanical pressure inside the oral cavity. The active ingredients and chemical constituents of the medicated liquid stimulate the chemoreceptors and mechanoreceptors in the mouth to send signals to salivary nuclei in the brain stem. As a result, the parasympathetic nervous system activity increases, and impulses are sent via motor fibres in facial and glossopharyngeal nerves. They trigger a dramatically increased output of salivary secretion which is predominantly watery (serous). The metabolic waste (toxins), food debris and depositions as well as superficial infective micro-organisms present in the oral cavity gets dislodged and mixed with retained medicated liquid and removed from the oral cavity. Thus, *Gandūsha* will act as a good oral cleansing method and help to improve or regain oral hygiene.

Stimulates salivary gland: *Gandūsha* stimulates the salivary glands to secrete more saliva. Saliva contains a variety of host defence factors. The IgA, IgM antibodies and lysozyme (a bactericidal enzyme that inhibits bacterial growth in the mouth) present in the saliva protect micro-organisms by acting as a local antibiotic. Saliva also contains coagulation factors (factors VIII, IX & X) which protect wounds from bacterial invasion. Hence, *Gandūsha* increases the local defence mechanism of the oral cavity and helps to regain oral hygiene.

Increases the vascular permeability: *Gandūsha* increases the vascular permeability in the oral cavity. It creates pressure over the oral mucosa. The active ingredients and chemical constituents of the warm medicated liquid irritate the oral mucosa and increase vascular permeability. Therefore, the drugs get rapidly absorbed both locally and systemically. This can help to reduce inflammation and enhance the healing

process of disease and thus cures the disease of the oral cavity.

Maintains oral pH: The main function of the salivary buffer is to maintain pH at the mucosal epithelial cell surface and the tooth surface. A healthy mouth is non-acidic or neutral. An unhealthy mouth is acidic and increases the risk of oral diseases. *Gandūsha* is an immediate solution for mouth acidity and changes the oral pH quickly into a safe zone. The active ingredients and chemical constituents of the medicated liquid of *Gandūsha* regulate and balance the pH of the oral cavity and help to reduce bacterial growth in the mouth. Thus, *Gandūsha* cures the disease and helps to regain oral hygiene by maintaining a good pH balance in the mouth.

Mode of Action of *Kavala* ¹⁷

It has both local and systemic action

1. Local action

The drug when moved within the oral cavity creates a pressure that stimulates Presso receptor (stretch reflex) that are present in the mouth. Once the presso receptor is stimulated, the signals are sent to salivary nuclei in the brain stem (pons and medulla). As a result, Parasympathetic nervous system activity increases and motor fibres in the facial (VII) and glossopharyngeal (IX) nerve trigger dramatically increased output of saliva. Chemical constituents present in the drug also stimulate chemoreceptors present in the mouth, which in turn increases salivary secretions. Lysozyme is an enzyme present in the saliva that is bacteriostatic in action which prevents the growth of pathogenic microorganisms in the oral cavity. Antibody IgA present in saliva also protects against microorganisms. Proper absorption of the active principles takes place in the oral cavity due to the pressure created by the action of *Kavala*.

The enzyme salivary amylase present in saliva and lingual lipase secreted by the lingual gland present at the dorsum of the tongue initiates the digestion of carbohydrates and fats respectively. *Kavala* increases the secretions of these enzymes. Excessive salivary secretion, which predominantly contains water, removes metabolic wastes present in the oral cavity. Some *dravyas* used for *Kavala* like *pancha valkala*

produces a soothing effect on lesions like ulcers thus preventing ulcers from physical and chemical injury.

2. Systemic action

A thin and highly vascular mucosal layer inferior to the tongue (sublingual) permits the rapid absorption of lipid-soluble drugs into the systemic circulation. The temperature and potency of drugs cause dilatation of blood vessels in the oral mucosa which helps to assimilate the active ingredients from the medicine. Some of the drugs irritate the oral mucosa (by their chemical nature) and increase vascular permeability. Thus, an active principle of *Dravya* is absorbed into the systemic circulation.

Kavala And Gandusha In Different Conditions

- **Tila kalka and Ushnodaka** – *Danta harsha, Danta chaala, Mukha roga*
- **Tila taila or Mansa rasa** – *Dinacharyartha*
- **Madhu Gandusha** - *Mukha vrana, vaisadya and daha-trisna prasamana*
- **Tila Tail saindhav** - *Gandusha in dantachaala*
- **Kanjika Gandusha** - *Mukhasosha, mukhaverasya and mala daurgandhyanashak*
- **Triphalamadhu Gandusha** - *Kaphaj and rak-tapittaja mukharoga*
- **Darvyadi Gandusha** - *Tridoshaja mukhapaka*
- **Tila kalkodaka Gandusha** - *Dantharsha, dantachala and vataja mukharoga*
- **Trikatukadi kavala** - *Kaphaja mukharoga*
- **Sukhosnodaka Gandusha** - *Mukhalaghuta*
- **Grita and Ksheera** – *Daaha, Paaka, Kshata, Agantu roga, Visha, Kshara, Agnidagha.*
- **Pippalyadi teeksha dravya kavala dharana** - *kaphaja karna shoola*
- **Kavala dharana** - *krimikarna*

- **Shreevestakaadi kashaya kavala dharana** - *pittaja Pratishyaya*
- **Mustadi kavala dharana** - *sannipataja pratishyayas*
- **Teekshna gandusha and kapha hara kavala** - *kaphaja shiroroga*
- **Kavala with shukta, tikta-katu dravya kashaya and madhu** - *krimija shiroroga*
- **Kavala** - *pakvapratishyaya*
- **Kavala with madhura dravya** - *pitta-rakta Pratishyaya*
- **Kavala dharana with mustadi kashaya** - *all types of Pratishyaya*

Pratisarana¹⁸

Application of different forms of the drugs inside the mouth with the help of the index finger is known as *partisarana*

- *Pratisarana* is used as a *paschat karma* after *Rakthmokshana karma*.
- The same drugs which will be useful for *gandusha* can be used in *pratisarana*.

Table 6: Types

<i>Astanga Hrudaya</i> ¹⁹	<i>Sushruta</i> ²⁰
1. <i>Kalka</i>	1. <i>Kalka</i>
2. <i>Rasakriya</i>	2. <i>Rasakriya</i>
3. <i>Churna</i>	3. <i>Kshaudra</i>
	4. <i>Churna</i>

Matra of Dravya²¹

- *kolasti matra* (size of jujube seed)

Duration²²

- *Heena dosha* – 3days
- *Madyama dosha* – 5days
- *Uttama dosha* – 7day

Table 7: Samyak Yoga, Ayoga, Atiyaoga of Pratisarana²³

<i>Samyak Yoga</i>	<i>Ayoga</i>	<i>Atiyoga</i>
<i>Vaishadya</i> (clarity)	<i>Paichilya</i> (stickiness)	<i>Daaha</i> (burning sensation)
<i>Laaghava</i> (lightness)	<i>Gurutva</i> (heaviness)	<i>Kleda</i> (salivation)
<i>Kshavathu</i> (feeling hungry)	<i>Anannabhilaasha</i> (loss of appetite)	<i>Shvayathu</i> (Gum swelling)
<i>Apraseka</i> (No nausea)	<i>Pramoha</i> (Fainting)	<i>Trushna</i> (feeling thirst)
<i>Annabhilaasha</i> (craving for food)	<i>Vikara anupashaya</i> (not alleviate the disease)	<i>Abhakta</i> (not feeling hungry)
		<i>Vaaksanga</i> (slurred speech)

Method of *Pratisarana* ²⁴

Instructions to the Patient

All the patients should be advised to follow the instructions during therapy and in the follow-up period:

- Oral hygienic methods should be explained
- Proper brushing by using soft brush 2 times a day morning and evening after meals by using “Bass” method was advised
- Instructions regarding *Ahara* and *Vihara* should be given, i.e., fibrous, non-sticky, less sweeten, etc., and proper mastication by using both sides
- Proper rinse of mouth after each meal/food.

Procedure

Purvakarma

- Patients were advised to do *Pratisarana* 2 times, morning and evening after proper cleaning of the mouth.
- *Choorana* should be taken in 1 *kola*(6gm) quantity and mixed with a very little amount of lukewarm water or honey and make the *Choorana* in paste form.

Pradhana Karma

- It should be taken on tip of the index finger and applied all over the gingiva smoothly with gentle pressure for 3-5 min in clockwise, round direction. Finally with slight pressure massage toward the gingival margin should be done and the drug should remain on gingiva for 5 minutes.

Paschat Karma

- After *pratisarana* proper rinsing was advised with lukewarm water.
- The same procedure was instructed for the paste and also application has been adopted by using the tip of the finger.

Probable Mode of Action of *Pratisarana* ²⁵

It is the procedure wherein gentle massage is done on gingiva as well as teeth helps in mechanical removal of food debris, Plaque, Necrotic tissue remnants, Inflamed granulation tissue and bacterial colonies. By constant rubbing it produces a pseudo-inflammatory reaction in the tissue, thereby altering the permeability of the blood capillaries and improving drug absorption producing the desired effect. Also, the rate of gingival crevicular fluid production is increased by

gingival massage. This crevicular fluid inhibits bacterial diffusion into the tissue as it has phagocytic leukocytes, specific antibodies and enzymes of several specificities. *Pratisarana* promotes salivation which helps in plaque control and restores normal contour to the gingiva.

Pratisarana In Different Condition

- *Sheetada* - *Mustadi churna pratisarana*.
- *Dantapupputa* - *Panchalavana or Yavakshara mixed with madhu pratisarana*.
- *Shousheera* - *Lodradi churna pratisarana*.
- *Upakusha* - *Madhu, Saindava lavana, Trikatu churna pratisarana*.
- *Adhimamsa* - *Vachadi churna pratisarana*.
- *Vataja ostakopa* - *Yashti, Guggulu, Devadaru, Madhuchista*
- *Pittaja ostakopa* - *Lodhra, Sariva, Madhuka, Madhu*
- *Jalarbuda* - *Trikatu, Madhu, Saindhava, Yavakshara*
- *Sheetada* - *Triphala, Shunti, Musta, Sarshapa, Rasanjana churna, Peetaka churna*.
- *Dantasharkara* - *Lakshachurna, Madhu*
- *Chalsadanta* - *Lodhradi churna, Madhu*
- *Jihwa kantaka* - *Guggulu churna/ Lodhra churna/ Pippalyadi churna*
- *Tundikeri* - *Pippalyadi churna, Peetaka churna*
- *Mukhapaka* - *Triphala churna, Madhu/ Darvi rasakriya/ Lavana, Krishna, Ela churna*

DISCUSSION

The aim of *mukha kriyakalpa* procedures seems to be tissue oriented where the therapeutic concentration of the drug can be achieved by tissue contact time, the molecular weight of the drug, absorption of drug and bioavailability of the drug. The drugs are selected as per vitiated *dosha* and type of disease for the procedure. The procedures of medication are modulated to attain maximum absorption of the drug. As *kavala* and *gandusha* act locally by exerting increased mechanical pressure inside the oral cavity, increasing the oral pH and stimulating the salivary glands and it also acts systemically by increasing the vascular permea-

bility, *Pratisarana* acts by increasing defence mechanism in the oral cavity.

Depending upon the *vyaktasthana*, *rogibala* and *rogabala*, one has to select these *sthanika chikitsopakramas*. Even in *shastrasadhyavyadhi*- we can go for *kavala*, *gandusha* and *pratisarana*. These *sthanikaupakramas* are oral transmucosal administrations, more beneficial because drug absorption is rapid due to rich vascular supply and lack of stratum corneum epidermidis. This results in the rapid rise of drug concentration in blood. Oral transmucosal administration has the advantage of avoiding entero-hepatic circulation and immediate destruction by gastric juice.

CONCLUSION

Ayurveda explained *kavala*, *Gandusha* and *Pratisarana* are some of the daily routine procedures under the context of *dinacharya* for maintenance of oral hygiene. These are important therapeutic procedures as well as effective detoxifying measures in oral diseases. They will maintain and promote oral hygiene by exerting the cleansing action and by increasing the defence mechanism in the oral cavity. These are having both preventive and curative effect if it is performed systematically. Being students of *Ayurveda*-we should know the importance of these procedures and make use of them in day-to-day life and in clinical practice and also has additive effect on general health, Daily practising of those may add a further step in the lifestyle of a healthy human being.

REFERENCES

1. *Vrudda Vagbhata: Astanga sangraha, Sutrasthana* edited by Dr Shivaprasad Sharma, Chaukamba Sanskrit series office Varanasi, Cha.No/Sl. No-31/5, Pg. No-231.
2. *Sushruta: Sushruta samhita, Chikitsa Sthana* edited by Dr Keval Krishna Thakral chawkhamba orientalia, Varanasi Vol-2 Cha.No/Sl. No-40/58, Pg. No- 623.
3. *Vagbhata: Astanga hrudaya, Sutrasthana* edited by Dr. R Vidyanath, Chaukamba surabharati prakashana Varanasi, Reprint-2016, Cha.No/Sl. No- 22/1, Pg. No- 328.
4. *Sharangadhara: Sharangadhara samhita, Uttara khanda* edited by Dr G Prabhakar Rao, chaukhamba publications, New Delhi, Reprint-2016, Cha.no/Sl. No- 10/1 and Pg NO-303.
5. *Sharangadhara: Sharangadhara samhita, Uttara khanda* edited by Dr G Prabhakar Rao, chaukhamba publications, New Delhi, Reprint-2016, Cha.no/Sl. No- 10/4 and Pg NO-303.
6. *Vagbhata: Astanga hrudaya, Sutrasthana* edited by Dr. R Vidyanath, Chaukamba surabharati prakashana Varanasi, Reprint-2016, Cha.No/Sl. No- 22/2-3, Pg. No-328-329.
7. *Sushruta: Sushruta samhita, Chikitsa Sthana* edited by Dr Keval Krishna Thakral chawkhamba orientalia, Varanasi Vol-2 Cha.No/Sl. No-40/59-60, Pg. No- 623.
8. *Vrudda Vagbhata: Astanga sangraha, Sutrasthana* edited by Dr Shivaprasad Sharma, Chaukamba Sanskrit series office Varanasi, Cha.No/Sl. No-31/5, Pg. No-231.
9. *Vagbhata: Astanga hrudaya, Sutrasthana* edited by Dr. R Vidyanath, Chaukamba surabharati prakashana Varanasi, Reprint-2016, Cha.No/Sl. No- 22/10-11, Pg. No-330.
10. *Vrudda Vagbhata: Astanga sangraha, Sutrasthana* edited by Dr Shivaprasad Sharma, Chaukamba Sanskrit series office Varanasi, Cha.No/Sl. No-31/5, Pg. No-231.
11. *Sharangadhara: Sharangadhara samhita, Uttara khanda* edited by Dr G Prabhakar Rao, chaukhamba publications, New Delhi, Reprint-2016, Cha.no/Sl. No- 10/5 and Pg No-303.
12. *Sharangadhara: Sharangadhara samhita, Uttara khanda* edited by Dr G Prabhakar Rao, chaukhamba publications, New Delhi, Reprint-2016, Cha.no/Sl. No- 10/19-20 and Pg No-305.
13. *Sharangadhara: Sharangadhara Samhita, Uttara khanda* edited by Dr G Prabhakar Rao, chaukhamba publications, New Delhi, Reprint-2016, Cha.no/Sl. No-10/8-15 and Pg No-304.7
14. *Sharangadhara: Sharangadhara samhita, Uttara khanda* edited by Dr G Prabhakar Rao, chaukhamba publications, New Delhi, Reprint-2016, Cha.no/Sl. No- 10/6 and Pg NO-303.
15. *Acharya Bhavamisra, Bhavaprakasha* Translated by *Bhishagmishra Shree brahmashankar Mishra*, Vol-1, 5/44, Edition 2013, Chaukambha sanskrita bhavana, Pg No-112.

16. Dr R B Hosamani: A review on *Gandusha*: An Ayurvedic therapeutic procedure for oral disorders, International Ayurvedic medical journal 2017.
17. Bhat Smitha U.S. & Waheeda Banu: Role of *Kavala* in *Mukha Swasthya* (Oral Hygiene) As *Dincharya*. International Ayurvedic Medical Journal {online} 2018 {cited May 2018} Available from: http://www.iamj.in/posts/images/upload/1070_1074.pdf
18. *Vagabhata: Astanga hrudaya, Sutrasthana* edited by Dr. R Vidyanath, Chaukamba surabharati prakashana Varanasi, Reprint-2016, Cha.No/SI. No- 22/13, Pg. No-332.
19. *Vagabhata: Astanga hrudaya, Sutrasthana* edited by Dr. R Vidyanath, Chaukamba surabharati prakashana Varanasi, Reprint-2016, Cha.No/SI. No- 22/13, Pg. No-332.
20. *Sushruta: Sushruta samhita, Chikitsa Sthana* edited by Dr Keval Krishna Thakral chawkhamba orientalia, Varanasi Vol-2 Cha.No/SI. No-40/69, Pg. No- 625.
21. *Sushruta: Sushruta samhita, Chikitsa Sthana* edited by Dr Keval Krishna Thakral chawkhamba orientalia, Varanasi Vol-2 Cha.No/SI. No-40/69, Pg. No- 625.
22. *Sushruta: Sushruta samhita, Chikitsa Sthana* edited by Dr Keval Krishna Thakral chawkhamba orientalia, Varanasi Vol-2 Cha.No/SI. No-40/69, Pg. No- 625.
23. *Sushruta: Sushruta samhita, Chikitsa Sthana* edited by Dr Keval Krishna Thakral chawkhamba orientalia, Varanasi Vol-2 Cha.No/SI. No-40/69, Pg. No- 625.
24. Peiris, K P P et al. "A comparative study of Dashana Samskara Choorna Pratisarana and *Dashana Samskara* paste application in the management of *Sheetada* (Gingivitis)." *Ayu* vol. 34,1 (2013): 63-9. doi:10.4103/0974-8520.115452.
25. M D, K D. practical utility of *sthanika* chikitsa *upakrama* in common *mukharoga*. world journal of pharmaceutical and life sciences WJPLS.2018;4(9):202-205.

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