wjpmr, 2025, 11(10), 100-108

WORLD JOURNAL OF PHARMACEUTICAL AND MEDICAL RESEARCH

www.wjpmr.com

SJIF Impact Factor: 6.842

Review Article

ISSN (O): 2455-3301

ISSN (P): 3051-2557

THERAPEUTIC INSIGHTS INTO *MADHU MISHRITA JATIPATRADI KWATHA GANDUSHA* IN *MUKHAPAKA* (ORAL ULCERS): A CRITICAL REVIEW

***Dr. Swati Chauhan, [1]Dr. Shaweta, [2]Dr. Ankita, [3]Dr. Rashmi Bisht**

P.G. Scholar, Department of Shalakya tantra, Patanjali Ayurvigyan Evam Anusandhan Sansthan, Haridwar, Uttarakhand, India.

***Corresponding Author: Dr. Swati Chauhan**

P.G. Scholar, Department of Shalakya tantra, Patanjali Ayurvigyan Evam Anusandhan Sansthan, Haridwar, Uttarakhand, India. **DOI:** https://doi.org/10.5281/zenodo.17223654

Article Received on 31/07/2025 **Article Revised on 21/08/2025** **Article Accepted on 10//09/2025**

ABSTRACT

Mukhapaka is frequently encountered oral disorder described in *Ayurveda*, characterized by painful ulcers, burning sensation and difficulty in mastication and swallowing. In modern science, it can be correlated with recurrent aphthous stomatitis (Oral ulcers), a condition with multifactorial etiology such as nutritional deficiencies, stress, trauma, hormonal balance, and immune dysfunction. Despite its common occurrence, conventional management remains symptomatic, offering only temporary relief without preventing recurrence. *Ayurveda* provides holistic and sustainable solutions for oral health through local and systemic approaches. Among the local measures, *Gandusha* (therapeutic gargle) is highlighted as both preventive and curative. *Madhu Mishrita Jatipatradi Kwatha Gandusha* is particularly effective in *Mukhapaka*, combining the anti-inflammatory, antimicrobial, antioxidant, and wound healing effects of *Jatipatradi Kwatha* with the soothing, healing and *Yogavahi* properties of Honey (*Madhu*). This critical review aims to analyze the therapeutic role of *Madhu Mishrita Jatipatradi Kwatha Gandusha* in the management of *Mukhapaka*. Classical references, Pharmacological actions of ingredients, and modern scientific evidence are discussed. The review suggests that this *Gandusha* alleviates pain and burning sensation, accelerates ulcer healing, prevents secondary infection, and improves oral hygiene. Being safe, economical, and easy to practice, it offers significant clinical value in recurrent oral ulcers. Further large-scale clinical studies are warranted to establish it as an evidence-based therapy.

KEYWORDS: *Mukhapaka*, Oral ulcers, *Gandusha*, *Jatipatradi Kwatha*, *Ayurveda.*

INTRODUCTION

Oral health is essential for overall well-being, as the mouth is the entry point for food and speech. Disorders of the oral cavity significantly impair nutrition, communication and quality of life. Among these, recurrent oral ulcers are a common problem, often painful and persistent, affecting people across all age groups.

In *Ayurveda* recurrent oral ulcers are described as *Mukhapaka*, A condition caused by the vitiation of *Pitta* and *Rakta*. *Acharyas* attribute it to improper dietary habits (*Ahara*), faulty lifestyle practices (*Vihara*), indigestion, suppression of natural urges, and psychological stress. Clinical features include *Daha* (Burning sensation), *Shotha* (Inflammation), *Ruja* (Pain), *Vrana* (Ulcer formation) and difficulty in eating or speaking.[2,3]

In modern medicine, *Mukhapaka* can be compared with Recurrent Aphthous Stomatitis. Affecting 15-25% of the global population, it is characterized by painful ulcers that heal spontaneously but recur at frequent intervals. Its etiology is multifactorial involving nutritional deficiencies (iron, vitamin B12, folic acid), stress, trauma, hormonal imbalance, and immune dysregulation. Though benign, it causes significant morbidity and reduced quality of life.[15]

Modern Management includes topical anesthetics, antiseptic mouth rinses, corticosteroids, and vitamin supplementation. However, these provide temporary relief and often fail to prevent recurrences. *Ayurveda* offers an alternative approach that is safe, holistic, and sustainable. Local therapies like *Gandusha* play a crucial role in oral health maintenance and management of oral diseases.

This review critically examines the role of Madhu *Mishrita Jatipatradi Kwatha Gandusha* in *Mukhapaka*, exploring classical references, pharmacological profiles, and therapeutic mechanisms.

REVIEW OF AYURVEDIC LITERATURE[1-3]

Acharya Sushruta mentions that *Mukharogas* are manifested in the *Saptaayatana* (Seven anatomical locations of the oral cavity), which include *Aushtha* (lips), Dantmoola (Gums), Danta (Teeth), Talu (Palate), Jihwa (Tongue), *Kantha* (Throat), and *Sarva Mukha* (entire oral cavity). Among the *Doshas*, *Pitta* plays a predominant role in the pathogenesis of *Mukharogas*.[1]

According to *Acharya Sushruta Mukhapaka* are classified into four major types: *Vataja*, *Pittaja*, *Kaphaja* and *Raktaja*. *Acharya Vaghbhata*, however, describes eight forms of *Mukhapaka*: *Vataja, Pittaja, Kaphaja, Raktaja, Sannipataja, Urdhvagata, Pootyavastha* and *Arbuda*.

In general, improper diet, faulty lifestyle, and *mithya yoga* of *kala*, *buddhi*, and *indriya* are common causative factors for oral ailments. In *ayurvedic* texts, *Nidana* have been elaborated for *Mukharogas*, most of which involve aggravation of *Kapha Dosha* along with other *Doshas*.

DISEASE REVIEW

MUKHAPAKA IN *AYURVEDA*[9]

Mukhapaka consists of two words, one is *Mukha* (mouth) and other is *Paka* (inflammation & ulcer). The disease which occur in the *Mukha* i.e. spreading completely all seven parts of the *Mukha mandala* is known as *Sarvasara roga (Mukhapaka*).

Common Etiological Factors and Pathogenesis

- *Agnimandya* (loss of appetite & indigestion)
- *Kosthabadhata* (Constipation)
- *Ruksha Annasevana* (consumption of excessively dry or hard food items)
- *Atisita* and *Atiushna Ahara sevana* (Intake of extremely cold or hot substance)
- Inadequate or Improper cleaning of teeth, mouth and tongue.
- General debility
- Nutritional deficiencies such as lack of vitamin B-complex.
- Physical or chemical trauma to the oral mucosa

Due to the above-mentioned etiological factors, vitiation of *Vatadi doshas* occurs, which in turn lead to inflammation and ulceration of the oral mucosa, thereby producing *sarvasara roga* (*Mukhapaka*).

Types of *Mukhapaka*

1. ***Vataja Mukhapaka***: Vitiated *Vata Dosha* causes single or multiple ulcers in the oral cavity, accompanied by acute inflammatory changes. The disorder usually progresses gradually and is often very painful. The oral mucosa becomes dry, rough and inflamed. Associated symptoms include lesions on lips, tongue and palate difficulty in mouth opening and increased sensitivity to cold substance.
2. ***Pittaja Mukhapaka***: Aggravated *Pitta Dosha* produces inflammation and ulceration in the oral mucosa. Small reddish-yellow papules appear throughout the mouth, leading to severe burning sensation, altered taste and difficulty in chewing or swallowing.
3. ***Kapahaja Mukhapaka***: Excessive vitiation of *Kapha Dosha* results in inflammatory and ulcerative changes within the oral mucosa. The lesions are generally associated with mild pain, itching and stickiness. The ulcers appear whitish in color and may resemble small cysts or tumors. With time, these become more severe and worsen under pressure, movement or attempts at excision.
4. ***Raktaja Mukhapaka***: The clinical presentation closely resembles *Pittaja Mukhapaka*.
5. ***Sannipataja Mukhapaka***: All the symptoms of *Tridosha* along with *Raktadosha* present in *Sannipataja Mukhapaka*.[2]

SAMANYA CHIKITSA OF *MUKHAPAKA*

- ***Nidana parivarjana*** (Avoiding causative factors)
- ***Snehana & Swedana*** (Oleation and Sudation)
- ***Shodhana*** (*Vamana, Virechana, Nasyam, Raktamokshan*)
- ***Dosha shamana chikitsa*** (Oral medications)- *Khadiradivati, Lavangadi vati, Eladi vati* for chewing.
- ***Pratisaran*** **(Application of medicines**)- with *Pathadi Manjana, Kalaka Churna, Saindhav+Honey, Tankan Bhasma+Madhu, Peetak churna, Jatyadi ghrita.*
- ***Kavala & Gandusha-*** with *Tripahala Kwatha, Jatipatradi kwatha, Panchpallava Kashaya, Aragwadhadi Kashaya, Saptachhadadi Kashaya.*
- *Chedana, bhedana, lekhan* (Surgical method)

Mukhapaka In Modern Science

Mukhapaka is analogous to stomatitis or mouth ulcers in modern medicine, especially Recurrent Aphthous Stomatitis (RAS).

The Greek term stoma, which means "mouth," and the suffix -itis, which means "inflammation," are the origins of the word "stomatitis." Although the precise reasons are complicated and not entirely known, this disease involves inflammation of the oral mucosa and can be brought on by stress, infections, autoimmune disorders, or nutritional deficiencies. In particular, repeated episodes are sometimes likened to recurrent aphthous stomatitis (RAS).

Stanley was the first to classify RAS into three distinct clinical forms in 1972.[7-8]

1. **Minor RAS**-Miculiz's aphthae or mild aphthous ulcers are other names for minor RAS. It makes up 80% of RAS and is the most prevalent form. The size of ulcers ranges from 8 to 10 mm. It is most frequently observed on nonkeratinized mucosal surfaces, such as the floor of the mouth, buccal mucosa, and labial mucosa. Within 10–14 days, ulcers heal without leaving any scars.

2. **Major RAS**- Periadenitis mucosa necrotica recurrens and Sutton's disease are other names for major RAS. About 10–15% of patients are affected. Ulcers are larger than 1 cm. The most frequently affected areas are the lips, soft palate, and faeces. Sometimes it involves the masticatory mucosa, such as the gingiva or the dorsum of the tongue. The ulcers leave scars after healing and might last up to six weeks.
3. **Herpetiform ulcer**-Multiple ulcers that reoccur frequently—up to 100 in number—are the hallmark of herpetiform ulceration. These are tiny, with a diameter of 2-3 mm. Large, uneven ulcers can occur when lesions combine. The duration of these ulcers is roughly 10–14 days. These do not contain virally infected cells and are not preceded by vesicles like herpetic ulcers are. Compared to other clinical variations of RAS, these are more prevalent in women and manifest later in life.

Predisposing factors- Genetics, Stress, trauma to the oral mucosa, tobacco, drugs, Hematinic deficiency, Hormonal changes.

Management of Stomatitis

No definitive cure exists; treatment is mainly symptomatic. Laboratory evaluation (CBC, folate, ferritin, B12) helps rule out systemic causes. Topical agents (antiseptic rinses, corticosteroid gels, protective pastes) relieve symptoms, while systemic drugs and supplements are used in severe cases. Good oral hygiene, diet regulation, and stress control reduce recurrences.

DRUG REVIEW

Jatipatradi Kwatha

Ayurvedic Classics such as *Yogratnakar, Bhaisajya Ratnawali* and *Chakradatta*[4] have documented the use of *Jatipatardi kwatha* in the management of *Mukhapak*a.

The formulation comprises *Jatipatra* (Jasminum grandiflorum L.), *Guduchi* (Tinospora cordifolia), *Draksha* (Vitis vinifera L.), *Daruharidra* (Berberis aristate DC), *Yavasa* (Alhagi camelorum Fisch.), *Amalaki* (Emblica officinalis), *Vibhitaki* (Terminalia bellirica Roxb.), *Haritaki* (Terminalia chebula Retz.) along with *Madhu* (Apis mellifera Linn.). The decoction is prepared by boiling the *Yavakuta* (coarse powder) form of the ingredients in water, filtering and mixing with honey, and is administered through *Gandusha* (retention in the oral cavity), as prescribed in *Ayurvedic* classics.[4]

Table no. 1: Botanical name, Family, Part used & Therapeutic uses of Jatipatradi kwatha content Drug.

S.no.	Drug name	Botanical name	Family	Part used	Therapeutic Use
1.	*Jati*	Jasminum grandiflorum L.	Oleaceae	Leaves	*Shothahara, Vranaropaka, Krimighna, Mukharoga, Dantaroga*, useful in oral ulcers & gingivitis
2.	*Guduchi*	Tinospora cordifolia	Menispermaceae	Stem	*Rasayana, Jvarahara, Shothahara, Dahahara*, promotes healing in ulcers and reduced burning sensation.
3.	*Draksha*	Vitis vinifera L.	Vitidaceae	Fruits	*Dahahara, Raktaprasadana, Kasahara, Virechanopaga*, useful in stomatitis due to its cooling and healing effect.
4.	*Yavasa*	Alhagi camelorum	Fabaceae	Stem	*Raktapittahara, Vranasodhana, Raktastambhak*, effective in bleeding gums, oral ulcers and inflammatory oral conditions.
5.	*Daruharidra*	Berberis aristate DC	Berberidaceae	Stem & Root bark	*Vranaropana, Krmighna, Shothahara*, reducing pain, inflammation and infection.
6.	*Amalaki*[6]	Emblica officinalis	Euphorbeacae	Fruit	*Rasayana, Chakushya, Kanthya, Vrashya*
7	*Haritaki*	Terminalia chebula Retz.	Combreteacae	Fruit	*Keshya, Medhya, Deepana, Pachana*
8.	*Vibhitaki*	Terminalia bellirica Roxb.	Combreteacae	Fruit	*Kriminashana, Jwarahara, Kasahara*
9.	*Madhu*	Apis mellifera Linn.	Apidae	Whole substance (Natural secretion)	*Yogavahi, Ropana, Sandhana, Lekhana*, reduces pain and promotes faster healing.

Fig.1 JATI PATRA

Fig.2. GUDUCHI

Fig. 3: HONEY

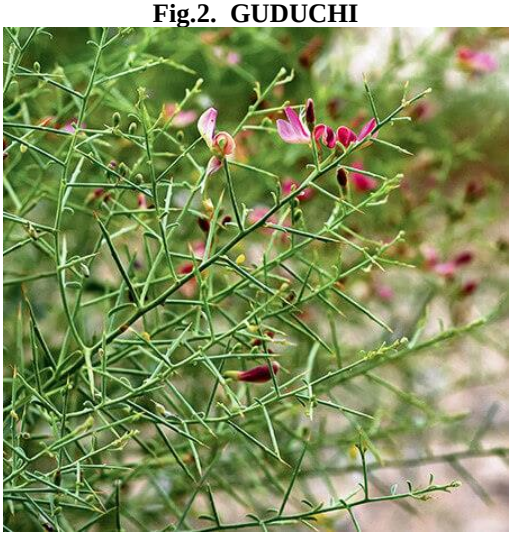

Fig.4. YAVASA

Fig.5. DRAKSHA

Fig.6. DARUHARIDRA

Fig. 7: Haritaki.

Fig. 8: Amalaki.

Fig. 9: Vibhitaki.

Table no. 2: *Rasa, Guna, Virya, Vipaka, Doshakarma* of *Jatipatardi Kwatha* content Drug.

S.no.	Drug name	Rasa	Guna	Virya	Vipaka	Doshakarma
1.	*Jati*	*Tikta, Kashaya*	*Laghu, Snigdha*	*Ushna*	*Katu*	*Tridoshahara*
2.	*Guduchi*	*Tikta, Kashaya*	*Guru, Snigdha*	*Ushna*	*Madhura*	*Tridoshahara*
3.	*Draksha*	*Madhura*	*Guru, Snigdha, Mridu*	*Sheeta*	*Madhura*	Vatapittahara
4.	*Yavasa*	*Madhura, Tikta, Kashaya*	*Laghu*	*Sheeta*	*Katu*	*Kaphapittahara*
5.	*Daruharidra*	*Kashaya, tikta*	*Laghu, Ruksha*	*Ushna*	*Katu*	*Kaphapittahara*
6.	*Amalaki*	*Madhur, Amla, Katu, Tikta, Kashaya*	*Laghu, Ruksha*	*Sheeta*	*Madhura*	*Tridoshahara*
7.	*Haritaki*	*Kashaya, Madhur, Amla, Katu, Tikta*	*Laghu, Ruksha*	*Ushna*	*Madhura*	*Tridoshahara*
8.	*Vibhitaki*	*Kashaya*	*Ruksha, Laghu*	Ushna	*Madhura*	*Kaphapittahara*
9.	*Madhu*	*Madhura, Kashaya anurasa*	*Ruksha, Laghu, Yogavahi*	Sheeta	Madhura	*Tridoshaghna*

PHARMACOLOGICAL INSIGHTS INTO *JATIPATRADI KWATHA GANDUSHA*

The efficacy of *Jatipatradi Kwatha Gandusha* in *Mukhapak*a (stomatitis) lies in the pharmacological synergy of its eight ingredients: *Jati, Guduchi, Yavasa, Daruharidra, Draksha, Madhu, Haritaki, Vibhitaki*, and *Amalaki* along with *Madhu*. Together, these drugs exert antimicrobial, anti-inflammatory, antioxidant, immunomodulatory, and wound-healing actions, which are essential for mucosal protection and regeneration.

1. *Jati* (Jasminum grandiflorum L.)[10-12]

In Ayurveda, Jati is attributed with *tikta* and *kashaya rasa*, *laghu guna*, *ushna virya* and *katu vipaka*. These properties render it effective as *shoshana* (absorptive), *shodhana* (cleansing), and *vranaropana* (wound healing). The astringent property (*kashaya rasa*) promotes contraction of ulcers and helps in cessation of bleeding.

Pharmacologically, *Jati* is rich in tannins, flavonoids, and essential oils, which exhibit strong antimicrobial, antioxidant, and anti-inflammatory activity. Tannins create a protective covering on ulcer surfaces, reducing irritation and facilitating healing. Studies have also confirmed its significant wound-healing potential in both acute and chronic models, validating its use in oral ulcers.

2. *Guduchi* (Tinospora cordifolia)[13-15]

Guduchi is a well-documented *rasayana dravya* described as *tridoshahara*. Its tikta and *kashaya rasa*, *guru* and *snigdha guna*, *ushna virya* and *madhura vipaka* contribute to its rejuvenative effects. *Ayurveda* describes it as *vranaropana* and *rasayana* due to its ability to enhance immunity and tissue repair.

Modern pharmacology has shown that *Guduchi* exhibits immunomodulatory, anti-inflammatory, hepatoprotective, antioxidant, and anti-ulcer effects. It enhances phagocytic activity, reduces oxidative stress, and stimulates fibroblast proliferation. Clinical studies in chronic ulcers and inflammatory conditions have demonstrated its ability to reduce inflammation, accelerate epithelialization, and prevent recurrence.

3. *Yavasa* (Alhagi camelorum Fisch.)

In classical medicine, *Yavasa* is indicated in conditions of inflammation, ulcers, and bleeding disorders due to its cooling (*sheeta*) and demulcent actions. It alleviates burning sensations and soothes the mucosa.

Pharmacologically, *Yavasa* contains flavonoids, alkaloids, and phenolic compounds that demonstrate antioxidant, antimicrobial, and hepatoprotective actions. These properties support detoxification, prevent microbial colonization in ulcer bases, and aid tissue regeneration. Its demulcent nature also provides a protective coating to oral lesions, reducing discomfort.

4. *Daruharidra* (Berberis aristata DC.)[16-18]

Daruharidra has *tikta-kashaya rasa, ruksha* and *laghu guna*, and *ushna virya*. Traditionally, it is described as *kleda shoshana* (absorptive), *shothahara* (anti-inflammatory), and *vranaropana*.

Pharmacological studies attribute these effects mainly to berberine, its chief alkaloid. Berberine demonstrates strong antimicrobial, anti-inflammatory, antioxidant, and wound-healing properties. It accelerates wound contraction, prevents secondary infection, and improves mucosal integrity. Modern research validates its efficacy in non-healing ulcers and inflammatory mucosal lesions.

5. *Draksha* (Vitis vinifera L.)[19-21]

Draksha is *madhura rasa pradhana*, with *sheeta virya* and *guru guna*. Ayurveda considers it *pittashamaka* and rejuvenative, promoting *dhatu poshana*.

Pharmacologically, Draksha is rich in resveratrol, polyphenols, flavonoids, and vitamin C. These confer powerful antioxidant effects, scavenging free radicals and protecting tissues from oxidative damage. Resveratrol enhances vascular circulation and collagen synthesis, thereby supporting epithelial regeneration. The micronutrient content (calcium and vitamin C) further accelerates wound healing and maintains mucosal health.

6. *Madhu* (Apis mellifera Linn.)[22-25]

Madhu is regarded as *yogavahi*, enhancing the potency of co-administered drugs. *Ayurveda* describes it as *lekhana* (scraping), *sandhana* (joining), and *vranaropana* (healing).

Pharmacologically, honey is a well-studied natural wound healer. It promotes angiogenesis, granulation tissue formation, fibroblast proliferation, and collagen deposition. Its high osmotic value prevents microbial growth, while enzymes such as glucose oxidase produce hydrogen peroxide, aiding in wound cleansing. Honey also exhibits potent antioxidant and anti-inflammatory actions, thereby accelerating mucosal healing and preventing infection.

7. *Haritaki* (Terminalia chebula Retz.)

Haritaki, one of the three *Triphala* components, has *panch rasa* (excluding *lavana*), predominantly *kashaya.* It is l*aghu* and *ruksha guna*, *ushna virya*, and *madhura vipaka*. *Ayurveda* attributes it with *shothahara*, *vedanasthapana*, *vranaropana*, and rasayana properties.

Pharmacologically, *Haritaki* contains tannins, gallic acid, chebulinic acid, and flavonoids. These provide antimicrobial, anti-inflammatory, and strong antioxidant effects. Studies show *Haritaki* enhances wound contraction, improves collagen matrix formation, and accelerates epithelialization, making it highly effective in ulcer management.

8. *Vibhitaki* (Terminalia bellirica Roxb.)[26]

Vibhitaki is traditionally described as *kashaya rasa pradhana* with *sheeta virya*. It is known to cleanse and heal ulcers.

Modern studies confirm its antimicrobial, antioxidant, analgesic, and immunomodulatory properties. The phytochemicals present, including tannins and lignans, protect mucosal tissues, inhibit microbial growth, and aid in wound healing.

9. Amalaki (Emblica officinalis)[27-28]

Amalaki is amla *rasa pradhana*, *sheeta virya*, and rich in vitamin C, tannins, and flavonoids. Ayurveda describes it as *rasayana*, *tridoshahara*, and *pittashamaka*, with specific action on *rakta dhatu* and mucosal tissues.

Pharmacologically, *Amalaki's* high vitamin C and antioxidant content enhance collagen synthesis, tissue repair, and epithelial regeneration. It reduces oxidative stress, supports immune function, and prevents recurrence of ulcerative conditions.

OVERALL PHARMACOLOGICAL SYNERGY

The combined pharmacological properties of all eight ingredients render *Jatipatradi Kwatha Gandusha* highly effective in *Mukhapaka*. *Triphala (Haritaki, Vibhitaki, Amalaki*) provides a strong foundation with antioxidant, anti-inflammatory, and *rasayana* actions. *Jati* and *Daruharidra* act as potent wound cleansers and antimicrobials. *Guduchi* and *Yavasa* provide immunomodulatory and mucoprotective effects, while *Draksha* enhances rejuvenation through antioxidants and micronutrients. *Madhu* potentiates the action of all ingredients while independently promoting angiogenesis and wound healing. This synergy makes *Jatipatradi Kwatha Gandusha* a safe, comprehensive, and effective intervention for *Mukhapaka* (stomatitis).

CONCEPT OF *GANDUSHA* IN *AYURVEDA*

Gandusha is the procedure of holding medicated liquid in the mouth until lacrimation and nasal discharge occur, ensuring prolonged contact with oral mucosa.

Types of *Gandusha* According to Various *Acharyas*.[2,3,5]

Ashtang sangraha	***Ashtang hridya***	***Sharangadhara***
Snaihik (unctuous)	*Snigdha*(unctuous)	*Snaihik*(unctuous)
Shamana(palliative)	*Shamana*(palliative)	*Shamana*(palliative)
Shodhana(cleansing)	*Shodhana*(cleansing)	*Shodhana*(cleansing)
Ropana(healing)	*Ropana*(healing)	*Ropana*(healing)

MODE OF ACTION OF *GANDUSHA*[29]

Gandusha, an integral part of *Ayurvedic* oral hygiene, works through a multi-dimensional mechanism that provides both local and systemic benefits strengthening of oral structures.

Local Actions

- **Mechanical cleansing and emulsification**: When held in the mouth, medicated oil or decoction mixes with saliva, increasing its surface area and coating oral tissues. This process traps toxins, debris, and microorganisms. The hydrophobic nature of oils attracts bacteria and facilitates their removal once the liquid is expelled.
- **Stimulation of salivary glands**: The pressure created by holding liquid in the mouth stimulates salivary secretion. Saliva contains enzymes and antibodies that strengthen the oral defense mechanism and inhibit microbial growth.
- **Antimicrobial and protective effects**: Various kwatha Oils like sesame and coconut possess antibacterial, anti-inflammatory, and antioxidant properties.
- **Regulation of oral pH**: Medicated liquids neutralize excessive oral acidity, creating an environment less favorable for microbial colonization.
- **Muscle strengthening**: Retaining liquid improves the tone and function of oral and facial muscles, including those of the cheeks, tongue, and lips.
- **Enzymatic action**: Salivary amylase and lingual lipase initiate digestion of carbohydrates and fats within the mouth.
- **Mucosal protection**: Decoctions such as *Jatipatradi Kwatha Panchavalkala Kwatha* provide a soothing effect on oral tissues, preventing ulcer formation due to irritation.

Systemic Actions

- **Absorption through buccal mucosa**: The thin and vascular sublingual mucosa allows rapid absorption of lipid-soluble constituents into systemic circulation, bypassing hepatic metabolism and ensuring faster action.
- **Nervous system effects**: By stimulating the trigeminal nerve and activating parasympathetic pathways, *Gandusha* reduces stress, anxiety, and promotes relaxation. It also alleviates headaches and migraines by improving cerebral blood flow and reducing vascular inflammation.
- **Vascular and lymphatic benefits**: The practice enhances blood circulation, activates the lymphatic system, and promotes toxin elimination. The anti-inflammatory and antioxidant properties of oils and decoctions improve vascular health and reduce the risk of atherosclerosis and hypertension.
- **Detoxification**: By binding with bacteria, metabolic wastes, and fat-soluble toxins in the oral cavity, Gandusha helps in their effective expulsion when

the liquid is discarded, thus functioning as a local detoxifying procedure with systemic support.

- **Holistic organ stimulation**: Ayurvedic principles suggest that different areas of the tongue correspond to various organs. Retaining medicated liquid in the mouth is believed to influence these organs indirectly, supporting systemic detoxification and overall well-being.

The therapeutic effect of *Gandusha* is not confined to oral health but extends to systemic well-being through multiple mechanisms. Its combined actions mechanical cleansing, antimicrobial protection, salivary stimulation, mucosal absorption, nervous system modulation, and detoxification make it a unique therapeutic procedure in Ayurveda. While classical texts and experiential evidence highlight its wide benefits, further clinical research is needed to scientifically validate its comprehensive mode of action.

DISCUSSION

Mukhapaka (oral ulcers) is a recurrent oral disorder where conventional medicine provides only temporary relief, without preventing recurrence. *Ayurveda* explains it as a *Pitta-Rakta pradhana vyadhi* and emphasizes *Gandusha* as a simple yet effective local therapy.

Madhu Mishrita Jatipatradi Kwatha Gandusha works through the synergistic action of its ingredients. *Triphala* provides strong *Rasayana* and antioxidant benefits, while *Jati* and *Daruharidra* cleanse ulcers and prevent infection. *Guduchi* and *Yavasa* strengthen immunity and protect mucosa, whereas *Draksha* and *Amalaki* rejuvenate tissues. *Madhu* enhances the efficacy of all drugs and independently accelerates healing.

Therapeutically, this results in

- Relief from pain and burning (*Pitta-Rakta Shamaka*, *Shothahara*)
- Faster healing of ulcers (*Vranaropana*)
- Protection against secondary infection (*Krimighna*, antimicrobial action)
- Improved oral hygiene and mucosal strength (*Rasayana*, immunomodulation)
- Reduced recurrence of ulcers (antioxidant and *Rasayana* effect)

Thus, the formulation not only provides symptomatic relief but also prevents recurrences, making it superior to conventional symptomatic management. Modern pharmacological studies on honey, *Guduchi, Triphala, and Daruharidra* support these actions, bridging *Ayurvedic* wisdom with scientific evidence.

Still, most evidence is from classical references and experimental studies. Future clinical trials are required to validate efficacy, establish dosage standards, and integrate this therapy into routine clinical practice.

CONCLUSION

Mukhapaka (oral ulcers) is a common and distressing oral disorder with recurrent episodes that significantly impact quality of life. Conventional therapies provide only symptomatic relief without addressing recurrence. *Ayurveda* offers safe, economical, and effective alternatives.

Madhu Mishrita Jatipatradi Kwatha Gandusha combines the wound-healing, antimicrobial, anti-inflammatory, and *Rasayana* properties of its ingredients with the soothing and potentiating action of honey. This therapy provides rapid relief from pain and burning sensation, promotes faster healing, and reduces recurrence risk.

Being simple, cost-effective, and patient-friendly, *Gandusha* with this formulation holds great promise as a sustainable therapy for *Mukhapaka.* Future clinical research with larger sample sizes is necessary to validate its efficacy and standardize protocols for routine practice.

ACKNOWLEDGEMENTS

None.

FUNDING

Nil.

CONFLICT OF INTEREST

The author(s) report no conflicts of interest.

REFERENCES

1. Sushruta. Sushruta Samhita. Edited with Nibandhasangraha commentary of Dalhanacharya. Translated by Sharma PV. Varanasi: Chaukhambha Visvabharati; 2001. Nidana Sthana 16/24–28.
2. Vagbhata. Ashtanga Hridaya. Translated by Srikantha Murthy KR. Varanasi: Krishnadas Academy; 2005. Uttara Tantra 21/58–64.
3. Vagbhata. Ashtanga Sangraha. Translated by Srikantha Murthy KR. Varanasi: Chaukhambha Orientalia; 2001. Uttara Tantra 24/1–8.
4. Chakrapanidatta. Chakradatta. Edited by Sharma PV. Varanasi: Chaukhambha Orientalia; 2013. Mukharoga Chikitsa Adhyaya, verses, 51–55.
5. Sharangadhara. Sharangadhara Samhita. Edited by Chunekar KC. Varanasi: Chaukhambha Orientalia; 2006. Madhyama Khanda, 11/62–66.
6. Bhavamishra. Bhavprakasha Nighantu, Amradiphala, Varga 68. 11th ed. Varanasi: Choukhamba Sanskrit Bhawan, 2007; 570.
7. Scully C, Porter S. Recurrent aphthous stomatitis: Current concepts of etiology, pathogenesis and management. J Oral Pathol Med., 1989; 18: 21–7.
8. https://pmc.ncbi.nlm.nih.gov/articles/PMC3227248
9. Biswal A, Routaray R. A Text Book of Shalākya Tantra. Vol II: Karna, Nāsa, Shiro and Mukha Rogas (Ayurvediya Otorhinolaryngology and Dentistry). 1st ed. New Delhi: Chaukhambha Publications, 2014; 675. ISBN: 978-93-81608-48-7.

10. Jati Patra M, Ashok V. Experimental study of Jati Patra (Jasminum grandiflorum Linn.) with special reference to wound healing activity. Int Ayurvedic Med J., 2013; 1(6): 77-84.
11. Arun V, Satish S, Anima P. Phytopharmacological profile of Jasminum grandiflorum Linn (Oleaceae). Chinese J Integr Med., 2015; 22(4): 311-20.
12. Sivasubramaniam M, Asokkumar K, Rathidevi R, Ananth DA, Vijaya C, Ravi TK, Sivashanmugam AT. In vitro antioxidant activities of Jasminum grandiflorum Linn. J Ethnopharmacol [Internet], Apr. 4, 2011; [cited 2022 May 20]; 133(2): 464-70.
13. Upadhya A, Kumar K, Kumar A, Mishra M. Validation of the Ayurvedic Tinospora cordifolia (Willd.) Hook f. & Thoms. (Guduchi). Sci Rep [Internet], Dec. 17, 2017; 7(1): 8588.
14. Saha S, Ghosh S. Tinospora cordifolia: one plant, many roles. Anc Sci Life., 2012; 31(4): 151.
15. Kotadiya J, Rathva B, Upadhyay U. Guduchi: a potential drug in Ayurveda. Int J Pharm Res., 2020; 5(2): 595-605.
16. Choudhary S, Kaurav HS, Chaudhary G. Daruharidra (Berberis aristata): review based upon its Ayurvedic properties. Int J Res Appl Sci Biotechnol, Mar. 2021; 8(2): 98-106.
17. Choudhary S, Kaurav HS, Chaudhary G. Daruharidra (Berberis aristata): review based upon its Ayurvedic properties. Int J Res Appl Sci Biotechnol, Mar. 2021; 8(2): 98-106.
18. Mazumder PM, Das S, Das S, Das MK. Phytopharmacology of Berberis aristata DC: a review. J Drug Deliv Ther., Dec. 10, 2011; 1(2): 46-50.
19. Ingale A, Pinnelli V, Rajendran V. Experimental evaluation of the anti-ulcer activity of ethanolic extract of grape (Vitis vinifera) seed in wistar albino rats. Int J Basic Clin Pharmacol, 2016; 5(3): 722-7.
20. Singh L, HVR. A clinical study in the management of Garbhini Pandu with Draksha Ghrita w.s.r. to iron deficiency anaemia in pregnancy. J Ayurveda Integr Med Sci., Oct. 25, 2020; 5(05): 21-30.
21. Deepashri T, Kumari S. Literature review of Draksha (Vitis vinifera). Int Ayurvedic Med J., 2017; 5(2): 545-8.
22. Samarghandian S, Farkhondeh T, Samini F. Honey and health: a review of recent clinical research. Pharmacognosy Res., Apr. 1, 2017; 9(2): 121.
23. Pasupuleti VR, Sammugam L, Ramesh N, Gan SH. Honey, propolis, and royal jelly: a comprehensive review of their biological actions and health benefits. Oxid Med Cell Longev, 2017; 2017: 1-21.
24. El-Haddad SA, Asiri FY, Al-Qahtani HH, Al-Ghamlas AS. Efficacy of honey in comparison to topical corticosteroid for treatment of recurrent minor aphthous ulceration: a randomized, blinded, parallel, double-center clinical trial. Quintessence Int [Internet], Sep. 2014; 45(8): 691-701.
25. Mohamed S, Al-Douri A. The effect of honey on the healing of oral ulcers (clinical study). Al Rafidain Dent J [Internet], Sep. 1, 2008; 8(2): 157-60.
26. Gupta A, Kumar R, Bhattacharyya P, Bishayee A, Pandey AK. Terminalia bellirica (Gaertn.) Roxb. in health and disease: a systematic and comprehensive review. Phytomedicine, Oct. 1, 2020; 77: 153278.
27. Bhat PM, Umale H, Lahankar M, Bhat CM, Bhat P, et al. Amalaki: a review on functional and pharmacological properties. J Pharmacogn Phytochem, 2019; 8(3): 4378-82.
28. Kumar V, Aneesh Kumar A, Kshemada K, Ajith K, Binil RSS, Deora N, et al. Amalaki rasayana, a traditional Indian drug, enhances cardiac mitochondrial and contractile functions and improves cardiac function in rats with hypertrophy. Sci Rep [Internet], Dec. 17, 2017; 7(1): 8588.
29. Yogesh Kumar Netam, Anita Sharma, Vibha Pali, Importance of Gandusha Dharana in Daily Life w.s.r. to Oil Pulling. J Ayu Int Med Sci., 2022; 7(11): 161-164.