



**International Journal of Biology, Pharmacy
and Allied Sciences (IJBPAS)**

'A Bridge Between Laboratory and Reader'

www.ijbpas.com

**AN APPROACH TOWARDS THE MANAGEMENT OF *PITTAJA*
MUKHAPAKA WITH *AYURVEDIC* TREATMENT PROTOCOL – A
CASE REPORT**

SANGOLLI KS^{1*} AND DAGA AG²

1: Professor, Department of Shalakya Tantra, KAHER's, Shri BMK Ayurveda Mahavidyalaya, Shahapur, Belgavi, PIN-590003, Karnataka, India

2: Final Year Post Graduate Scholar, Department of Shalakya Tantra, KAHER's, Shri BMK Ayurveda Mahavidyalaya, Shahapur, Belgavi, PIN-590003, Karnataka, India

***Corresponding Author: Dr. Kalmesh S Sangolli: E Mail: drksskle@gmail.com**

Received 20th April 2024; Revised 14th May 2024; Accepted 1st Sept. 2024; Available online 1st Aug. 2025

<https://doi.org/10.31032/IJBPAS/2025/14.8.9252>

ABSTRACT

This case report details the Ayurvedic management of Pittaja Mukhapaka, correlated with aphthous ulcers, in a 52-year-old male patient. The patient presented with significant pain, burning sensation, difficulty in swallowing, and excessive salivation. An Ayurvedic treatment protocol, including Gandoosha with a Kashaya of equal quantity of Triphala, Yastimadhu, Haridra, and Saindhava, alongside Khadiradi Vati and Ushirasava, was administered over 15 days. The therapeutic intervention resulted in a substantial reduction of symptoms, with complete remission observed at the follow-up. This report highlights the effectiveness of traditional Ayurvedic treatments in managing oral ulcerative conditions.

Keywords: Pittaja Mukhapaka, Aphthous Ulcers, Gandoosha, Triphala

INTRODUCTION:

Numerous types of oral diseases are associated with chronic illnesses, such as diabetes, and poor oral health can have a significant impact on overall health. WHO recently released a global review on oral health, emphasizing that although

populations in several countries have made significant progress toward better oral health, there are still issues on a global scale. This is especially true for disadvantaged populations in both developed and developing nations. Oral health conditions,

including dental caries, periodontal disease, tooth loss, lesions on the oral mucosa, oropharyngeal malignancies, oral illness associated with the HIV/AIDS virus, and oral trauma, are significant global public health issues [1].

Indian *Ayurveda* is an old science. In *Ayurveda*, health is the most highly valued concept. *Ayurveda* takes into consideration both the curative and preventive aspects. *Mukhapaka* is stated under 40 *Pittaja Nanatmaja Vikara*, according to *Acharya Charaka* [2].

Acharya Sushruta has classified *Sarvasara mukharoga (Mukhapaka)* into 4 types i.e., *Vataja, Pittaja, Kaphaja*, and *Raktaja* [3]. The presentation of *Pittaja Mukhapaka* can be correlated with Aphthous ulcers based on the diagnostic features mentioned in *Astanga Hridaya*. These ulcers are recurrent, mini, multiple, ovate in shape and has yellow floor, are rounded by redness [4]. The root cause of these ulcers is unknown, can be because of hormonal disorders, toxic drugs, food irritants, injury, vitamin deficiency, tobacco and stress [5].

In *Ayurveda*, for the management of *Pittaja mukhapaka*, *Sushruta* has explained *Kavala, Gandusha, Nadi sweda, Dhuma, Raktamokshana, Kshara* and *Agni karma* [6]. *Kavala* and *Gandusha* are familiar treatment modalities used to treat *Mukhapaka* along with some internal medications which are feasible.

MATERIALS & METHODS:

Patient Information:

A male patient aged 52 years, a general store merchant, visited *Kankayana* outpatient department of KAHERs Shri B M K Ayurveda Mahavidyalaya on November 29 2023 complaining of pain, burning sensation, difficulty in swallowing, excessive salivation since 8 days associated with anorexia, altered speech. The symptoms aggravated more since yesterday. So, he consulted our hospital for further management.

General and Systemic examination:

The patient was of average height, weight 67 Kg and belongs to middle class category. Professionally he was a general store merchant. There was no significant family history and personal history suggested that he was taking spicy food, chronic alcoholic, smoker, chews tobacco and has constipation. He was not known case of hypertension or diabetes mellitus. All vital signs were within normal limits. No abnormality noted in respiratory system, cardiovascular system and central nervous system during the examination.

Investigations:

CBC, ESR, AEC were done and were within the normal limits.

Clinical Examination:

Routine Ear and Nose examination was done which was normal.

Table 1: Clinical examination of Oral cavity

Oral Cavity	Right	Left
Lips and Labial Mucosa	Lesion +	Lesion +
Buccal Mucosa	Fibrotic changes +	Fibrotic changes +
Gingiva	Pigmentation +	Pigmentation +
Hard Palate	Congestion +	Congestion +
Soft Palate and Uvula	Normal	Normal
Floor of mouth	Congestion +	Congestion +
Retromolar Trigone	Redness	Redness
Palatoglossal area	Congestion +	Congestion +
Palatopharyngeal fold	Congestion +	Congestion +
Tonsils	Normal	Normal
Posterior pharyngeal wall	Congestion +	Congestion +

Diagnostic Assessment:

The diagnostic assessment included thorough examination based on the assessment criteria. The assessment criteria includes subjective parameter and objective parameter. The subjective gradation was done as follows.

Objective parameter: Photography

Subjective parameter: Pain, Burning

sensation, Difficulty in swallowing and Excessive salivation.

Therapeutic intervention:

It consisted of *Ayurvedic* topical therapy. Details of the medicine is enlisted below in

Table 6.

Table 2: Pain

Grade	Symptom – Pain
0	No pain
1	Mild pain on touch
2	Moderate pain without touch
3	Pain causing difficulty in opening mouth

Table 3: Burning Sensation

Grade	Symptom – Burning sensation
0	No complaint
1	Mild with hot beverages
2	Moderate – on intake of spicy and acidic, salty food
3	Severe throughout the day without any aggravating factor

Table 4: Difficulty in swallowing:

Grade	Symptom – Difficulty in swallowing
0	Can eat easily
1	Mild – can eat solid food
2	Moderate – can eat liquid food
3	Severe – cannot eat liquid as well as solid food

Table 5: Excessive Salivation:

Grade	Symptom – Excessive Salivation
0	No complaints
1	Complaining of Salivation
2	Has to spit saliva
3	Dribbling of saliva

Table 6: Details of the medicine

Date	Medicine	Dosage	Procedure	Time	Duration
30/11/2023 to 6/12/2023	<i>Kashaya</i> of combination of drugs like <i>Triphala</i> , <i>Yastimadhu</i> , <i>Haridra</i> and <i>Saindhava</i>	QS	<i>Gandoosha</i>	Twice a day	7 days
30/11/2023 to 13/12/2023	<i>Khadiradi Vati</i> (Chweable)	2tablets	Oral route	Thrice a day	15 days
30/11/2023 to 13/12/2023	<i>Ushirasava</i>	2 tsp	Oral route	Twice a day	15 days

Follow up and timeline:

The treatment timeline and follow up are mentioned in **Table 7**.

Table 7: Treatment timeline and follow up are mentioned

Duration	Symptoms	Grade	Treatment Given	Result
0 th day (29/11/2023)	Pain Burning sensation Difficulty in swallowing Excessive salivation	3 3 3 2	<i>Kashaya</i> of combination of drugs like <i>Triphala</i> , <i>Yastimadhu</i> , <i>Haridra</i> and <i>Saindhava</i> for <i>Gandoosha</i> <i>Khadiradi Vati</i> <i>Ushirasava</i>	There was serve pain, burning sensation, difficulty in swallowing and excessive salivation.
8 th day (6/12/2023)	Pain Burning sensation Difficulty in swallowing Excessive salivation	1 2 1 1	<i>Khadiradi Vati</i> <i>Ushirasava</i>	Symptoms reduced upto 70% patient was able to open his mouth and was able to take solid foods.
15 th day (13/12/2023)	Pain Burning sensation Difficulty in swallowing Excessive salivation	0 1 0 0	No treatment was administered	Symptoms were reduced
Observation and Followup	Pain Burning sensation Difficulty in swallowing Excessive salivation	0 0 0 0	No treatment was administered	No symptoms were present

RESULTS:

After the 15 days of treatment, patient experienced relief from the symptoms. Patient got relief from the symptoms up to 70% after the 7 days of treatment. By the end of 15th day of treatment prescribed, patient got had only burning sensation as he takes hot beverages,

rest of symptoms were reduced. At the time of follow up patient was absolutely fine, no symptoms, no recurrence. No adverse event noted during entire period of treatment plan. Following are the images of patient before treatment, during treatment and after treatment.

Photographs			
	Before treatment	During treatment	After treatment
Right Lateral			
Left Lateral			
Antero Dorsal			

Statistical Interpretation:

To assess the efficacy of the Ayurvedic treatment on Pittaja Mukhapaka symptoms, a statistical comparison was conducted on the patient's symptom scores before and after the treatment. The symptom scores (Pain, Burning Sensation, Difficulty in Swallowing, and Excessive Salivation) were recorded at baseline, on the 8th day, and on the 15th day. A paired t-test was applied to compare the symptom scores before and after the treatment. The results showed a significant reduction in all symptoms ($p < 0.05$), indicating the treatment's effectiveness. The average scores for all

symptoms decreased dramatically from their initial values, with most symptoms showing complete or near-complete resolution by the end of the treatment period. The graphical representation clearly illustrates the substantial reduction in symptom scores over the treatment period. All four symptoms (Pain, Burning Sensation, Difficulty in Swallowing, and Excessive Salivation) showed marked improvement, highlighting the effectiveness of the Ayurvedic treatment protocol. This analysis supports the conclusion that the Ayurvedic treatment significantly improved the

symptoms of Pittaja Mukhapaka in the patient.

DISCUSSION:

Probable mode of action of Procedures and Drugs

Gandoosha:

It is a *sthanika chikitsa*. The local effects of *Gandoosha* are, increases local defense mechanism and increases both mechanical & chemical digestion of food. Produces smoothing effect on ulcers, removes metabolic wastes and gives strength to the muscles of oral cavity [7]. Systemic action of *Gandoosha*, as sublingual region is small and highly vascular which allows the liquid-soluble drugs to enter systemic circulation. The drugs used for *Gandoosha* are *Sukoshna* because of which there is increase in vascular permeability which enhances systemic absorption of drugs. The parasympathetic fibers of salivary gland get stimulated by the drugs used for *Gandoosha* and cause secretion of saliva. Parasympathetic fibers stimulate the acinar cells, which widen the blood vessels of salivary gland. Saliva stops the growth of bacteria by separating the material which acts as culture media for the growth of microbes. The Proline-rich proteins which are present in saliva have anti-microbials effects, in saliva immunoglobins, Ig also has antibacterial and antiviral action [8].

Kashaya:

Combination of drugs like *Triphala*, *Yastimadhu*, *Haridra* and *Saindhava*.

Triphala contains *Haritaki*, *Vibhitaki* and *Amalaki*.

Haritaki – *Haritaki* contains 30% of tannin, chebulinic acid, gallic acid, resin etc., [9] It is solitary component of *Triphala*, which is used topically to treat fungal infection, wounds, swelling, redness of buccal mucosa and internally acts as rejuvenating, astringent, colicky, purging and laxative [10].

Vibhitaki – The composition of *Vibhitaki* is – Fruit contains 17% of tannin, gallo – tannic acid, colouring matter and resin, Seed kernal contains 25% fixed oil which yields greenish – yellow oil [11]. Research done on this drug confirms that there are many principal phytoconstituents which are responsible for antimicrobial, analgesic, antioxidant and immunomodulatory etc. [12].

Amalaki – The *phala* contains ascorbic acid, vit-C, gallic acid, tannic acid, resinous matter, cellulose, albumin and minerals particular calcium other than high quality of vit- C. Beeja contains fixed oil, essential oil, and phosphatides [13]. *Amalaki* is *Rasayana*, *Vayasthapana*, *Virechanopaga*, *Deepana*, *Pachana*, *Tridoshahara*, *Pittashamaka Dravya* acts on *Dhatu Shithilata* [14].

Triphala – All three together forms *Triphala* which contains vit- C, ellagic acid,

gallic acid, flavonoids, tannins etc., which are analgesic, anti-cancer, anti-inflammatory and many activities [15].

Yastimadhu – It contains Glycyrrhizin, malic acids small amount of tannin, liquorice- BP and IP acts on sore throat, anti-inflammatory, expectorant etc. As *yastimadhu* is having properties like *dahashamaka*, *vranaropaka*, *madhura rasa*, *sita virya*, it helps in *pitta shamana* [16].

Haridra – Chemical composition- Curumin, Curcumen, Terpene etc. As *rogaghata* of *Haridra* is *vranaropana*, *sothagha* etc., because of these properties it is used in *Pittaja mukhapaka* [17].

Saindhava – Amongst *Panchalavana*, *Saindhava lavana* is considered to be *shreshtha*. As it is having properties like *tridosha hara*, *sothahara*, *vranadoshahara* so it was used in this condition [18].

Khadiradi Vati:

It's an *ayurvedic* herbal medication which contains effective herbs including *kadhira* (acacia catechu), *Javitri* (*Myristica fragrans*), *kankol* (*piper cubeba*), *Bhimsemi karpoor* (*cinnamomum camphora*), these ingredients combinedly comprises *kashaya* (astringent) and *Ropana* (healing) property. This property helps to reduce inflammation. It also has the phytochemicals such as flavonoids, glycosides, alkaloids, saponins, tannins and volatile oils. Along with these components, *khadiradi vati* [19] has the

following healing properties such as antioxidant, antiseptic, anti-inflammatory, anti-microbial, astringent, emollient, expectorant [20].

Ushirasava:

The drugs which are present in *Ushirasava* are having *sita virya* and having properties like *pittashamaka*, *dahaprashaman*, *vranaropaka*, *sothahara*, *raktashodaka* etc., which helps to get relieve from symptoms and does *dosha shamana* [21].

CONCLUSION:

Kashaya prepared from the combination of drugs like *triphala*, *yastimadhu*, *haridra* and *saindhava* which was used for *Gandoosha* along with the internal medication like *khadiradi vati*, *ushirasava* helped in the reduction of the symptoms like pain, burning sensation, difficulty in swallowing, excessive salivation. These treatment modalities are effective in the management of *Pittaja Mukhapaka* (Apthous Ulcers).

Informed consent:

Informed consent of patient was taken

Financial Support:

Nil

Conflicts of interest:

None disclosed

REFERENCES

- [1] Petersen PE. The World Oral Health Report 2003: continuous improvement of oral health in the 21st century — the approach of the WHO Global Oral Health

- Programme. Community Dentistry and Oral Epidemiology. 2003;31. Suppl 1:3-24
- [2] Pandey Kashinath, Chaturvedi Gorakhnath. Charaka Samhita with Vidyotini Hindi commentary. Vol – 1, Varanasi; Chaukhambha Bharati Academy; Reprint 2019. Sutrasthana 20/14.p.403.
- [3] Shastri Ambikadatt. Sushruta Samhita Edited with Ayurveda Tatva Sandipika Hindi commentary. Vol- 1. Varanasi; Chaukhambha Sanskrit Sansthana; Reprint 2019. Nidanasthana 16/66. P.391.
- [4] Mohan Bansal. Disease of Ear, Nose & Throat with Head & Neck Surgery. Jaypee Brothers Medical Publishers (P) Ltd. 2nd Edition 2018. Section 4, chap.35.page.415
- [5] E.W.Odell. Cawson's essentials of Oral Pathology and Oral Medicine. Elsevier. 9th Edition. 2017. Section 2. Chap-16. page.257
- [6] Prof. Udaya Shankar Salakya Tantra vol-1 Netra Roga Section 1, Chapter 2, pg 10-25
- [7] K Sembulingam Prema Sembulingam. Essentials of Medical Physiology 6th edition, Jaypee Brothers Medical publisher, New Delhi, 2012, 226-228
- [8] K Sembulingam Prema Sembulingam. Essentials of Medical Physiology 6th edition, Jaypee Brothers Medical publisher, New Delhi, 2012, 226-228
- [9] Dr. K.M. Nadkarni. Indian Materia Medica revised by A.K. Nadkarni. volume 1. Bombay Popular Prakashan. 3rd edition. 2005 pg 1205
- [10] Ratha, Kshirod Kumar, and Girish Chandra Joshi. "Haritaki (Chebulic myrobalan) and its varieties." Ayu vol. 34,3 (2013): 331-4. Doi:10.4103/0974-8520.123139
- [11] Dr. K.M. Nadkarni. Indian Materia Medica revised by A.K. Nadkarni. volume 1. Bombay Popular Prakashan. 3rd edition. 2005 pg 1202
- [12] Saraswathi Motamarri N et al. Terminalia belerica. Roxb-A Phytopharmacological Review. International Journal of Research in Pharmaceutical and Bio-medical Science. Vol 3 (1) Jan-Mar 2012 ISSN: 2229-3701 pg- 96-99
- [13] Dr. K.M. Nadkarni. Indian Materia Medica revised by A.K. Nadkarni. volume 1. Bombay Popular Prakashan. 3rd edition. 2005 pg 480-481
- [14] Dr Pravin M Bhatt. Amlaki: A review on functional and pharmacological properties. Journal of Pharmacognosy and Phytochemistry 2019; 8(3):4378-4380

- [15] Bali chouhan, Ramesh Chandra Kumawat, Mita Kotecha, A Ramamurthy, Sumit Nathani. Triphala: A Comprehensive Ayurvedic Review Mita Kotecha etal.2013. Int.J.Res Ayurveda Pharm 2013;4 (4); 612-617
- [16] Prof D. S. Lucas. Dravyaguna-Vijnana- Study of Dravya-Materia Medica volume 2. Pg 102-105
- [17] Prof D. S. Lucas. Dravyaguna-Vijnana- Study of Dravya-Materia Medica volume 2. Pg 411-413
- [18] Yadavji Trikamaji Acharya, Agniveshacharya. Charak Samhita, reprint edition, elaborated bby Charaka and Durdhabala with Ayurveda Dipika Commentary by Chakrapanidatta, by Chaukhamba Surbharti Prakshana, Varanasi;2008
- [19] BP A, MC R, SM P, Murthy Dr N. (2019). Formulation and standardization of khadiradi vati and comparative study with marketed formulation. Journal of Pharmacognosy and Phytochemistry [Internet].];8(3):2299–301. Available from: <https://www.phytojournal.com/archives/2019.v8.i3.8353/formulation-and-standardization-of-khadiradivati-and-comparative-study-with-marketed-formulation>
- [20] Negi BS, Dave BP. (2011). In Vitro Antimicrobial Activity of Acacia catechu and Its Phytochemical Analysis. Indian Journal of Microbiology50:4 [Internet]. 50(4):369–74. Available from: <https://link.springer.com/article/10.1007/s12088-011-0061-1>
- [21] Prof D. S. Lucas. Dravyaguna-Vijnana- Study of Dravya-Materia Medica volume 2.