

# Ayurvedic Management of Tobacco-induced Stomatitis (*Pittaja Mukhapaka*): A Case Report

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## ABSTRACT

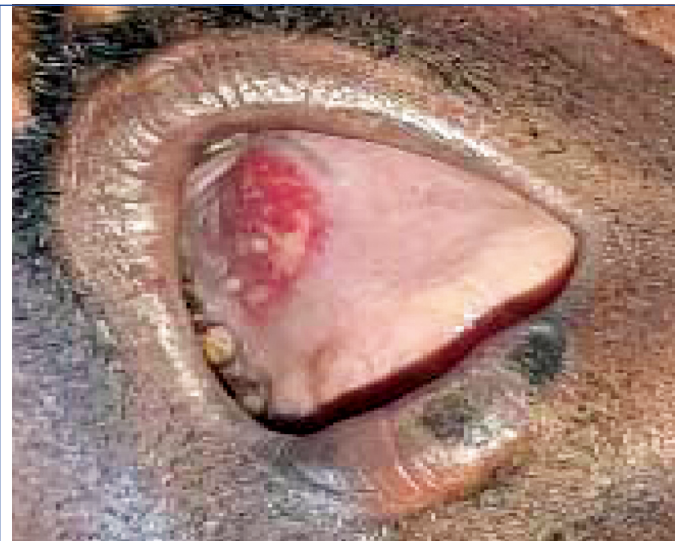
Tobacco-induced stomatitis, also called nicotine stomatitis, presents as raised papules with red central depressions, mainly on the posterior hard palate. In *Ayurveda*, *mukhapaka* is classified into *Vataj*, *Pittaja*, *Kaphaj*, and *Sannipataj* types, each with distinct symptoms. This case study discusses a 42-year-old male with ulceration of the hard palate, pricking pain (*toda*), burning sensation (*daha*), altered taste (*aasyvairasya*), and blackish lip discoloration (*vaivarnya*). Following 30 days of Ayurvedic treatment, he experienced marked improvement.

**Keywords:** *Ayurveda*, *Gandush*, *Mukhapaka*, *Pittaja mukhapaka*, *Stomatitis nicotina*

## CASE REPORT

A 42-year-old male (farmer) presented to the outpatient department with complaints of burning sensation and pricking pain in the palate, altered taste, and blackish discoloration of the lips, noticed over the last 30 to 40 days. He reported progressive worsening of symptoms over this period. There was no significant medical history for hypertension, diabetes or any systemic illness. There was no major history of any illness or surgery, no allergies, and no previous dental consultations. The patient consumed spicy food and reported long-standing use of tobacco (kharra-4-5 sachets per day of 15 to 20 gm) and occasional smoking with consumption of alcohol for the past 10 years.

On intraoral examination, a single lesion measuring approximately 3 cm in diameter with whitish margins was observed on the posterior hard palate. The surrounding mucosa appeared erythematous. Blackish discoloration was present on the vermilion border of the lower lip. [Table/Fig-1]. Vital signs were within normal limits: Pulse rate 82/min, Blood Pressure (BP) 130/80 mmHg, and Respiratory Rate (RR) 18/min. Systemic examination was unremarkable. Based on chronic tobacco exposure, and exclusion of (leukoplakia, erythroplakia, candidiasis), a clinical diagnosis of *nicotina stomatitis* was made. Biopsy was not performed as the patient was not financially stable, and also due to the resource constraints in the Ayurvedic outpatient setting.



**[Table/Fig-1]:** Lesion with characteristic papules in the posterior palate and blackish pigmentation on the lower lip.

According to ayurveda, the presence of burning sensation (*daha*), pricking Pain (*toda*), discoloration (*vaivarnya*), and involvement of oral mucosa supported a diagnosis of *pittaja mukhapaka* (stomatitis). The patient was treated for 30 days [Table/Fig-2].

S. No.	Medication	Dose
1.	<i>Panchatikta ghrita</i>	20 mL twice daily (BD) as <i>gandusha</i> , retained in the oral cavity for 5-10 minutes, for 30 days
2.	<i>Kamdudha vati</i>	250 mg. Two tablets administered orally twice daily after meals for 30 days
3.	<i>Bilwadi gutika</i>	250 mg. Two tablets administered orally twice daily after meals for 30 days
4.	<i>Patolkaturohinyadi kashya</i>	20 mL twice daily (BD) after food (AF) for 30 days

**[Table/Fig-2]:** Treatment regimen.

The patient was counselled to completely discontinue tobacco and alcohol and avoid excessively spicy, hot and acidic food during treatment. Pain and burning sensation were assessed using a 10-point Visual Analogue Scale (VAS) [1], where 0 indicated no symptoms, and 10 indicated maximum severity. Lesion size was recorded in centimetres using periodontal probe under the guidance of dentists. Clinical outcomes are detailed in [Table/Fig-3].

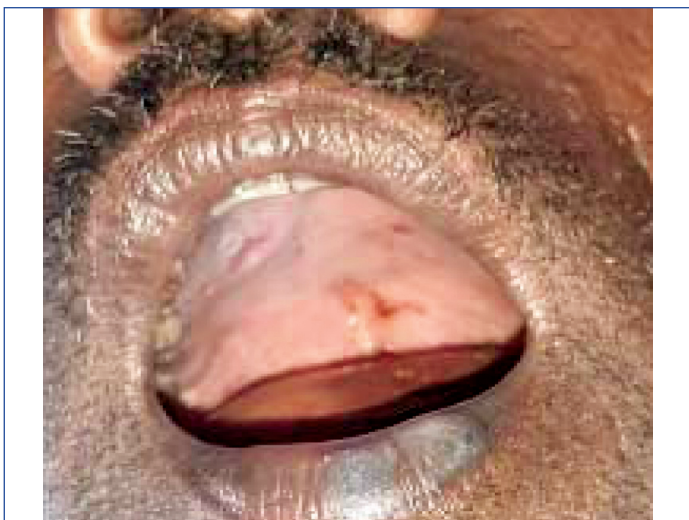
S. No.	Parameters	Baseline	Day 30
1.	Palatal lesion size	Size- 3 cm	0 cm
2.	Lip pigmentation area	2-3x1 cm	1 cm
3.	<i>Toda</i> (pricking pain)	8	0
4.	<i>Daha</i> (burning sensation)	4	0

**[Table/Fig-3]:** Quantitative treatment outcomes.

After 30 days of treatment, the palatal lesion had resolved to the maximum capacity [Table/Fig-4], pain and burning sensation decreased from VAS score of 8 and 4 to 0 at day 30. At regular 15 days of follow-up for two months, there was no recurrence of stomatitis and no adverse event related to the medications was reported.

## DISCUSSION

*Nicotina stomatitis* is a tobacco-induced inflammatory condition of the palatal mucosa, characterised by papular lesions with central erythematous depressions in chronic smokers and tobacco users [2,3]. *Mukharoga* in ayurveda describes multiple forms, and *pittaja mukhapaka* is particularly associated with burning sensation, redness, and ulcerative or erosive lesions of the oral mucosa, closely paralleling the features of *nicotina stomatitis* in this patient [4].



**[Table/Fig-4]:** After completion of treatment, complete healing of the lesion in the palate was observed and blackish discoloration on lower lip was reduced.

From a modern perspective, tobacco-related heat and chemical irritants cause epithelial damage, vasoconstriction, impaired tissue perfusion, and activation of inflammatory mediators, resulting in persistent mucosal inflammation and delayed healing [3]. Ayurvedic understanding attributes such presentations to *Pitta* aggravation in *Rasa* and *Rakta Dhatu* with associated *Ama*, leading to burning pain and discoloration in the oral cavity [4].

The chosen intervention targeted *Pitta* pacification and mucosal healing at both local and systemic level. *Panchatikta ghrta*, used as a *Gandusha*, provides a combination of bitter herbs in a *ghrita* base, which has been reported to possess anti-inflammatory and immunomodulatory properties and support epithelial repair [4]. *Kamadudha Vati* and *Bilwadi Gutika* have been described as useful in *Pitta*-predominant disorders and are reported to exhibit anti-inflammatory properties, Antioxidant and gastroprotective actions which may contribute to the reduction of mucosal inflammation and symptom relief [5,6].

In a clinical study of 30 patients with tobacco-induced *Mukhapaka*, treatment with *Eladi Churna* internally and *Triphaladi Kwatha Gandusha* for 30 days produced significant improvement in clinical symptoms, including reduction in ulcer size and pain, with most patients experiencing symptomatic relief [7].

This case demonstrates relatively rapid symptomatic improvement and complete lesion resolution.

## CONCLUSION(S)

Tobacco-induced inflammatory stomatitis is a complex condition that results from the toxic effects of tobacco on the oral mucosa, as well as the immune system's response to these irritants. By integrating both viewpoints, healthcare providers can approach the treatment of tobacco-induced stomatitis more comprehensively, addressing both the symptoms and the underlying causes of the condition.

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