

COMMENTARY



A commentary on ayurvedic management of lichen planus with aphthous ulcer – Pittaja Mukhapaka

Manjusha Rajagopala, Poonam Dhruv, Narayan Bavalatti

Department of Shalaky Tantra, All India Institute of Ayurveda, Sarita Vihar, New Delhi, India

Correspondence

Dr. Manjusha Rajagopala, Department of Shalaky Tantra, All India Institute of Ayurveda, Sarita Vihar, New Delhi, India. Phone: +91-9560788850. E-mail: bhattrajma2008@gmail.com

Received 09 July 19;

Accepted 10 October 19

doi: 10.15713/ins.ijcdmr.137

How to cite the article:

Rajagopala M, Dhruv P, Bavalatti N. A commentary on ayurvedic management of lichen planus with aphthous ulcer – Pittaja Mukhapaka. Int J Contemp Dent Med Rev, vol.2019, Article ID: 011219, 2019. doi: 10.15713/ins.ijcdmr.137

Abstract

Aim: Lichen planus is a chronic inflammatory mucocutaneous disease, more commonly found in females with a prevalence rate of 1–2%. Recurrent aphthous ulcer is also an inflammatory disease with ulceration in mouth, pain, and burning sensation. In Ayurveda, these can be correlated with *Mukhapaka* which occurs when the oral cavity undergoes suppuration and ulceration along with vitiation of *Pitta dosha*. The aim of this commentary is to present a case of oral lichen planus (OLP) with a recurrent aphthous ulcer in an 18-year-old female patient treated with ayurvedic management. **Conclusion:** In modern medicine, for the management of OLP and recurrent aphthous ulcer, mouth gargles, steroids, B-complex group of drugs, and injection placentrex (submucosal) are prescribed, but the modern management has its own limitations along with side effects. According to Ayurveda, *Pitta dosha* and *Raktavaha srota* are the main *Dushya* in *Mukhpaka*; therefore, management includes *Pitta shamaka*, *Vedanasthapana* (pain relieving), *Vranashodhana* (wound cleaning), *Vranaropana* (wound healing), and *Rakta prasadaka* (blood soothers) treatment. Due to tobacco chewing, spicy food, alcohol, betel nut, gastric disturbance, and other various reasons commonly found OLP and recurrent aphthous ulcer has been presented here with its management. **Clinical Significance:** This review aims at clinical approach to treat lichen planus and non-healing recurrent aphthous ulcer in ayurvedic lines of the treatment having achieved substantial recovery.

Keywords: Ayurveda, *Mukhapaka*, oral lichen planus, recurrent aphthous ulcer

Introduction

Lichen planus is an inflammatory disease of stratified squamous epithelium that affects mucosal and cutaneous tissues involving T-cells in particular.^[1] It is estimated to affect 0.5–2.0% of the general population.^[2] Clinically, six types of oral lichen planus (OLP), namely, reticular, papular, plaque-like, atrophic/erosive, ulcerative, and bullous types, can be identified.^[3] The more commonly found is a reticular form which is characterized by white lacy streaks, which generally are surrounded by discrete erythematous borders. OLP is an autoimmune mucocutaneous disease more commonly affecting buccal mucosa, tongue, and gingiva. It has been observed that OLP affecting cutaneous tissue tends to be more persistent and more resistant to treatment.^[4] The etiology can be multifactorial including genetic, environmental, lifestyle factors such as betel nut chewing, cigarette smoking, and alcohol drinking habits, stress, and citrus food items. Recent development reveals interesting new associations, such as with liver disease.^[1] While often asymptomatic, OLP may be associated with chronic atrophic ulcerative erosive lesions which commonly

give rise to pain. The prevalence of recurrent aphthous stomatitis ranges from 2% to 66% in different populations worldwide.^[5] In Ayurveda, *Mukhapaka* is the disease affecting oral cavity, wherein patient feels burning sensation in mouth along with ulceration and discomfort.^[6] It is found more common due to vitiated *Pitta dosha*, in *pitta* dominant *Prakriti* and *Pittaja kala*. It occurs commonly in India because people are more prone to have *Pitta* dominant food such as oily food, tobacco chewing, smoking, and alcohol consumption and also *Pitta* aggravating factors such as late-night sleeping and improper timing of meals. Due to the suppuration process, ulcers and inflammation over affected area are seen in *Mukha*.^[5] Ayurveda emphasizes that all the diseases are the result of weak state of *Agni* (factor for digestion and metabolism). Improper functioning of *Agni* leads to various gastrointestinal disorders as well as various allergic, autoimmune, and metabolic disorders. Therefore, OLP and recurrent aphthous ulcers can be correlated with *Pittaja Mukhapaka* in Ayurveda. The management of lichen planus is still not totally satisfactory, as yet so far no definitive treatment has been claimed. Immunomodulation

along with corticosteroid and removal of the triggers, however, can control the condition. In Ayurveda, the treatment modalities for *Mukhapaka* include *Shaman oushadhi* (oral medicines to alleviate the disease), along with food and lifestyle changes and panchakarma procedures specially *Virechana karma* (purgation therapy), *Nasya* (nasal administration), external therapies such as *Kavala* and *Gandusha* (medicated gargles), and *Pratisarana* (local application).

Case Report

An 18-year-old female visited the Department of Shalaky Tantra, All India Institute of Ayurveda, with chief complaints of ulcer on dorsum of tongue for 18 months which was non-healing and recurrent in nature. The patient had burning sensation in mouth for the past 1 year while consuming spicy food and pigmentation on oral mucosa bilaterally. Medical and family history was not significant.

On intraoral examination, tongue was coated and there was a non-healing aphthous ulcer on dorsum of tongue. Grayish-brown patch with white striae was observed bilaterally in the posterior buccal mucosa extending into the retromolar fossa. These lesions were non-tender on palpation [Figure 1].

Initially, the patient noticed coating of tongue and ulcer on dorsum of tongue. She took treatment from Lok Nayak Hospital, New Delhi, and was provisionally diagnosed as case of OLP. There she took treatment for about 1 year but did not get relief. Her treatment history was as follows [Table 1].

On assessment of *Prakriti* patient was *Pitta vata* predominant in nature, had *Krura koshtha* (where in person will take long time for digestion and has irregular bowel habits) with *Madhyam satva* (moderate psychological strength). She had mild *Agnimandhya* (decreased digestion and appetite). Predominant *Dosha* in disease is *Pitta* as well there was a history of recurrence leading to vitiation of *Pitta*. Besides, there were burning sensation and pain in the ulcerated region.



Figure 1: Before treatment

Investigation

Urine routine and microscopic were normal, hemoglobin level was 12.2 g/dl, total leukocytes and differential leukocytes were found to be within normal limits.

Management of the condition

The management of the disease was as follows [Table 2]: The aphthous ulcer started healing with reduction in size during snehapana (internal oleation) [Figure 2a-c]. Later, after *virechana karma* (purgation), the ulcerative lesion on dorsum of tongue healed leaving behind the scar with whitish margins. Coating of the tongue and blackish striae on bilateral oral mucosa reduced 80% [Figure 3a and b].

Do's and do not's^[7-9]

- Do's: Food items with pungent and bitter taste, old rice, wheat, bean, horse gram, bitter gourd, radish, *Tambula* (pan leaves), *Khadir*, *Ghrita*, etc.
- Do not's: Curd, milk and its derivatives, jaggery, sweets, black gram, fish, jiggery, and hard eatables.

Observation and Results

Marked improvement was observed. Tongue was clear. The aphthous ulcer regressed completely (100%) and lichen planus on bilateral sides of oral mucosa reduced 80%.

Discussion

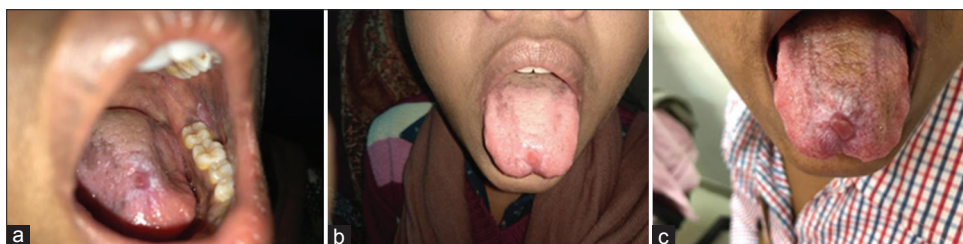
In Ayurveda for *Mukhapaka*, *agnimandya* is an important causative factor. In this case, the *Prakriti* of patient was *Pitta-vataja* and weight was 50 kg and had mild *Agni mandya*. *Agni mandya* causes vitiation of *Apana vayu*, hence causing constipation. Therefore, the first and foremost step to the management of *Mukhapaka* was correction of *Agni*. Therefore,

Table 1: Previous treatment history

S. No.	Date	Medication
1.	From August 3, 2016, to September 7, 2016	Betadine gargles
2.	From November 2, 2016, for 7-8 months	Tab. Dapsone Triamcinolone acetonide oral paste Tacrolimus oral gel
3.	From November 23, 2017, to October 20, 2017	Tab. Dapsone was stopped Tab. Betnesol Forte 4 mg OD Tacvido Forte oral gel Cinort oral paste for local application Tab. Pantop Tab. HCQ 200 mg OD
4.	October 23, 2017, onward	Triamcinolone acetonide oral paste Tacrolimus oral gel daily

Table 2: Treatment plan

S. No.	Therapy	Medications	Duration
Shaman karma (treatment plan to alleviate the disease)			
1.	<i>Shaman oushadhi</i>	<i>Panchsakara churna</i> <i>Yashtimadhu churna</i> with <i>Tankan bhasma</i> for <i>Pratisarana</i> (local application), <i>Gandusha dharana</i> with <i>Irimejadi taila</i> <i>Rasayana churna</i> (<i>Guduchi churna</i> , <i>Gokshura churna</i> , and <i>Amalaki churna</i>) with <i>Ghrita</i> and <i>Madhu</i> <i>Saptamrita lauha</i>	3 months
Shodhana karma (medicine to alleviate the disease)			
1.	<i>Rukshan</i> (dehydrating therapy to remove the vitiated <i>Kapha</i> and <i>ama</i>)	<i>Ajmodadi churna</i> <i>Amritarishta</i> <i>Mahasudarshan ghan vati</i>	5 days
2.	<i>Snehapana</i> (internal oleation)	<i>Go-ghrita</i> at a dose of 30, 80,120,150, and 180 ml	1 st , 2 nd , 3 rd , 4 th , and 5 th days, respectively
3.	<i>Abhyanga</i> (body massage) and <i>Swedana</i> (sudation)	<i>Tila taila</i> <i>Dashmoola Kwatha churna</i>	3 days
4.	<i>Virechana</i> (purgation)	<i>Trivrit avaleha</i> and <i>Triphala kwatha</i>	45 Vegas (frequency) of motion)
5.	<i>Sansarjana karma</i>	As per <i>Pravara shuddhi</i> – excellent purification level	7 days
Shaman karma (treatment plan to alleviate the disease)			
1.	<i>Shaman oushadhi</i>	<i>Panchsakara churna</i> <i>Yashtimadhu churna</i> with <i>Tankan bhasma</i> for <i>Pratisarana</i> (local application) <i>Gandusha dharana</i> with <i>Irimejadi taila</i> <i>Rasayana churna</i> (<i>Guduchi churna</i> , <i>Gokshura churna</i> , and <i>Amalaki churna</i>) with <i>Ghrita</i> and <i>Madhu</i> <i>Saptamrita lauha</i>	1 month
2.	<i>Nasya</i> (nasal administration)	<i>Shadbindu taila</i>	Consecutively for 7 days with a gap of 1 month

**Figure 2:** (a-c) During treatment**Figure 3:** (a and b) After treatment

Deepana-pachana drug was given to ignite *Agni*. Initially for 3 months, *Shaman oushadhi* (medicine to alleviate the disease) was given. *Panchsakara churna* majorly contains *Sanaya* (*Cassia angustifolia*) which is a good purgative, antimicrobial, helped to correct the bowel, and increase the appetite.^[10] *Yashtimadhu churna* have properties such as *Tridosahara*, *Vedanahara*, *Vranashothahara*, *Vranaropana*, *Dahashamaka*, healing and antiulcer, anti-inflammatory, and skin regeneration activity.^[11] *Tankan* shows characteristic of

Kshara and hence used in *Shwasa*, *Kasa*, *Mukhapaka*, and *Danta roga* for *Pratisarana* (local application).^[12] *Irimedadi* tail constitutes *Pitta shamaka* drugs and is indicated in diseases pertaining to *Mukha*.^[13] *Rasayana churna* (*Guduchi churna*, *Gokshura churna*, and *Amalaki churna*) with *Ghrita* and *Madhu* (honey) and *Saptamrita lauha* were given. *Guduchi* have properties such as *Daha prashamana*, *Tridoshahara*, antiulcer, antiseptic, anticancer, anti-inflammatory, and immunomodulatory activity. *Gokshura* have properties such as *Vata-pittahara*, anti-inflammatory, and analgesic. *Amalaki* has properties such as *Dahashamana* (relieves burning sensation), *Shophahara* (decreases inflammation), antimicrobial, antioxidant, immunomodulatory, antifungal, anti-tumor, anti-inflammatory, antibacterial, and antiulcer. Honey promotes healing process.^[14] The main symptoms present were ulcer on dorsum of tongue which was non-healing in nature that indicates *Pitta* as the main *Dosha*. It was associated with burning sensation and pain which again is the manifestation of *Pitta dosha*. Considering *Pitta* as main *Dosha*, *Virechana* was planned in the management. Moreover, in the management of *Mukhapaka*, the treatment protocol as given in *Charaka Samhita* involves *Virechana*. The patient had a history of oral steroid drug usage, in that case also, *Virechana* helped to detoxify the body and to correct the metabolism of patient. Hence, after 3 months, *Shodhana karma* (body purification therapy) was given, in which the patient was given *Rukshana* therapy (dehydrating therapy) to clear the body channels before commencing with the main treatment for better action and bioavailability for *Snehapana*. Internal *Deepanapaachana* with *Ajamodadi churna* and *Amritarishta* also lead to increased appetite and proper bowel evacuation on daily basis. Forty-five *Virechana vegas* with last two *Vegas* of stool with mucous indicate optimum purification level of *Virechana*. *Samsarjana karma* (regeneration of the body) was planned for the patient. The aim of *Samsarjana karma* was to gradually bring the patient's diet back to what he/she was accustomed to before starting panchakarma. No weakness was reported by the patient on the day of *Virechana* or subsequent days of *Samsarjana karma*. There was considerable improvement in pain and burning sensation in ulcer, indicating equilibrium state of *Pitta dosha*. Bowel was clear due to evacuation of toxins from body. After the completion of treatment, the patient was prescribed with shamana drugs for a month to preserve the effects produced by *Virechana karma*. *Dhanyamla*^[15] (wash of grains fermented by keeping overnight) was given for *Gandusha* (holding in mouth) to remove *Asyavairasyata* (altered taste perception), dirt, and bad smell from the mouth.^[16] The patient was advised to revisit the hospital after 15 days to reevaluate to the features. Meanwhile, two sittings of *Nasya* (nasal administration) were done consecutively for 7 days with a gap of 1 month. As per *Acharya Charaka*, *Nasya* is the line of treatment in all the diseases pertaining to supraclavicular region for the maintenance of health of sense organs.^[17] Nose is considered the gateway of brain, thus drug administered through nose stimulate the centers of brain. No

further deterioration in symptoms was noticed after indicating that the disease pathogenesis was checked. Non-healing ulcer on dorsum of tongue recovered. No recurrence of ulcer was observed until 6 months. No burning sensation was observed by the patient. Blackish pigmentation on bilateral sides of oral mucosa reduced much extent. The coating of tongue reduced.

Conclusion

According to *Acharya Charaka – Dhoomapana, Pradhamana nasya, Virechana, Vamana*, and *Lekhana* are indicated in the treatment of oral diseases.^[18] *Virechana* is a chief treatment for *Pitta dosha* and it also causes *Rakta dhatu prasdana*. It normalizes the path of *Vata dosha* which further leads to correct constipation, hence breaking the pathogenesis of *Mukharoga*. *Virechana karma* along with *Pratisarana* of *Yashtimadhu churna* with honey and *Shaman oushadhi* is an effective treatment in the management of lichen planus and non-healing aphthous ulcer. However, the protocol of ayurvedic management can be finalized by conducting clinical trials on large sample.

References

1. Scully C, Beyli M, Ferreiro MC, Ficarra G, Gill Y, Griffiths M, et al. Update on oral lichen planus: Etiopathogenesis and management. *Crit Rev Oral Biol Med* 1998;9:86-122.
2. McCreary CE, McCartan BE. Clinical management of oral lichen planus. *Br J Oral Maxillofac Surg* 1999;37:338-43.
3. Lavanya N, Jayanthi P, Rao UK, Ranganathan K. Oral lichen planus: An update on pathogenesis and treatment. *J Oral Maxillofac Pathol* 2011;15:127-32.
4. Gupta S, Jawanda MK. Oral lichen planus: An update on etiology, pathogenesis, clinical presentation, diagnosis and management. *Indian J Dermatol* 2015;60:222-9.
5. Koybasi S, Parlak AH, Serin E, Yilmaz F, Serin D. Recurrent aphthous stomatitis: Investigation of possible etiologic factors. *Am J Otolaryngol* 2006;27:229-32.
6. Shashtri KA, editor. *Susruta Samhita of Maharisi-Susruta, Nidana Sthana*. Ch. 16, Ver. 66-8. Varanasi: Chaukhamba Sanskrita Sansthan; 2015. p. 391-2.
7. Kumari A, Tiwari P, editors. *Yogratnakar: A Complete Treatise on Ayurveda, Nidana Sthana*. Ch. 63, Ver. 196-8. Varanasi: Chowkhamba Vishwabharti Academy; 2010. p. 1027.
8. Murthy KR, editor. *Vagbhata's Ashtanga Hridayam, Uttara Sthana*. 7th ed., Ch. 22, Ver. 110. Varanasi: Chaukhamba Sanskrit Pratishthan; 2010. p. 217.
9. Kumari A, Tiwari P, editors. *Yogratnakar: A Complete Treatise on Ayurveda, Nidana Sthana*. Ch. 63, Ver. 199-200. Varanasi: Chowkhamba Vishwabharti Academy; 2010. p. 1027.
10. Ramchander, Jalwal P, Middha A. Recent advances on *Senna* as a laxative: A comprehensive review. *J Pharmacogn Phytochem* 2017;6:349-53.
11. Das D, Agarwal SK, Chandola HM. Protective effect of *yashtimadhu (Glycyrrhiza glabra)* against side effects of radiation/chemotherapy in head and neck malignancies. *Ayu* 2011;32:196-9.
12. Sankpal J, Takalikar J. Comprehensive review of

- tankana. *J Ayurveda Integr Med Sci* 2018;3:110-5.
13. Tripathi I, editor. *Chakradatta of Chakrapannidatta*. Ch. 56, Ver. 43-7. Varanasi: Chaukhamba Sanskrit Bhawan; 2010.
 14. Murthy KR, editor. *Sarngadhar Samhita by Sharangdhara, Uttar Khanda*. Ch. 11, Ver. 10. Varanasi: Chaukhamba Orientalia; 2016. p. 234.
 15. Ranasinghe S, Ediriweera S. A pharmacological appraisal of dhanyamla. *Int Ayurvedic Med J* 2015;3:1-20.
 16. Shashtri R, editor. *The Charaka Samhita of Agnivesh, Sutra Sthana*. Ch. 5, Ver. 78-9. Varanasi: Chaukhamba Bharti Academy; 2013. p. 127.
 17. Tripathi B, editor. *Caraka Samhita of Agnivesa, Chikitsa Sthana*. Ch. 30, Ver. 249. Varanasi: Chaukhamba Surbharati Prakashana; 2010. p. 1058.
 18. Shashtri RD, editor. *Charaka Samhita, Chikitsa Sthana*. Ch. 26, Ver. 187. Varanasi: Chaukhamba Bharti Academy; 2016. p. 751.

This work is licensed under a Creative Commons Attribution 4.0 International License. The images or other third party material in this article are included in the article's Creative Commons license, unless indicated otherwise in the credit line; if the material is not included under the Creative Commons license, users will need to obtain permission from the license holder to reproduce the material. To view a copy of this license, visit <http://creativecommons.org/licenses/by/4.0/> © Rajagopala M, Dhruv P, Bavalatti N. 2019