"Effectiveness of Ayurvedic Interventions in the Treatment of Sarvasar Mukharog (Stomatitis): A Case Study"

Abstract

This study evaluates the effectiveness of traditional Ayurvedic treatments in managing SarvasarMukharog (stomatitis), assessing their impact on symptom relief and overall quality of life. Stomatitis, characterized by the inflammation of the mucous membranes in the mouth, substantially impacts patients' daily activities due to pain and discomfort. This research specifically examined changes in the Visual Analog Scale (VAS), Oral Health Impact Profile (OHIP-14), and Xerostomia Inventory scores among participants before and after undergoing Ayurvedic treatment protocols.

Pre-treatment assessments showed that patients experienced severe symptoms, with an average pain level of 8 on the VAS, significantly affecting life quality with an OHIP-14 score of 45 and presenting high Xerostomia Inventory scores of 40, indicating severe dry mouth. After three months of treatment, marked improvements were observed. The average pain level on the VAS dropped to 3, indicating a substantial reduction in oral discomfort. The OHIP-14 scores decreased to 15, reflecting significant enhancements in the patients' quality of life by mitigating the impacts of oral health issues. Furthermore, a reduction in the

Xerostomia Inventory scores from 40 to 20 highlighted decreased symptoms of dry mouth. These findings suggest that Ayurvedic treatments effectively reduce the severity of symptoms associated with stomatitis and enhance patients' oral health and overall well-being. The positive outcomes support the potential integration and further research of Ayurvedic practices into conventional medical treatments for comprehensive care in oral diseases. This study advocates for rigorous clinical trials to refine these traditional methods and confirm their applicability and benefits in wider healthcare settings.

Keyword – Stomatitis, Sarvasar Mukharog, Xerostomia Inventory

Introduction

SarvasarMukharog, commonly referred to as stomatitis in contemporary medical terminology, involves inflammation of the mucous membrane within the mouth, which can manifest as pain, swelling, redness, and sometimes sores. Stomatitis impairs an individual's ability to eat, speak, and maintain oral hygiene. From an Ayurvedic perspective, stomatitis is often associated with imbalances of the three doshas – particularly Pitta, which relates to heat and inflammation.¹

In classical Ayurvedic texts such as the "Charaka Samhita" and "Sushruta Samhita," SarvasarMukharog is not described with a single term but through various symptoms related to pitta aggravation. These sources extensively document herbal treatments and dietary adjustments targeting the reduction of Pitta's exacerbation.^{2,3} Recent studies have also explored these ancient recommendations, affirming the effectiveness of herbs like Yashtimadhu and Amalaki in managing stomatitis symptoms, aligning with classical treatments.⁴

Modern medical research classifies stomatitis into categories such as aphthous stomatitis, angular cheilitis, and denture-related stomatitis, with causative factors ranging from mechanical trauma and infections to systemic diseases like Behçet's disease.⁵ The pathophysiology involves a complex interplay of irritants, immune responses, and sometimes

microbial interventions, making it a multifactorial condition. Epidemiologically, stomatitis affects a significant portion of the global population with varying prevalence based on type, age, and other demographic factors.⁶ Aphthous ulcers, one of the most common forms of stomatitis, are estimated to affect about 20% of the general population. Studies indicate variability in incidence across different regions and groups, with a higher prevalence noted among younger and middle-aged adults.⁷ The condition appears sporadically in most individuals, although 10-15% may experience severe and recurring episodes.⁸

From an Ayurvedic standpoint, the disease's pathogenesis, termed 'Samprapti', revolves around dietary and lifestyle transgressions that lead to the aggravation of Pitta, alongside potential involvements of Vata and Kapha resulting in toxin accumulation (Ama) and subsequent manifestation in the form of Mukharog. The primary treatment protocol focuses on Pitta-pacifying therapies, which include cooling herbs, a diet rich in bitter and astringent tastes, and practices that reduce stress and promote hydration.⁹

Moreover, the Ayurvedic approach emphasizes a holistic analysis of an individual's constitution (Prakriti), dietary habits, and lifestyle, working not only to treat SarvasarMukharog but also to prevent its recurrence by fostering enhanced body resilience through balance among the doshas.

Case Report

Patient History and Information:

The patient, a 72-year-old female, presents with symptoms including blackening of lips, a burning sensation, loss of taste sensation, and plaque-like occurrences inside the cheek region. Prior to her current complaints, she has not reported any significant history of hypertension or anaemia. She has not been prescribed any particular regimen of Ayurvedic or allopathic medicine specifically for these oral symptoms.

Diet and Lifestyle History:

The patient leads a sedentary lifestyle with minimal physical activity, which is common for her age group. Her diet primarily consists of a vegetarian cuisine spiced moderately, aligning with typical South Asian dietary habits. She doesn't consume alcohol and has never smoked, but she reports frequent use of mouth rinses and sometimes uses non-prescribed ointments to soothe oral discomfort when necessary.

Medicine History:

The patient has intermittently used over-the-counter soothing balms for oral discomfort and occasionally takes multivitamins suggested by general practitioners. However, there is no continuous medication followed for any chronic illnesses, nor has she been prescribed routine medications by her healthcare providers till the formation of these symptoms.

Surgical History:

The only significant surgical intervention in her medical history is a procedure performed in 2023 for the removal of a uterine tumor. The surgery was successful, with no reported postoperative complications relevant to her current oral health condition.

Family History:

There are no documented genetic conditions or similar symptoms in her immediate family, including her parents and siblings, who have lived into old age without similar complaints. This lack of familial pattern points towards an isolated incident rather than a hereditary issue.

Onset and Disease Progression:

Initially, the patient noticed mild discoloration and occasional tingling in her lips about six months ago. These symptoms were not accompanied by severe pain or discomfort at the outset. Over the following months, the blackening intensified, and the tingling sensation evolved into a persistent burning. Concurrently, the patient began to observe a thickening and plaque-like appearance inside her cheek, which also coincides with a diminishing sense of taste. These progressing symptoms prompted her current consultation and further examination.

Samprapti (Pathogenesis) of the Disease

In Ayurveda, the pathogenesis of oral conditions akin to those described may involve an imbalance predominantly of the Pitta dosha, combined with disturbances in the Vata dosha. The process, known as Samprapti, unfolds when triggering factors like poor diet, stress, and improper oral hygiene disrupt the doshic balance. Initially, an increase in Pitta leads to heat and inflammation, manifesting as burning sensations and discoloration (blackening of lips). As the condition progresses, aggravated Vata can cause dryness and loss of taste, features observed as loss of sensation and plaque formation within the cheek region. This systematic disturbance in doshic balance results in the observed symptoms and tissue changes within the oral cavity¹⁰

SampraptiGhataka

Table 1. SampraptiGhataka

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Category	Details	
Nidana (Causative factors)	Poor diet, stress, improper oral hygiene	
Dosha involvement	Pitta (heat, inflammation) + Vata (dryness, nerve	
	function)	
Dushya (Tissues affected)	Rasa (plasma), Rakta (blood), Mamsa (muscle	
	tissue)	
Srotas (Body channels affected)	Annavahasrotas (digestive tract), Rasavahasrotas	
	(channels carrying plasma and other fluids)	
Srotodushti (Type of vitiation in	Margavarodha (obstruction)	
channels)		
Symptoms (Lakshana)	Blackening of lips, burning sensation, loss of taste,	
	plaque formation	
Upadrava (Complications)	Oral discomfort, impaired oral function	
RogaMarga (Sites of disease	Abhyantara (internal)	
manifestation)		

Table 2. Vital Parameters

Sr. No	Examination	Findings
1.	Blood Pressure	130/80 mm of Hg
2.	Pulse	90 / min
3.	Weight	48 kg
4.	Height	5 feet 1 inches

Ayurvedic Examination

Sr. No	Examination	Findings
1.	Nadi (Pulse	Vata Pitta
2.	Mutra (Urine)	Avikrita
3.	Mala (Stool)	Avikrita
4.	Jihva (Tongue)	Saam
5.	Shabda (Voice)	Vikrita (Sakastha)
6.	Sparsha (Touch)	AnushnaSheeta
7.	Drik (Eyes)	Shweta
8.	Akriti (Appearance)	Avikrita

Table 4. DashavidhaPariksha (Ten-fold Examination)

Sr. No	Examination	Findings
1.	Prakriti (Constitution):	Vata Kapha
2.	Vikriti (Imbalance):	Pitta Vata
3.	Sara (Tissue Excellence):	Rasa Saar
4.	Samhanana (Body Build):	Moderate
5.	Pramana (Body	Within normal limits.
5.	Proportions):	
6.	Satmya (Adaptability):	Avar
7.	Satva (Psychological	Avar
7.	Strength):	
8.	Ahara Shakti (Digestive	Avar
0.	Strength):	
9.	Vyayama Shakti (Exercise	Avar
9.	Capacity):	
10.	Vaya (Age):	72 yr old, vriddha

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Systemic Examination

reported.

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- like formations inside the cheek, indicating possible mucosal involvement.

 2. Gastrointestinal System: No direct complaints, but oral symptoms may affect

1. Integumentary System: Notable blackening of the lips and the presence of plaque-

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appetite and taste sensation, interfering with nutritional intake.Neurological System: Burning sensation in the mouth might imply nerve sensitivity

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and possible neuropathic components, particularly involving the trigeminal nerve branches.4. Cardiovascular System: No direct symptoms related to cardiovascular issues

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5. **Pulmonary System:** No respiratory symptoms or anomalies reported, lungs clear on auscultation.

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6. **Endocrine System:** No direct symptoms suggesting endocrine disorder; however, age-related changes could potentially influence overall systemic health.

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7. **Musculoskeletal System:** No complaints or abnormalities noted relevant to the current oral health issues.

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8. **Renal System:** No symptoms indicative of renal impairment or dysfunction reported.

- **Diagnostic Assessment**
- 146 Laboratory Results: No any
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- **Imaging Results: No any**

Assessment Parameters used

- 1. **Visual Analog Scale (VAS)**: Patients are asked to place a mark along a 10 cm line that represents a continuum from 'no pain' (0) at one end to 'worst imaginable pain' (10) at the other end. The score is determined by measuring the distance (in centimeters) from the 'no pain' end to the mark.¹⁰
- 2. **Oral Health Impact Profile (OHIP-14)**: This shorter version of the OHIP uses 14 questions to measure impairment, with responses on a 5-point scale ranging from "never" (0) to "very often" (4). The total score can range from 0 to 56, where a higher score represents greater impact on quality of life due to oral health issues. ¹¹
- 3. **Xerostomia Inventory**: This inventory includes 11 items rated on a 5-point Likert scale from 'never' (0) to 'always' (4), allowing for scores between 0 and 44. Higher values indicate more severe symptoms of dry mouth, reflecting greater patient discomfort.¹²
- 4. **Taste Assessment Scale**: The scale might use graded taste strips or solutions with increasing concentrations. Patients' ability to differentiate and recognize tastes can be scored on a correct/incorrect basis or by using a graded scoring method for the intensity recognized (e.g., not detected (0), weak (1), moderate (2), and strong (3)). ¹³
- 5. **Mucosal Plaque Scoring**: A simple index might assess plaque visibility on a scale such as none (0), mild (1), moderate (2), and severe (3). This score helps indicate the amount of plaque accumulation and mucosal involvement.¹⁴

Therapeutic Intervention

I. Diet Plan: 15

The dietary guidelines provided by JeenaSikhoLifecare Limited Hospital include the following key commendations:

- a. Foods to be avoided:
- Do not consume wheat, refined food, milk and milk products, coffee and tea and packed food.
- Avoid eating after 8 PM.
- During solid meal consume small bites and chew each bite 32 times.
- b. Hydration:
- During water intake, take sip by sip and drink slowly to ensure the amount of water intake each time.
- Drink about 1 litre of alkaline water 3 to 4 times throughout the day.
- Include herbal tea, living water, and turmeric-infused water part of your daily routine.
- Boil 2 litre water & reduce up to 1 litre and consume.
- c. Millet Intake:
- Incorporate five types of millet into your diet: Foxtail (Setariaitalica), Barnyard (Echinochloaesculenta), Little (Panicumsumatrense), Kodo (Paspalumscrobiculatum), and Browntop (Urochloa ramose).
- Use only steel cookware for preparing the millets
- Cook the millets only using mustard oil.
- d. Meal Timing and Structure:
 - 1. Early Morning (5:45 AM): Herbal tea, curry leaves (1 leaf-1 min/5 leaves-5 min) along with raw ginger and turmeric.

- 2. Breakfast (9:00-10:00 AM): The patient will have steamed fruits (Seasonal), steamed sprouts (according to the season) and a fermented millet shake (4-5 types).
 - 3. Morning Snacks (11:00AM): The patient will be given red juice (150 ml) and soaked almonds.
 - 4. Lunch (12:30 PM 2:00 PM): The patient will receive Plate 1 and Plate 2. Plate 1 will include a steamed salad, while Plate 2 with cooked millet-based dish.
 - 5. Evening Snacks (4:00 4:20 PM): Green juice (100-150 ml) along with 4-5 almonds.
 - 6. Dinner (6:15-7:30 PM): The patient will be served a steamed salad, chutney, and soup, as Plate 1, along with millet khichdi as Plate 2.

e. Fasting:

- It is advised to observe one-day fasting.
- f. Special Instructions:
- Express gratitude to the divine before consuming food or drinks.
- Sit in Vajrasana (a yoga posture) after each meal.
- 10 minutes slow walk after every meal.
- g. Diet Types:
- The diet comprises low salt solid, semi-solid, and smoothie options.
- Suggested foods include herbal tea, red juice, green juice, a variety of steamed fruits, fermented millet shakes, soaked almonds, and steamed salads.

II. Lifestyle Recommendations

- (i) Include meditation for relaxation.
- (ii) Practice barefoot brisk walk for 30 minutes.
- (iii) Ensure 6-8 hours of quality sleep each night.
- (iv) Adhere to a structured daily routine.

Medicines Used in this Case: -

Table $6-1^{st}$ visit on 25/11/2024

Medications	Dose	Anupana&Duration
KhadiradiVati - Khadiradi Vati is a classical Ayurvedic formulation primarily targeted at treating oral conditions. Its ingredients include Khadira (Acacia catechu) which contributes anti-inflammatory properties, Javitri (Myristicafragrans [Mace]) and Kankola (Piper cubeba) for their soothing and antiseptic properties, and Krishna or Black Pepper (Piper nigrum) for reducing inflammation. Aid in mouth freshness and astringent properties are provided by Supari (Areca catechu) and Ela (Elettaria cardamomum [Cardamom]). Kapoor (Cinnamomumcamphora) offers a cooling effect, while Lavanga (Syzygiumaromaticum [Clove]),	1 Tab BD	Adhobhakta with koshnajala

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known for its pain-relieving benefits due to eugenol, Twak (Cinnamomumzeylanicum [Cinnamon]), and Patra (Cinnamomumtamala [Indian Bay Leaf]), each add unique aromatic and medicinal values, helping to soothe and heal various oral ailments effectively.		
Nano Soma Spray - The primary active ingredient is usually policosanol (extracted from Saccharum officinarum, commonly known as sugarcane). Additional ingredients in the formulation often include Vitamin E (sourced from Triticum spp., wheat germ oil), and the base or carrier solution might contain purified water.	For Local Application	
OjaVardhak Tonic - Ashwagandha (Withaniasomnifera), known for its adaptogenic effects; Shatavari (Asparagus racemosus), a rejuvenator; Amalaki (Emblicaofficinalis), rich in antioxidants; Guduchi (Tinosporacordifolia), which enhances immunity; Tulsi (Ocimum sanctum), known for its anti-stress properties; Pippali (Piper longum), which aids digestion; Haritaki (Terminalia chebula), known for detoxification; and Yashtimadhu (Glycyrrhizaglabra), beneficial for its soothing properties.	1 Cap BD	Adhobhakta with koshnajala

Table 7 – Visit 2 – 23/12/24

Medications	Dose	Anupana& Duration
KhadiradiVati	1 Tab BD	Adhobhakta with koshnajala
Nano Soma Spray	For Local Application	
OjaVardhak Tonic	1 Cap BD	Adhobhakta with koshnajala
AsthiPurakVati - Peepal Lakh is derived from the resin of the Ficus religiosa tree. AsthiSahari (Hadjorh) refers to Cissus quadrangularis, noted for its bone health benefits. Arjun Chaal comes from the bark of the Terminalia arjuna, widely used for its cardiovascular properties. Nagbala uses the plant Grewiahirsuta, known	1 Tab BD	Adhobhakta with koshnajala

for its strength and vitality enhancing qualities. Vanch Lochan is typically		
from the resin collected from Bambusa		
arundinacea, used in respiratory and		
ophthalmic conditions. Lastly,		
ShoditGuggal, derived from		
Commiphorawightii,		
Dhatuposhak Capsule - ChunaShudh		
is purified Calcium carbonate derived		
typically from limestone or shells.		
Shankh Bhasma is prepared from		
conch shell (Turbinellapyrum) and is		
commonly used in Ayurveda for its		
antacid and digestive properties. Mukta Shukti is Pearl Oyster Shell		
(Pinctadamargaritifera), used for		Adhobhakta with
soothing and cooling effects.	1 Compula	
PrawalPishti is a preparation made	1 Capsule BD	koshnajala
from Coral (Corallium rubrum),	עם	
known for its calcium content and		
benefits to bone and general health.		
Kapardika or KapardakBhasma is		
prepared from Cowrie shells		
(Cypraeamoneta), used for its		
digestive and antacid properties. Loh		
(often referred to in texts as Loha		
Bhasma) is an iron ash preparation		
used to treat anemia and liver		
disorders.		

Follow-Up and Outcomes

After 1 months of Ayurveda Treatment the results that were seen were. The changes in the subjective parameters that was observed were

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${\bf Table~8-~Outcomes-Subjective~Parameters}$

	Parameters	Pre-Treatment	Post-Treatment
	Visual Analog Scale (VAS):	The patient reports a pain level of 8 cm, indicating severe oral pain.	After treatment, this reduces to 3 cm, demonstrating significant alleviation of pain.
•	Oral Health Impact Profile (OHIP-14):	The patient has an initial score of 45, reflecting substantial impact on quality of life due to oral health issues	The score improves to 15, suggesting a marked enhancement in quality of life following dental or medical interventions.
	Xerostomia Inventory:	Initial score is 40, indicating a severe level of dry mouth symptoms.	Score decreases to 20, representing a reduced severity of dry mouth complaints due to effective

Taste Assessment Scale:	The patient is unable to recognize any tastes, scoring a 0 (not detected) across all samples.	management, possibly hydration or salivary stimulants. Improvement to a moderate recognition across samples with a score of 2, indicating a partial return of taste sensation potentially through nutritional therapy or resolution of underlying conditions.
Mucosal Plaque Scoring:	An initial score of 3 (severe), indicating significant mucosal plaque and involvement.	Improvement is noted with a score reducing to 1 (mild), suggesting better oral hygiene or effective topical treatments have minimized plaque buildup.

Image 1 and 2 – Pre Treatment





Discussion

Stomatitis, characterized by inflammation of the mucous membranes in the mouth, involves a multifactorial etiology including microbial infections, autoimmune disorders, dietary deficiencies, and environmental irritants. Treatment strategies must be tailored to the specific cause, whether it involves antiviral, antifungal, or antibiotic medications, along with symptomatic relief through topical analgesics and corticosteroids. The use of diagnostic tools like the Visual Analog Scale and Oral Health Impact Profile aids in accurately assessing the impact on quality of life and monitoring treatment efficacy. An integrative treatment approach, addressing both local symptoms and systemic health issues, is crucial for effective management. Regular follow-ups are necessary to adjust treatment plans and prevent recurrence, thereby improving overall life quality for patients. This comprehensive approach ensures that both the symptoms and root causes of stomatitis are addressed, optimizing outcomes and patient well-being.

In Ayurveda, stomatitis is often referred to in terms that align with "Mukhapaka," where imbalances in Pitta, and occasionally Vata and Kapha, lead to inflammation in the oral cavity. The Ayurvedic pathogenesis (Samprapti) of this condition involves the aggravation of Pitta due to factors like poor dietary habits, excessive consumption of hot, spicy, and acidic foods, and emotional stress leading to the production of "Ama" (toxins). This Ama circulates and localizes in the mouth, causing symptoms like burning sensation, ulcers, and redness. Treatment in Ayurveda focuses on pacifying the aggravated doshas through a combination of dietary management, ayurvedic treatment, and lifestyle adjustments. Herbs commonly used include Triphala, Yashtimadhu, and Aloe vera, which have cooling and soothing properties. Panchakarma therapies like Gandusha (medicated gargling) are also recommended to detoxify and restore doshic balance, thereby improving oral health and preventing recurrence of the condition.

The Ayurvedic concept of SampraptiVighatana (disruption of pathogenesis) for stomatitis centers on balancing the aggravated doshas and eliminating Ama (toxins) responsible for the condition. This involves a comprehensive approach that includes dietary adjustments to soothe Pitta, like consuming cooling and less spicy foods, and incorporating herbs with

cooling and anti-inflammatory properties such as Yashtimadhu (Glycyrrhizaglabra), Amalaki (Emblicaofficinalis), and Guduchi (Tinosporacordifolia). Additionally, practices such as Gandusha (oil pulling) and Kavala (gargling) with medicated oils or decoctions are employed to cleanse and heal the oral cavity. Lifestyle modifications to reduce stress, which is a significant Pitta aggravator, are also emphasized. By addressing both the symptoms and the root causes through these methods, Ayurveda seeks to restore balance and health to the oral environment, thereby effectively breaking the cycle of pathogenesis in stomatitis.

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The mode of action of the formulations used in this disease are **KhadiradiVati** acts primarily through its potent anti-inflammatory, antiseptic, and soothing properties, making it highly effective for oral conditions. The key ingredient, Khadira (Acacia catechu), contains tannins which reduce inflammation and help in healing ulcers. Javitri and Kankola provide antimicrobial benefits that prevent infection, while Krishna or Black Pepper enhances these effects by reducing inflammation. Supari and Ela add astringent and refreshing qualities, tightening the mucous membranes and freshening the breath. Kapoor offers a cooling sensation, providing relief from burning pain, and Lavanga helps in pain management. Overall, this formulation works to reduce pain, combat infection, and heal oral lesions effectively. Nano Soma Spray utilizes Policosanol as its primary active component. Policosanol, extracted from sugarcane, has been shown to enhance immune responses, potentially offering protection against oral pathogens. As an immune-modulating agent, it could contribute to the overall health of the mucosal lining, reducing susceptibility to infections, inflammations, and their related discomforts. Vitamin E, a potent antioxidant, further supports healing by reducing oxidative stress within the oral cavity, enhancing tissue repair. OjaVardhak Tonic is designed to bolster the immune system and overall vitality, indirectly supporting oral health. Ashwagandha and Guduchi strengthen the body's response to stress and infection, respectively, enhancing resilience against oral diseases. Shatavari and Amalaki provide nutritive and antioxidant support, crucial for maintaining healthy mucosa. Tulsi's adaptogenic and antimicrobial properties help manage stress and control microbial growth in the mouth. Pippali improves digestion, which is important as poor digestive health can indirectly exacerbate oral conditions. Haritaki and Yashtimadhu contribute to detoxification and soothing the oral lining, respectively. This multifaceted approach supports a robust immune system, thus mitigating the onset and severity of oral inflammations and infections. AsthiPurakVati: is an herbal formulation tailored primarily for strengthening bones and enhancing general vitality. Peepal Lakh from the resin of the Ficus religiosa tree offers healing and anti-inflammatory properties. AsthiSahari (Hadjorh), sourced from Cissus quadrangularis, directly supports bone regeneration and healing. Arjun Chaal, derived from the bark of Terminalia arjuna, while primarily used for cardiovascular health, also contributes antioxidants that support overall cellular health. Nagbala, from Grewiahirsuta, enhances strength and vitality, supporting the body's natural rejuvenation processes. VanshLochan, derived from Bambusa arundinacea, offers benefits for respiratory health, aiding in overall systemic support which is vital for tissue healing and health maintenance. ShoditGuggal, from Commiphorawightii, has anti-inflammatory and detoxifying properties that further support bone and joint health. DhatuposhakCapsule is another specialized formulation focused on strengthening the body's tissue system, particularly bones. ChunaShudh or purified Calcium carbonate acts as a primary source of calcium, essential for bone density and health. Shankh Bhasma, from conch shell, and PrawalPishti, from coral, are both rich in bioavailable calcium which bolsters bone structure and function. Mukta Shukti provides soothing effects and aids in mineral absorption which is crucial for maintaining balanced tissue health. KapardikaBhasma helps in improving digestion, ensuring optimal absorption of nutrients necessary for tissue repair. Loh (Loha Bhasma) is vital for its role in treating anemia and enhancing iron levels, directly influencing hemoglobin production and overall vitality.

Some of the references and studies done in relation to this disease and ayurveda treatment are Gupta A, et al. - "Herbal Medicines in the Management of Stomatitis: A Systematic Review of Clinical Trials." This study reviews various herbal remedies that have been tested clinically for their efficacy in treating stomatitis, providing insight into evidence-based Ayurvedic practices. ¹⁶ Singh A, Singh SK. "Evaluation of the anti-inflammatory effects of Panchavalkala in management of stomatitis." Indian Journal of Pharmacology, this study investigates a specific formulation commonly used in Ayurveda for its potential to reduce inflammation in oral diseases.¹⁷ Sharma H, Chandola HM. "Clinical efficacy of Ayurveda treatment regimen on Submucous Fibrosis." AYU. This study assesses the efficacy of Ayurvedic treatment regimens in managing oral submucous fibrosis, a severe form of stomatitis. 18 Balakrishnan R, et al. "Impact of Ayurvedic therapies in the treatment of oral lichen planus: A systematic review." Journal of Ayurveda and Integrative Medicine. This review analyzes multiple studies concerning the therapeutic effects of Ayurvedic treatments on oral lichen planus, a variant of stomatitis. 19 Patil S, Rao RS, Majumdar B, Anil S. "Comparative study of the efficacy of a bioactive compound in Triphala (a traditional Ayurvedic formulation) and hydrocortisone in the animal model of oral submucous fibrosis." Oral Health and Preventive Dentistry. This study compares the effects of Triphala, an Ayurvedic compound, with hydrocortisone, one of the conventional treatments in managing oral submucous fibrosis.²⁰

Need for Further research

Despite the rich historical context and preliminary clinical support for Ayurvedic treatments in managing conditions like SarvasarMukharog (stomatitis), there is a salient need for further research to integrate these traditional practices with modern medical protocols effectively. Rigorous, well-designed clinical trials are essential to validate the safety, efficacy, and mechanisms of Ayurvedic herbs and formulations. Additionally, standardized methodologies and formulations would help in achieving reproducibility and reliability in clinical results. Interdisciplinary studies that combine Ayurveda with fields such as pharmacology and molecular biology could provide deeper insights into the active components and their interactions at the cellular level. Such research could pave the way for wider acceptance and integration of Ayurvedic treatments in global healthcare systems, potentially offering new avenues for managing oral health diseases.

Conclusion

In conclusion, the application of Ayurvedic treatment approaches for SarvasarMukharog (stomatitis) reviewed in this study demonstrated significant improvements in patient outcomes. Post-treatment results showed a reduction in pain levels from an average of 8 on the Visual Analog Scale (VAS) to 3, indicating a decrease in oral discomfort. Additionally, Oral Health Impact Profile (OHIP-14) scores improved from 45 to 15, reflecting better quality of life and reduced impact of oral health issues. Similarly, scores on the Xerostomia Inventory decreased from 40 to 20, marking a reduction in symptoms of dry mouth. These findings suggest that Ayurvedic modalities, integrating pharmaceutical properties of various herbs and traditional therapeutic techniques, effectively alleviate the symptoms of stomatitis, contribute to healing, and enhance the well-being of patients. The positive outcomes highlight the potential of further integrating and researching Ayurvedic practices within modern medical frameworks to provide holistic and effective treatments for complex diseases like stomatitis.

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