

CLINICAL EVALUATION OF YASTHIMADHU GHRITA PRATISARANA IN THE MANAGEMENT OF ORAL SUBMUCOUS FIBROSIS (OSMF): A CASE REPORT

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ABSTRACT

Background: Oral Submucous Fibrosis (OSMF) is a chronic, progressive, debilitating, and potentially malignant disorder of the oral cavity characterized by juxta-epithelial inflammatory changes followed by progressive fibrosis of the lamina propria and deeper connective tissues. The disease results in reduced mouth opening, burning sensation, intolerance to spicy food, impaired mastication, and deterioration in the patient's quality of life. Habitual chewing of areca nut and commercially available preparations such as gutkha and pan masala remains the principal etiological factor, particularly in the Indian subcontinent.^[1-3] Despite numerous available treatment modalities, long-term therapeutic outcomes remain inconsistent, and recurrence is common. Ayurveda emphasizes disease management through correction of the underlying pathological process rather than symptomatic relief alone.

Among the local therapeutic procedures described in Ayurvedic classics, *Pratisarana* is considered an effective treatment for diseases affecting the oral cavity. *Yasthimadhu Ghrita*, owing to its *Ropana* (healing), *Shothahara* (anti-inflammatory), *Vedanasthapana* (analgesic), *Rasayana* (rejuvenative), and *Varnya* properties, may play an important role in improving the clinical manifestations of OSMF.^[2,9] **Case Presentation:** A 25-year-old male presented to the Outpatient Department of Shalaky Tantra with complaints of progressive reduction in mouth

opening, burning sensation during consumption of spicy food, oral mucosal stiffness, and recurrent oral ulceration. Clinical examination revealed blanching of the bilateral buccal mucosa with palpable fibrous bands and an initial inter-incisal distance of 17 mm. The patient underwent *Kaya Shuddhi* using *Eranda Bhrishta Haritaki Churna* (10 g once daily for five days) followed by *Yasthimadhu Ghrita Pratisarana* for six weeks. **Results:** After completion of therapy, the inter-incisal distance improved from 17 mm to 22 mm, representing a clinically meaningful increase in mouth opening. Burning sensation reduced remarkably, oral mucosal colour changed from blanched to healthy pinkish appearance, and no recurrence of oral ulcers was observed during the treatment period. No adverse drug reactions or treatment-related complications were reported. **Conclusion:** This case demonstrates that *Yasthimadhu Ghrita Pratisarana*, administered following *Kaya Shuddhi*, may offer beneficial clinical outcomes in the management of Oral Submucous Fibrosis. The observed improvements suggest that this Ayurvedic therapeutic approach has potential as a safe and effective supportive treatment. Nevertheless, larger controlled clinical studies are required to establish its efficacy and long-term therapeutic benefits.

KEYWORDS: Oral Submucous Fibrosis, OSMF, Yasthimadhu Ghrita, Pratisarana, Ayurveda, Mukharoga, Case Report.

INTRODUCTION

Oral Submucous Fibrosis (OSMF) is a chronic, progressive, potentially malignant disorder of the oral cavity that primarily affects the oral mucosa and submucosal connective tissues. It is characterized by progressive fibrosis of the oral mucosa, resulting in stiffness, reduced elasticity, burning sensation, blanching, and gradual restriction in mouth opening. As the disease advances, patients experience difficulty in mastication, swallowing, speech, and maintenance of oral hygiene, ultimately leading to considerable impairment in nutritional status and quality of life. OSMF is recognized as one of the most common oral potentially malignant disorders in South and Southeast Asia, particularly in India, where the widespread consumption of areca nut, gutkha, pan masala, and other smokeless tobacco products has contributed significantly to its increasing prevalence.^[1,3,5,6,8]

The pathogenesis of OSMF is complex and multifactorial. Chronic exposure to areca nut alkaloids stimulates fibroblast proliferation and enhances collagen synthesis while simultaneously inhibiting collagen degradation. This imbalance results in excessive deposition of collagen fibers within the submucosal tissues, causing progressive fibrosis and

reduced tissue elasticity. In addition to areca nut, nutritional deficiencies, oxidative stress, genetic susceptibility, immunological factors, and chronic local irritation have also been implicated in disease progression. The irreversible nature of fibrosis and the documented malignant transformation rate of approximately 7–13% make OSMF a significant public health concern requiring timely diagnosis and effective management.^[4,8]

Conventional management of OSMF includes cessation of harmful habits, nutritional supplementation, intralesional corticosteroids, hyaluronidase, placental extracts, antioxidants, physiotherapy, and surgical intervention in advanced cases. Although these treatment modalities may provide temporary symptomatic relief, none consistently reverse the fibrotic process, and recurrence is frequently encountered. Surgical procedures are associated with postoperative morbidity, and pharmacological therapies may require repeated administration with variable outcomes. Therefore, there remains a need for safe, effective, and economical therapeutic options capable of improving both symptoms and tissue health.^[2,9]

Ayurveda, the traditional system of Indian medicine, offers a holistic approach to disease management by addressing the underlying imbalance of *Dosha*, *Dhatu*, and *Srotas*. Although Oral Submucous Fibrosis is not explicitly described as an individual disease entity in the classical Ayurvedic texts, its clinical features closely resemble conditions included under *Sarvasara Mukharoga*. The disease can be understood as a manifestation of *Vata-Pitta-Kapha* predominance, affecting the *Mamsa Dhatu*, *Rakta Dhatu*, and *Mukha Pradesh*. Continuous exposure to incompatible dietary and lifestyle factors (*Nidana Sevana*) leads to vitiation of *Doshas*, impaired tissue metabolism, and gradual development of fibrosis, dryness, and restriction of movement.^[11,16]

The therapeutic principles described in Ayurveda emphasize *Nidana Parivarjana* (elimination of causative factors), *Shodhana Chikitsa* (purification therapy), and *Shamana Chikitsa* (pacification therapy), followed by local measures to restore tissue integrity. *Kaya Shuddhi* serves as a preparatory measure by facilitating the elimination of accumulated *Doshas* and improving the body's responsiveness to subsequent therapy. After purification, local therapeutic procedures are employed to act directly on the affected tissues.^[11-13,17]

Among these procedures, *Pratisarana* is a well-recognized local therapeutic technique described in the management of diseases of the oral cavity. The procedure involves gentle application and massage of medicated formulations over the affected mucosal surfaces,

facilitating direct drug absorption, improving local circulation, reducing inflammation, and promoting tissue healing. Because the drug is applied directly to the diseased tissue, higher local bioavailability may be achieved while minimizing systemic adverse effects.^[12,28,33]

Yasthimadhu (*Glycyrrhiza glabra* Linn.) occupies a distinguished place in Ayurvedic therapeutics owing to its wide range of pharmacological actions. Classical Ayurvedic texts describe *Yasthimadhu* as possessing *Madhura Rasa*, *Guru-Snigdha Guna*, *Sheeta Virya*, and *Madhura Vipaka*, making it particularly effective in pacifying *Vata* and *Pitta Dosha* while promoting tissue nourishment and healing. It is classified as a *Rasayana*, *Varnya*, *Sandhaniya*, and *Vranaropana* drug.^[12,13] Modern pharmacological investigations have demonstrated that *Glycyrrhiza glabra* contains glycyrrhizin, glycyrrhetic acid, liquiritin, glabridin, and various flavonoids, which exhibit anti-inflammatory, antioxidant, immunomodulatory, antimicrobial, mucoprotective, and wound-healing properties. These pharmacological activities may contribute to reduction of chronic inflammation, prevention of oxidative tissue injury, enhancement of epithelial regeneration, and improvement in connective tissue repair.^[14,15,19-25]

The use of *Ghrita* as the pharmaceutical base further enhances the therapeutic value of the formulation. According to Ayurvedic pharmaceutics, *Ghrita* possesses *Samskara Anuvartana* and *Yogavahi* properties, facilitating deeper tissue penetration and improved delivery of active phytoconstituents. Owing to its unctuous nature, *Ghrita* also provides lubrication to the fibrotic oral mucosa, thereby reducing dryness and improving tissue flexibility.^[26,27]

Although several Ayurvedic formulations have been evaluated for the management of OSMF, scientific evidence regarding the effectiveness of *Yasthimadhu Ghrita Pratisarana* remains limited. Carefully documented case reports provide valuable preliminary clinical evidence and may stimulate further observational studies and randomized controlled trials.^[29,31]

Therefore, the present case report was undertaken to evaluate the clinical response of a patient with Oral Submucous Fibrosis managed with *Kaya Shuddhi* followed by *Yasthimadhu Ghrita Pratisarana*, with emphasis on changes in mouth opening, burning sensation, oral mucosal appearance, and overall clinical improvement.

CASE PRESENTATION

A 25-year-old male presented to the Outpatient Department (OPD) of the Department of Shalakya Tantra, Glocal College of Ayurvedic Medical Sciences and Research Centre, Saharanpur, Uttar Pradesh, with complaints of persistent burning sensation in the oral cavity while consuming spicy food, progressive reduction in mouth opening, stiffness of the oral mucosa, and occasional recurrent oral ulceration for the past one year. The symptoms had gradually increased in severity, affecting his ability to consume solid food and perform routine oral activities comfortably.

The patient had a significant history of gutkha and areca nut chewing for approximately ten years, with a frequency of 4–5 packets per day. Initially, the habit was occasional but gradually became habitual. He denied any history of cigarette smoking or alcohol consumption. Despite repeated attempts, he was unable to discontinue the habit due to dependence.

The patient had previously received symptomatic treatment from local practitioners, including multivitamins and topical oral preparations, which provided only temporary relief. No previous Ayurvedic treatment or surgical intervention had been undertaken.

There was no history of diabetes mellitus, hypertension, tuberculosis, thyroid disorders, autoimmune disease, or any major systemic illness. Family history was non-contributory.

The patient expressed anxiety regarding the progressive inability to open his mouth and difficulty in consuming normal food. He also reported fear that the disease might progress to oral cancer, as he had been informed that OSMF is a potentially malignant disorder.

Clinical Findings

General Examination

The patient was moderately built and well nourished. General physical examination revealed no significant abnormalities.

Parameter	Observation
Age	25 years
Gender	Male
Height	170 cm
Weight	65 kg
Pulse Rate	76/min

Blood Pressure	120/80 mmHg
Respiratory Rate	18/min
Temperature	Afebrile

Systemic examination of the cardiovascular, respiratory, abdominal, and central nervous systems was within normal physiological limits.

Local Examination

Extra oral examination revealed no facial asymmetry or cervical lymphadenopathy.

Intra oral examination demonstrated the following findings:

- Diffuse blanching involving bilateral buccal mucosa.
- Loss of normal oral mucosal elasticity.
- Palpable vertical fibrous bands over bilateral buccal mucosa.
- Mild restriction of tongue movements.
- Reduced cheek flexibility.
- Oral mucosa appeared dry and inelastic.
- No active bleeding.
- Occasional healed ulcerative lesions.
- Difficulty in opening the mouth.

The Inter-Incisal Distance (IID) measured with a calibrated Vernier caliper was 17 mm, indicating severe restriction of mouth opening.

Burning sensation was severe during consumption of spicy food and acidic beverages, significantly affecting the patient's dietary habits.

History of Addiction

The patient admitted to chewing commercially available gutkha preparations continuously for approximately six years.

The habit was characterized by:

- Frequency: 4–5 packets/day
- Duration: Approximately 10 years
- Site of placement: Bilateral buccal vestibule
- Average retention time: 10–15 minutes

The patient was strickly instructed to discontinue the habit immediately before initiation of treatment.

DIAGNOSTIC ASSESSMENT

Modern Diagnosis

- **Oral Submucous Fibrosis (OSMF)**

The diagnosis was based on:

- History of prolonged areca nut chewing.
- Progressive trismus.
- Burning sensation.
- Blanching of oral mucosa.
- Palpable fibrous bands.
- Reduced cheek flexibility.

Based on clinical presentation, the patient was categorized as Stage III Oral Submucous Fibrosis.^[10]

Ayurvedic Diagnosis

Although Oral Submucous Fibrosis has not been specifically described in Ayurvedic classics, its clinical presentation resembles *Sarvasara Mukharoga* with predominance of *Vata-Pitta-Kapha Dosha* involving *Mamsa, Rakta, and Rasa Dhatu*.^[16]

Continuous consumption of irritant substances such as gutkha acts as *Nidana*, producing *Agnimandya*, *Ama* formation, and *Dosha Prakopa*, ultimately resulting in *Dosha-Dushya Sammurchana* at the level of oral mucosa.

The resulting pathological changes include:

- *Kapha* → tissue thickening and fibrosis.
- *Vata* → dryness, restricted movement, and stiffness.
- *Pitta & Rakta* involvement → burning sensation.
- *Mamsa Dhatu Dushti* → fibrous band formation.

Hence, treatment was planned according to the principles of *Shodhana* followed by *Sthanika Chikitsa*.^[11-13,16,33]

Therapeutic Intervention

The treatment protocol was planned in two sequential phases.

Phase I – Kaya Shuddhi

Initially, *Kaya Shuddhi* was performed with the objective of eliminating accumulated *Doshas*, correcting *Agni*, and preparing the patient for local therapy.^[11,17]

The patient received:

- **Drug:** *Erand Bhrishta Haritaki Churna*
- **Dose:** 10 g
- **Route:** Oral
- **Vehicle:** Lukewarm water
- **Time:** Bedtime
- **Duration:** Five consecutive days

The patient tolerated the purification therapy well without any adverse events.

Phase II – Yasthimadhu Ghrita Pratisarana

Following completion of *Kaya Shuddhi*, *Pratisarana* was initiated.

- **Drug:** *Yasthimadhu Ghrita*
- **Method of Administration:** The affected oral mucosa was cleaned with sterile gauze before application. Approximately 3–5 g of *Yasthimadhu Ghrita* was gently applied over the fibrotic bands of the buccal mucosa using a sterile gloved index finger.
- Gentle massage was performed in a circular motion for approximately 8–10 minutes, ensuring adequate contact of the medicated ghrita with the affected tissues.
- The patient was instructed not to rinse the mouth or consume food or water for at least 30 minutes following the procedure to facilitate optimal absorption of the medicament.
- The treatment was continued twice daily for six consecutive weeks.

Dietary and Lifestyle Modifications

The patient received comprehensive counselling regarding habit cessation and dietary modifications.

He was advised to:

- Completely discontinue gutkha and areca nut chewing.

- Avoid tobacco in any form.
- Avoid spicy, acidic, and excessively hot food.
- Consume a soft, nutritious diet rich in proteins and antioxidants.
- Maintain proper oral hygiene.
- Perform mouth-opening exercises twice daily.
- Maintain adequate hydration.

The patient demonstrated good compliance throughout the treatment period.

Timeline of the Case

Timeline	Clinical Event
Day 1	Registration, clinical examination, diagnosis
Day 1–5	<i>Kaya Shuddhi</i> with <i>Erand Bhrishta Haritaki Churna</i> (10 g daily)
Day 6	Initiation of <i>Yasthimadhu Ghrita Pratisarana</i>
Week 2	Burning sensation markedly reduced
Week 4	Improvement in mucosal colour and oral flexibility
Week 6	IID increased from 17 mm to 22 mm; significant clinical improvement observed

Outcome and Follow-up

The patient was reviewed periodically throughout the treatment period to evaluate the clinical response to therapy. Assessment was performed using objective and subjective clinical parameters, including inter-incisal distance (IID), burning sensation, oral mucosal appearance, presence of oral ulceration, and functional improvement in mastication.

The patient tolerated the treatment well and remained compliant with the prescribed medications, dietary restrictions, and habit cessation advice. No adverse drug reactions, allergic manifestations, or treatment-related complications were observed during the six-week treatment period.

Clinical improvement became noticeable during the second week of therapy. The patient reported a gradual reduction in burning sensation while consuming spicy foods and improvement in oral comfort. By the fourth week, oral mucosal blanching had reduced considerably, and the patient experienced improved flexibility of the buccal mucosa. At the completion of six weeks, a significant improvement in mouth opening was observed, accompanied by restoration of normal mucosal colour and absence of recurrent oral ulcers.

The patient also reported improvement in chewing ability, speech comfort, and overall quality of life. Compliance with discontinuation of gutkha was maintained throughout the treatment period.

ASSESSMENT CRITERIA

- **Primary Outcome Measures:** Inter-incisal Distance (IID), Burning sensation
- **Secondary Outcome Measures:** Oral mucosal colour, Presence of fibrous bands, Oral ulceration, Functional improvement in mastication, Patient satisfaction, Adverse drug reactions

CLINICAL OUTCOME

Clinical Parameter	Before Treatment	After 6 Weeks
Mouth opening (IID)	17 mm	22 mm
Burning sensation	Severe	Markedly reduced
Oral mucosal colour	Diffuse blanching	Healthy pinkish appearance
Oral ulceration	Occasional recurrence	No recurrence observed
Oral mucosal flexibility	Poor	Significantly improved
Mastication	Difficult	Comfortable
Adverse drug reaction	Nil	Nil

DISCUSSION

Oral Submucous Fibrosis is a chronic, progressive, potentially malignant disorder characterized by excessive collagen deposition within the submucosal tissues, resulting in progressive fibrosis, reduced vascularity, loss of tissue elasticity, and restricted mouth opening. The disease has emerged as a major public health concern in the Indian subcontinent because of the increasing consumption of areca nut-containing products among younger individuals.

The principal pathological event in OSMF is an imbalance between collagen synthesis and degradation. Areca nut alkaloids stimulate fibroblast proliferation and enhance collagen production while simultaneously reducing collagen breakdown through inhibition of collagenase activity. Progressive accumulation of collagen fibres results in fibrosis of the oral mucosa, leading to blanching, stiffness, burning sensation, and trismus. Chronic inflammation and oxidative stress further aggravate tissue injury and increase the risk of malignant transformation.

From an Ayurvedic perspective, although OSMF has not been described as a separate disease entity, its clinical manifestations can be correlated with *Sarvasara Mukharoga*, involving

predominance of *Vata-Pitta* and *Kapha Dosha*. Long-term exposure to incompatible dietary habits and continuous irritation of the oral mucosa produce *Dosha-Dushya Sammurchana*, affecting *Rasa*, *Rakta*, and *Mamsa Dhatu*. Progressive tissue fibrosis may be understood as *Kapha*-induced *Srotorodha* (obstruction of channels), while restricted mouth opening and mucosal dryness represent manifestations of aggravated *Vata Dosha*. Burning sensation reflects the associated involvement of *Rakta* and *Pitta*.

Considering this pathogenesis, treatment was designed according to classical Ayurvedic principles by first eliminating aggravated *Doshas* through *Kaya Shuddhi*, followed by local therapy aimed at restoring tissue integrity. Administration of *Eranda Bhrishta Haritaki Churna* served as a mild purification measure. Haritaki is described in Ayurvedic classics as *Anulomana*, *Rasayana*, and *Tridosahara*, while *Eranda* supports bowel cleansing and *Vata* & *Pitta* pacification. Purification prior to local therapy may improve metabolic function (*Agni*), reduce accumulated *Doshas*, and create a favourable internal environment for tissue healing.^[11,14,15,17]

Following purification, *Yasthimadhu Ghrita Pratisarana* was administered as the primary local intervention. *Pratisarana* is one of the local therapeutic procedures described for diseases of the oral cavity, in which a medicated preparation is gently rubbed over the affected mucosal surface. The mechanical action of massage may improve local blood circulation and facilitate penetration of the medicament into superficial tissues. Direct local application allows sustained contact between the formulation and diseased mucosa, which may enhance therapeutic efficacy.^[12,28,33]

Yasthimadhu (*Glycyrrhiza glabra* Linn.) is widely recognized in Ayurveda as a *Rasayana*, *Vranaropana*, *Sandhaniya*, and *Varnya* drug. Classical texts attribute *Madhura Rasa*, *Guru-Snigdha Guna*, *Sheeta Virya*, and *Madhura Vipaka* to *Yasthimadhu*, making it especially useful in disorders associated with tissue damage, inflammation, and dryness. Modern pharmacological investigations have demonstrated that glycyrrhizin, glycyrrhetic acid, glabridin, liquiritin, and other flavonoids exhibit anti-inflammatory, antioxidant, antimicrobial, immunomodulatory, and wound-healing activities. These actions may reduce chronic inflammation, limit oxidative stress, promote epithelial regeneration, and support connective tissue repair.^[14,15,19-25]

The *Ghrita* base plays an equally important therapeutic role. According to Ayurvedic pharmaceutics, *Ghrita* possesses *Yogavahi* and *Samskara Anuvartana* properties, facilitating deeper penetration of active constituents while nourishing the affected tissues. Its unctuous nature may improve lubrication of the fibrotic mucosa, reduce dryness, and increase tissue flexibility. These properties collectively provide a plausible explanation for the observed improvement in oral function.^[26,27]

In the present case, treatment resulted in an increase in inter-incisal distance from 17 mm to 23 mm, accompanied by a marked reduction in burning sensation and restoration of a healthier pinkish appearance of the oral mucosa. The absence of recurrent oral ulcers throughout the treatment period further suggests improvement in mucosal integrity and healing. These findings are clinically meaningful because improvement in mouth opening directly influences nutrition, oral hygiene, speech, and quality of life.

The favourable clinical outcome observed in this patient may therefore be attributed to the combined effects of habit cessation, *Kaya Shuddhi*, *Yasthimadhu Ghrita Pratisarana*, dietary modifications, and patient compliance. As a single-patient observation, however, this report cannot establish efficacy or causal relationships. Larger prospective clinical studies with standardized outcome measures, longer follow-up, and appropriate control groups are necessary to validate these preliminary findings.

Strengths of the Present Case

- Simple, economical, and minimally invasive treatment.
- No adverse drug reactions observed.
- Objective improvement in mouth opening.
- Improvement in subjective symptoms and oral function.
- Excellent patient compliance throughout treatment.

LIMITATIONS

- Single-patient case report.
- Short follow-up duration.
- No histopathological assessment after treatment.
- Findings cannot be generalized without controlled clinical studies.

CONCLUSION

Oral Submucous Fibrosis (OSMF) is a chronic, progressive, and potentially malignant disorder that significantly affects oral function and quality of life. The present case demonstrated that a therapeutic protocol comprising *Kaya Shuddhi* with *Erand Bhrishta Haritaki Churna*, followed by *Yasthimadhu Ghrita Pratisarana*, was associated with clinically meaningful improvement in the patient's symptoms. Following six weeks of treatment, the inter-incisal distance increased from 17 mm to 22 mm, burning sensation was markedly reduced, oral mucosal colour improved from diffuse blanching to a healthy pinkish appearance, and no recurrence of oral ulceration was observed.^[1-3,9]

The observed clinical improvement may be explained by the combined effects of purification therapy, local drug delivery, habit cessation, and supportive dietary measures. From an Ayurvedic perspective, the treatment addressed the underlying *Vata-Piita-Kapha* predominance, promoted tissue healing, and restored the normal physiological state of the oral mucosa. Modern pharmacological evidence regarding the anti-inflammatory, antioxidant, and wound-healing properties of *Glycyrrhiza glabra* further supports the biological plausibility of the observed outcome.^[11-15,19-28]

Although this report is limited to a single patient, it highlights the potential role of *Yasthimadhu Ghrita Pratisarana* as a safe, economical, and non-invasive therapeutic option in the management of OSMF. Well-designed randomized controlled trials with larger sample sizes, standardized outcome measures, and long-term follow-up are required to establish its clinical efficacy and therapeutic value.^[29,30]

Learning Points

- Oral Submucous Fibrosis requires early diagnosis and timely intervention to minimize functional impairment and reduce the risk of malignant transformation.^[1,8,9]
- A multidisciplinary approach incorporating habit cessation, nutritional counselling, and appropriate therapy remains essential for successful management.^[2,9,30]
- *Kaya Shuddhi* may serve as a useful preparatory procedure before local Ayurvedic treatment in selected patients.^[11,17]
- *Yasthimadhu Ghrita Pratisarana* may improve mouth opening, reduce burning sensation, and promote healing of the oral mucosa.^[19-28,33]
- This case provides preliminary clinical evidence that supports further scientific evaluation of this therapeutic approach.^[29,31]

DECLARATIONS

- **Patient Perspective:** "Before treatment, I experienced severe burning in my mouth whenever I consumed spicy food, and I had difficulty opening my mouth while eating. After completing the prescribed Ayurvedic treatment, I noticed a gradual reduction in burning sensation and was able to open my mouth more comfortably. Eating became easier, and I did not develop mouth ulcers during the treatment period. I was satisfied with the treatment and motivated to discontinue my gutkha habit."
- **Informed Consent:** Written informed consent was obtained from the patient for publication of the clinical details and accompanying clinical photographs.
- **Ethical Considerations:** As this manuscript describes a single clinical case managed according to routine clinical practice without any experimental intervention, formal Institutional Ethics Committee approval was not required.
- **Declaration of Patient Consent:** The authors certify that they obtained all appropriate patient consent forms. The patient provided consent for the use of clinical information and images for academic and scientific publication.
- **Author Contributions**
 - **Dr. Ankit Sharma:** Conceptualization of the study, clinical diagnosis and patient management, data collection, clinical documentation, manuscript preparation.
 - **Siva Kumar C.S.:** Manuscript review, critical revision, supervision, final approval of the manuscript.
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