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# Case Report

## Oral Submucous Fibrosis -A Case with Successful Management

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### ABSTRACT:

All stages of Oral submucous fibrosis is not easy to manage. It depends upon the immunological factors, host response and patient condition. The standard management of the oral submucous fibrosis includes 1500 IU hyaluronidase, dexamethasone 4mg, with 1ml of local anesthesia generally given as intralesional injections initially 5-6 weeks, maybe extending upto 8 weeks. Some patients may respond and some may not. Immunological factors and host response may play a role in progression of oral submucous fibrosis. Here we present a case on Oral submucous fibrosis of a 22 year old male reported to the hospital with a burning sensation and successfully managed with above mentioned medications and got good results.

**Keywords:** Oral Submucous Fibrosis, Areca Nut, Slacked Lime, Blanching, Hyperbaric Oxygen Therapy

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### INTRODUCTION

The World Health Organization (WHO) defines Oral Submucous Fibrosis (OSMF) as a slowly progressing condition characterized by the production of fibrous bands in the oral mucosa. These bands gradually limit the movement of the mouth, including the tongue.<sup>1</sup> It is a pre-malignant disease caused by chewing betel quid (areca nut, slacked lime, and betel leaf) and prepared foods such as pan masala and gutka, both of which include areca nuts. The habit of chewing areca nut and its commercial preparation is popular in the Indian subcontinent and Southeast Asia, and it has been recognized as one of the most significant risk factors for oral submucous fibrosis (OSMF), a common potentially malignant condition. Currently, the primary treatments for OSMF include physical therapy, hyperbaric oxygen therapy, pharmacological therapy, and surgery.<sup>2</sup> Drug therapy is the most prevalent treatment, and options include steroids, exogenous enzymes, multivitamins and micronutrients, peripheral vasodilators, human placental extracts, and other therapeutic agents. Although several therapies have been recommended for OSMF over the past few dec-

ades, adequate outcomes have not been attained with the majority methods.

### CASE REPORT

A 22-year-old male patient reported to the department of Oral medicine and radiology with a chief complaint of difficulty in mouth opening and burning sensation since 1 year. Patient gave history of gutka chewing since 1 year. On extraoral examination, patient had reduced cheek blowing capacity and restricted mouth opening. On inspection, a solitary ulcer of size approximately 2x2 mm is seen involving the soft palate region 1cm away from hard palate and 1cm in front of oropharynx region and medio laterally 1cm away from midpalatine raphe region to 3cm in front of maxillary tuberosity area. Blanching is evident involving right and left buccal mucosa, upper and lower labial mucosa extending anteroposteriorly from left and right corner of the mouth to retromolar region and superoinferiorly from upper to lower buccal vestibule. Blanching is also evident involving upper and lower labial mucosa, soft palate with normal uvula. On palpation, all inspeitory findings are confirmed on palpation. One vertical band is palpable

on right and left buccal mucosa. Inter incisal mouth opening measuring 25mm. Based on above history and clinical findings it was diagnosed as stage 2 Oral

submucous fibrosis involving right and left buccalmucosa, upper end labial mucosa and soft palate(Figures 1-10).



**Figure 1: Extra oral picture of patient aged 22 years old**



**Figure 2: Reduced cheek blowing capacity both right and left side**



**Figure 3: Showing reduced mouth opening**



**Figure 4: Showing blanching in upper labial mucosa**



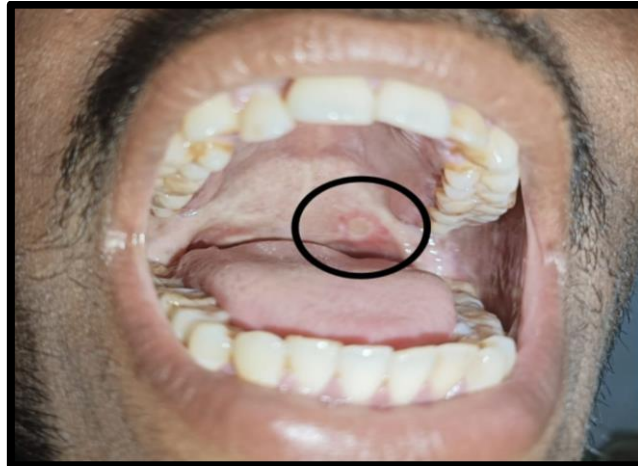
**Figure 5: Showing blanching in lower labial mucosa**



**Figure 6: Showing blanching in right buccal mucosa**



**Figure 7: Showing blanching in left buccalmucosa**



**Figure 8: Showing solitary ulcer in soft palate region**



**Figure 9: Injection of Intralesions**



**Figure 10: Follow-up after 3 weeks**

### DISCUSSION

Oral submucous fibrosis is a chronic condition that causes functional limitations and has the potential to progress to malignancy. In recent years, areca nut chewing has been regarded to be the primary etiological factor in the development of OSMF. Other reasons linked in its etiopathogenesis include nutritional deficiencies, chile consumption, genetic susceptibility, and immunological processes.<sup>3</sup> While clinical and histological evaluations are used to diagnose OSMF, therapeutic options vary greatly in the literature, and no universally accepted effective treatment is currently available. Intralesional corticosteroid injections, which are intended to reduce epithelial lining fibrosis and improve mouth opening via enzymatic activities, are viable therapy options for early-stage patients that do not require surgical intervention.<sup>4</sup> Hyaluronidase is an enzyme that destroys hyaluronic acid, an essential component. An interesting point of our case is patient is relatively younger with no systemic illness. A proper counseling and education on tobacco chewing habits can be taken for the prevention further progression of the disease.

### TREATMENT

On the initial visit of the patient, the patient was advised to quit the habit of gutkha chewing. Intralesional injections in combination of dexamethasone 4mg, hyaluronidase 1500 IU, 1ml of local anesthesia, insulin syringe. Along with ORO-t mouthwash was advised for burning sensation with added antioxidants Cap. Lycoflash was prescribed.

Patient is recalled after one week for follow up. Intralesional injections were given for 3 consecutive weeks and a reduction in burning sensation was noticed by the end of third week with a VAS given by the patient 0. An improvement in the mouth opening capacity and cheek blowing capacity is seen with normal protrusion. Mouth opening measured 30 mm by the end of 3<sup>rd</sup> week with increase in 2 mm after 1<sup>st</sup> week and 1mm mouth opening after 2<sup>nd</sup> and 3<sup>rd</sup> weeks. Patient was asked to continue the regular antioxidant medications. However, intralesional injections are planned for further 3 weeks with patient cooperation.

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