



A REVIEW ON ORAL SUBMUCOUS FIBROSIS

¹Gaurav Solanki* ¹Namita Lohra¹Jaya Lohra²Renu Solanki

¹Jodhpur National University, Jodhpur, Rajasthan, India.

²Lachoo Memorial College of Science and Technology, Rajasthan, India.

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Corresponding Author

GauravSolanki
E mail: drgauravsolanki@yahoo.com

ABSTRACT

Oral submucous fibrosis (OSMF) is a chronic, insidious, disabling disease involving oral mucosa, the oropharynx, and rarely, the larynx. The treatment of patients with OSMF depends on the degree of clinical involvement and timely diagnosis of it. Oral submucous fibrosis (OSMF), a precancerous condition of the oral cavity, has been studied by a number of workers in the field. Though more research is needed to control and remove this problem completely and effectively.

Key words: OSMF, Etiology, Malignancy, Complication etc.

INTRODUCTION

Oral submucous fibrosis is a chronic disease of oral mucosa characterized by inflammation and progressive fibrosis followed by stiffening of healthy mucosa resulting in difficulty in opening the mouth [1]. It is seen today that areca nut quid plays a major role in the etiology. The younger generation is very much addicted to these products especially gutkha and panmasala. The condition is well recognized for its malignant potential. The pathogenesis of the disease is not well established, but the cause of OSMF is believed to be multifactorial. Factors include areca nut chewing, ingestion of chilies, genetic and immunologic processes, nutritional deficiencies and other factors [2]. Iron deficiency anemia, vitamin B complex deficiency, and malnutrition are promoting factors that derange the repair of the inflamed oral mucosa, leading to defective healing and resultant scarring. The rate varies from 0.2-2.3% in males and 1.2-4.57% in females in Indian communities [3].

OSMF is widely prevalent in all age groups and across all socioeconomic strata in India. Generally, patient age ranges from 11-60 years most patients are aged 45-54 years and chew betel nuts 5 times per day. OSMF has a high rate of morbidity because it causes a

progressive inability to open the mouth, resulting in eating and consequent nutritional deficiencies [4]. OSMF also has a significant mortality rate because it can transform into oral cancer, particularly squamous cell carcinoma, at a rate of 7.6%. The disease can be classified clinically into two phases (1) An eruptive phase, characterised by formation of erythema, vesicles, ulceration and a burning sensation in the mouth. (2) The fibrosis induction phase, characterised by the disappearance of the vesicles and healing of the ulcers by fibrosis. The burning sensation decreases and blanching and stiffness of the oral and oropharyngeal mucosa occur. The two phases appear in a cyclic manner.

Symptoms:

Symptoms of OSMF include: Progressive inability to open the mouth (trismus) due to oral fibrosis and scarring, Oral pain and a burning sensation upon consumption of spicy foodstuffs, Increased salivation, Change of gustatory sensation, Hearing loss due to stenosis of the eustachian tubes, Dryness of the mouth, Nasal tonality to the voice, Dysphagia to solids (if the esophagus is involved), Impaired mouth movements etc



[5].

Laboratory Findings:

Laboratory findings includes: Decreased hemoglobin levels, Decreased iron levels, Decreased protein levels, Increased erythrocyte sedimentation rate, Decreased vitamin B complex levels etc [6].

Treatment and Management:

The treatment of patients with OSMF depends on the degree of clinical involvement. If the disease is detected at a very early stage, cessation of the habit is sufficient. Most patients with OSMF present with moderate-to-severe disease. Moderate-to-severe OSMF is irreversible. Medical treatment is symptomatic and aimed at improving mouth movements. In patients with moderate OSMF, weekly submucosalintralesional injections or topical application of steroids may help prevent further damage [7]. The rationale for using placental extract (PE) in patients with OSMF derives from its proposed anti-inflammatory effect hence, preventing or inhibiting

mucosal damage. The use of topical hyaluronidase has been shown to improve symptoms more quickly than steroids alone. The combination of steroids and topical hyaluronidase shows better long-term results [8]. Pentoxifylline and Lycopene are two newer drugs which can be used to control extend of OSMF [9]. Cox in 1996 said that dietary focus should be on reducing exposure to the risk factors, especially the use of betel quid and correcting any nutritional deficiencies, such as iron and vitamin B complex deficiencies [10].

CONCLUSION

Oral submucous fibrosis (OSMF) is a chronic, insidious, disabling disease involving oral mucosa, the oropharynx, and rarely, the larynx. OSMF also has a significant high mortality rate and is widely prevalent in all age groups and across all socioeconomic strata in India. Patient education and public awareness regarding OSMF can be done to improve the condition and prevent future occurrence of OSMF.

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