

AYURVEDIC MANAGEMENT OF ORAL SUB MUCOUS FIBROSIS

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ABSTRACT

Oral sub mucous fibrosis (OSF) is a tropical disease occurring mainly in the India subcontinent. It is characterized by abnormal collagen deposition and progressive fibrosis of the sub mucosal tissue. The prevalence rate of OSF was 6.3% and gutakha chewing is the most common habit was present in OSF patients. Symptoms include ulceration, burning sensation, sub mucous fibrosis, restricted mouth opening and xerostomia. In *Ayurveda* oral sub mucous fibrosis is correlate with *sarvasara mukharoga* (Diseases of Oral cavity) described in *Beuhatrayi*. Betel nut, tobacco, lime, chillies etc act like irritants and can cause damage to oral mucosa. Treatment includes *Pittashamaka*, *Yoga* and *gandush* (oil pulling), *nasya* (Nasal medication), *Pratisarana* (rubbing) etc. Can be done in OSF patients. In present conceptual study we are highlighting the management of oral sub mucous fibrosis.

KEYWORDS: OSF, *sarvasara mukharoga*, Single herbs, compound preparations.**INTRODUCTION**

Oral submucous fibrosis (OSF) on insidious process characterised by juxta-epithelial deposition of fibrous tissue in the oral cavity and pharynx. The condition was first described in India by Joshi in 1953. The disease is widely seen in India, Pakistan, Taiwan, Sri Lanka, Nepal and Thailand due to habit of betel-nut chewing. It is associated with fibro elastic change of the lamina propria and epithelial atrophy that leads to stiffness of the oral mucosa and can cause Burning sensation in the mouth, Dryness of the mouth, Difficulty in opening the mouth (trismus), Difficulty in speaking or swallowing, Thickening and hardening of the oral mucosa Restricted tongue movement. It occur at any age but most commonly seen in young age between 25 to 35 years. Prevalence rate of oral sub mucous fibrosis in India about 0.2% - 0.5% and this rate increased due to use of tobacco products and prepared areca nut. Betel nut chewing is one of the most common cause of oral submucous fibrosis which contains tannins, arecoline, arecaidine, guvacine and guvacoline. It is estimated that around 600 million people globally consume betel nut in various variety of formulation. In *Ayurveda* oral submucous fibrosis is correlate with *sarvasara mukha roga* (Diseases of oral cavity) describe by Acharya Sushruta. Some symptoms like pain in mouth, Swelling and redness of the gums (gingivitis) Ulcers and sores in the mouth, Dry mouth (xerostomia), Excessive salivation (sialorrhoea), Changes in taste sensation etc. Are found in

mukha roga (Diseases of oral cavity) some treatment like *Swedana* (sudation), *gandush* (oil pulling), *kavala* (gargling), *nasya* (nasal medication) etc to cure *mukha roga* (Diseases of oral cavity). This conceptual article will highlight, evaluate, elaborate and discuss about oral submucous fibrosis.

AIMS AND OBJECTIVES

1. To evaluate, elaborate and discuss the oral submucous fibrosis.
2. To evaluate and discuss the etiology and *Ayurvedic* method of oral submucous fibrosis.
3. To evaluate, elaborate and discuss the management of oral submucous fibrosis.

MATERIAL AND METHOD

Material related to Oral submucous fibrosis is collected from *Ayurvedic* text including *Brihatrye* and *Laghutrye* and text book of modern medicine respectively. The index, non-index medical journals has also referred to collect information of relevant topic.

Conceptual study**Definition of oral Submucous fibrosis**

Oral submucous fibrosis (OSMF) is a chronic and progressive disease of oral cavity, which is characterized by the deposition of fibrous tissue in the submucosal layer of the oral cavity. This fibrosis can lead to restricted mouth opening (trismus) and difficulty in

chewing, swallowing, and speaking. Is associated with the habitual use of areca nut and tobacco in various forms. the condition is considered a premalignant lesion, with an increased risk of oral cancer.

Etiology

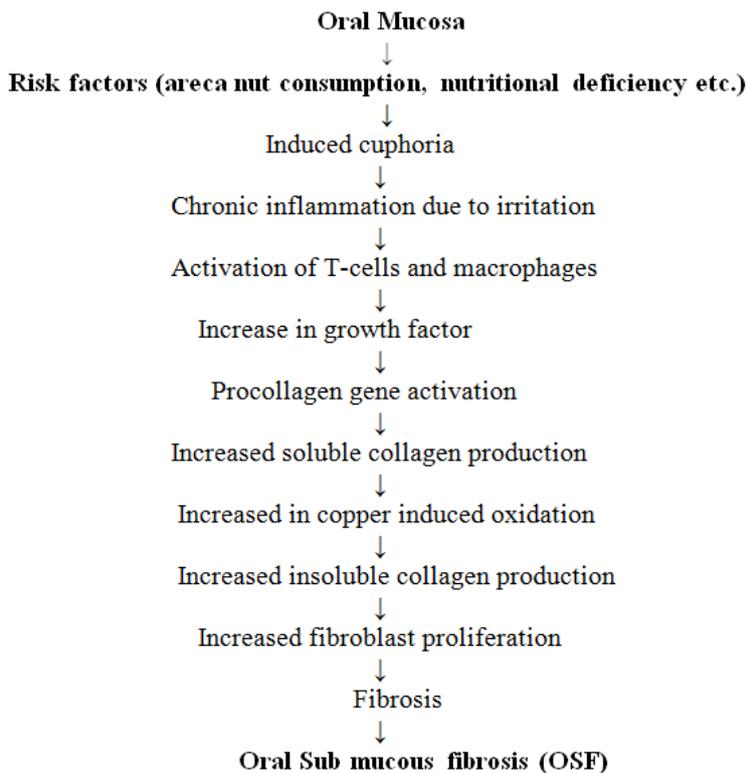
The etiology (causes) of oral submucous fibrosis (OSMF) is multifactorial, and several factors contribute to its development. The most common risk factor for OSMF is the habitual use of areca nut, either alone or in combination with tobacco, in various forms. The following factors are also believed to contribute to the development of OSMF:

1. Genetics: Genetic factors may play a role in the development of OSMF, and it is more common in individuals with a family history of the disease.
2. Nutritional deficiencies: Nutritional deficiencies, such as iron, vitamin B12, and folic acid, may contribute to the development of OSMF.

3. Autoimmunity: Autoimmune disorders, such as Sjogren's syndrome, may increase the risk of developing OSMF.
4. Environmental factors: Environmental factors, such as exposure to industrial pollutants and chronic irritation from sharp teeth, may contribute to the development of OSMF.
5. Viral infections: Viral infections, such as the human papillomavirus (HPV), may play a role in the development of OSMF.

The exact pathogenesis of OSMF is not fully understood, but it is believed to involve the accumulation of collagen fibers, leading to fibrosis and subsequent loss of elasticity of the oral mucosa. The severity of OSMF varies from mild to severe, and early intervention is essential to prevent the disease from progressing to oral cancer.

Pathogenesis:



Clinical feature

- Burning sensation in the mouth
- Dryness of the mouth
- Difficulty in opening the mouth (trismus)
- Restricted tongue movement
- Thickening and hardening of the oral mucosa
- Reduced mouth opening and difficulty in chewing
- Ulcers or lesions in the oral cavity
- Changes in the colour of oral mucosa
- Blistering or vesicles in the mouth

- Fibrous bands or strings in the oral cavity
- Reduced salivary flow
- Teeth and gum problems
- Speech and swallowing difficulties

Management through Ayurveda

Main symptoms of OSF are burning sensation, trismus, difficulty to eat etc. Hence the management have been tried to relieve these symptoms. *Acharya Vagbhat* has stated purification of body and *Shiroshuddhi* (cleaning of

head) as the first line of treatment of *Mukhrogas* (diseases of oral cavity). *Shiroshuddhi* (cleaning of head) removes the obstructions in channels and opens the channels for absorption in supraclavicular region which might have enhanced the effect of all the used drugs and

procedures. external application, gargling and holding oil or decoction in oral cavity are the local therapies mostly used in *Mukharogas* (diseases of oral cavity). Many single and compound drugs are used to treat oral submucous fibrosis. they are-

Single herbs used in oral fibrosis

Sr.no	Herbs	Uses
1.	<i>Haridra</i> (Turmeric)	Antitoxic, antiseptic, hepatoprotective, antifungal, antiviral antipatelet, Antioxidant and anti-inflammatory property. Turmeric showed ant- inflammatory and fibrinolytic action among patients.
2.	<i>Tulsi</i> (<i>Ocimum sanctum</i>)	Analgesic, antioxidant, antistress, antiseptic etc. Tulsi (<i>Ocimum sanctum</i>) helps to improve in mouth opening distance among patients.
3.	Aloe vera	Aloe vera is also known as the plant of immortality. It reducing the symptoms of OSF like burning sensation and increase mouth opening.
4.	<i>Ashwagandha</i> (<i>Withania Somnifera</i>)	Anti-oxidant, anti-inflammatory property etc. Ashwagandha improve patient's immunity.

Compound preparation used in oral fibrosis

Sr.no	Preparations	Uses
1.	<i>Aswagandha arista</i>	Used for stress, neurological disorder, rasayan
2.	<i>Haridradi tail</i>	Used for ulceration, redness and erosion of oral cavity, difficulty in swallowing etc.
3.	<i>Iremedadi tail</i>	Useful in various Mukha roga (diseases of oral cavity) like burning mouth syndrome, pericoronitis, gum abscess etc.
4.	<i>Khadiradi vati</i>	It is used in Ayurveda management of cold, asthma, bronchitis and mainly use for Mukha roga (diseases of oral cavity).

According to Acharya charak Pratisarana (rubbing) with panchlavana churna, Pippalyadi yoga, Kalaka churna, Pitaka churna, Kavala (Gargling) with vata har sidha taila, dugdha, Ikshu ras, ghrita &. According to yog ratnakar Mukh dhavan with Panchpallav kwath, use of Yastimadhu taila.

DISCUSSION

The oral submucous fibrosis are one of the major concerns in recent times. According to *Ayurveda* mainly all the oral disease are caused predominantly caused by *kapha* and *Rakta dosha*. So, *kavala* (gargling) with decoction of medicines having *Tikta* and *katu* (bitter – pungent) rasa are to be adapted where therapies with mitigate *Rakta* and *kapha dosha* are beneficial in the treatment of *Mukha roga* (diseases of oral cavity). Other surgical and non-surgical treatment for oral submucous fibrosis is not completely effective but *Ayurvedic*, herbs and preparation show efficacy in improvement of symptoms. Filling the mouth with liquid is called *Mukha purana* (pulling technique) and it is beneficial in burning sensation of mouth. *Kavala* is a procedure explained in our classics and it is used as an *Upkarma* in many *Mukhaghata roga* (diseases of oral cavity). Most of the drugs are having antioxidant, anti-inflammatory medicine, cancer prevention properties that may have improved the status of *dhatu*s.

CONCLUSION

Ayurveda treatment is helpful to subside inflammation and ulceration so preventing further progress, increases suppleness of the stiffed oral tissue in terms of reverses fibrosis in some extent, improving mouth movements

and improves overall immunity which in turns increases the strength of submucosa and oral mucosa to overcome the disease.

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