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Oral Submucous Fibrosis- Bird's eye view

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Abstract: Oral submucous fibrosis is a potentially malignant disorder characterized by the burning sensation in the oral cavity and difficulty in opening the mouth. It is caused by arecanut and gutka chewing habits. This disorder can be easily diagnosed by the manifestations. Such a premalignancy requires awareness among the unaffected and counselling among the affected population.

Key words: Oral Submucous Fibrosis, Premalignant

INTRODUCTION

In 1952, five Indian women from Kenya reported with a condition in the oral cavity, which was termed as "atrophia idiopathica (tropica) mucosae oris" by Schwartz. Later the terminology was modified as Oral Submucous Fibrosis (OSMF).[1]

Difficulty in swallowing and opening mouth is the characteristic symptoms of this disorder due to fibrosis of the oral cavity, pharynx and esophagus.[2]

EPIDEMIOLOGY

Recent epidemiological studies in India and evidence from Indians living in South Africa point to the habit of chewing areca nut as the major etiological factor of OSMF. In recent years, commercial preparations like panmasala have become available in India and abroad. The major constituent of these panmasala is areca along with lime catechu wrapped in betel leaf with or without tobacco.[3]

Surveys in India showed that[4]

- Rate of prevalence: 0.5%. Persons between
- Age of occurrence: 20 and 40 years of age
- Female: male ratio 3:1.
- Morbidity: 3.2%
- Malignant transformation: 7-13%.

CLINICAL FEATURES

Oral submucous fibrosis is characterized by set of manifestations included in the table below[5]

Early stages
Burning sensation during spicy food
Dry mouth
Blanching oral mucosa causes marble-like appearance
Advanced stages
Difficulty in mastication, speech, swallowing
Difficulty in maintaining oral hygiene
Lips and cheeks thick and rigid
Depapillated tongue
Restricted tongue movement.
More advanced stages
Loss of hearing

MANAGEMENT

Factors to be considered while selecting the management strategies for this disorder[6]

1. ***Choice of the agent:*** Drug with minimum toxicity and a chemopreventive agent.[6]

2. ***Assessment response:*** It can be applied by using oral photography and measurement of mouth opening. The response can be assessed by two examiners who can independently assess the photographs as an adjunct. Measurement of mouth opening can be done by using calipers.[6]

3. ***Evaluation of the histopathology:*** comparison of pre-treatment and the post-treatment biopsy (examination of diseased tissue under microscope for confirmation of this disorder and the premalignant change as histopathology is considered as gold standard in medicine).[6]

Management strategies include

- Habit counselling: Educating the patient regarding the discontinuation of habit
- Basic regimen: Bland diet with nutritional supplementation
- Medical management: Several drugs have been effectively tried in the management of Oral mucous fibrosis includes steroids[7], antioxidants[8], placental extracts[7], pentoxifylline[9], Levamisole and vitamin A[10]. Ayurveda has been tried in the management that includes Turmeric[11], tea pigments and vitamins[12], salvia miltiorrhiza[13], Mangifera indica, Withania somnifera, Daucus carota, Glycyrrhiza glabra, Vitis vinifera, Emblica officinalis, Yashada bhasma, oils of Triticum sativum[14].
- Physiotherapy: Mouth exercises

- Surgical management

CONCLUSION

Even though OSMF is a premalignant disorder it has the potential to transform into malignancy. Several commercial preparations are easily available with low cost in the market. Lack of knowledge about the etiology of this disorder is another major concern. So it is the role of the Oral Physician to guide and counsel patients and general public about the condition and its potentiality for the occurrence of cancer. Let's provide our support to protect such people.

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