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A CASE REPORTING 54 YEAR OLD MAN WITH ORAL SUB-MUCOUS FIBROSIS

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ABSTRACT

The article presents a case of oral submucous fibrosis occurring in a 54 year old man. This article reviews the etiology, clinical presentation and treatment modalities of oral submucous fibrosis. This article highlights the association between oral sub-mucous fibrosis and the continuous use of areca-nut and other oral tobacco products. The human population faces a higher danger with products which are clearly targeted at them by the tobacco industry.

KEY WORDS: Oral Sub-Mucous Fibrosis, Areca-Nut, Genetic, Auto-Antibodies etc.

INTRODUCTION

A consensus workshop in Kuala Lumpur, Malaysia in 1994 reviewed oral mucosal lesions associated with betel quid, areca nut and tobacco chewing habits [1]. Pindborg and Sirsat define, describe and identified the OSMF and set a criteria and guidelines for it. They defined it as a chronic insidious disease affecting any part of the oral cavity and may extend to the pharynx and the oesophagus, and may be preceded or associated with vesicle formation [2]. OSMF is associated with juxta-epithelial inflammation followed by fibro-elastic change of the lamina propria with epithelial atrophy leading to stiffness of the oral mucosa and causing trismus. OSMF is seen mostly in communities resident in the Indian sub-continent and has a reported incidence of between 0.2 – 1.2% of the urban population attending dental clinics [3]. The condition mostly affects women than man with a female: male ratio of 3:1 and characteristically first presents in adulthood between the ages of 45 – 54 years [4]. Cases of OSMF have also been reported in individuals of Asian origin living outside the sub-continent but it is extremely rare in White populations [5]. The present report describes a case of OSMF presenting in a 54 year old male of India.

Case report: A 54 year old male patient came with a chief complain of reoccurrence of ulcers in oral cavity. The patient also suffered discomfort and a burning

sensation affecting the oral mucosa, particularly when eating spicy foods (Fig. 1).

The patient told about a long history of tobacco chewing among both parents: the mother is a non-smoker but consumes chewing tobacco 2 - 3 times per day; the father both smokes and chews tobacco. The patient only seldomly chews betel-quid but regularly chews supari. This has occurred since the age of 30 years. The patient is aware of the new tobacco products like Gutkha but did not use these on a regular basis. The parents and all the other family members were unaware of the harms of supari or chewing tobacco products, believing them to be a natural product which aid digestion. Intra-oral examination revealed a number of ulcers that were characteristic of recurrent minor aphthous stomatitis. Further examination revealed that the buccal mucosa was pale and fibrous bands were palpable within the buccal mucosa. Mouth opening was reduced to 29 mm.

DISCUSSION

OSMF etiology is controversial and at the present time there is evidence suggesting a combination of factors is likely to be involved which are as follows:

Pan-Supari is a commonest Areca-nut form traditionally chewed throughout India. The mixture is held

generally adjacent to the buccal mucosa and slowly chewed over a long period of time. Studies by Harvey [6], suggests that areca-nut alkaloids, particularly acroline and arecaidine, were involved in causing OSMF. It was seen that extracts of areca-nut stimulated collagen synthesis by 170% over the control studies. Many other studies have also shown a strong correlation between OSMF and areca-nut chewing. Different studies have shown raised levels of a number of immuno-globulins including IgA, IgE and IgD. Auto-antibodies to gastric, parietal and thyroid microsomal and antinuclear antibodies have also been found in 65% of patients with OSMF [7].

OSMF diagnosis is usually based on the clinical signs and symptoms like oral ulceration, burning sensation (especially with spicy foods), paleness of the oral mucosa and occasional leukoplakia. The characteristic feature is the marked vertical fibrous ridge formation within the cheeks and board like stiffness of the buccal mucosa. The fibrosis in the soft tissue leads to trismus, difficulty in eating and

even dysphasia. Fibrous scar formation and worsening of the symptoms can be seen if biopsy of the tissue is performed. At the present time there is no cure for OSMF and management consists of elimination of the ingestion of implicated irritants. Successful prevention in the early stages of the condition has been shown to produce improvement in symptoms [8].

Different studies have successfully shown the association between areca-nut chewing and the development of OSMF with an increased risk of oral cancer has [9]. No accurate cure has been found yet of the OSMF but prevention seems to be a good option for it. OSMF can convert to cancerous conditions later in severe cases if not treated correctly. The possible precancerous nature of OSMF was first described by Paymaster, who observed the occurrence of squamous cell carcinoma in one third of his patients with OSMF. Subsequent studies have reported that the incidence of carcinoma varies in OSMF from 2–30% [10].

Fig. 1 Oral Mucosa Showing Fibrous Bands



CONCLUSION

OSMF described was difficult to manage and was caused by the continuous tobacco consumption and poor oral hygiene maintenance. Monitoring and managing the earliest stages of the condition was also made difficult as he was found to be a poor attender. It seems inevitable that

OSMF is likely to worsen since he would not appear to be able to stop the ingestion of areca-nut. So in case of worsening of the condition, he may need surgical intervention with grafting. Close monitoring of his oral mucosa is essential as there is always the possibility of malignant changes in such situations.

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