CLINICAL OUTCOME OF HABIT CONTROL AND SUBMUCOSAL INJECTION OF LONG ACTING STEROID IN THE MANAGEMENT OF ORAL SUBMUCOUS FIBROSIS – A FOLLOW UP STUDY

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The aim of this study was to assess the effectiveness of intra-lesional injection of methyl prednisolone and habit control in the management of Oral Submucous Fibrosis (OSMF).

The sample consisted of 43 patients (male = 28, female = 15) who attended the Oral Medicine Clinic, Faculty of Dental Sciences, University of Peradeniya from January 2001 to December 2003. The diagnosis of OSMF was based on the criteria recommended at the workshop on oral mucosal lesions associated with betel quid, arecanut and tobacco chewing habits held in Kuala Lumpur, Malaysia (1997). Patients were divided into the following groups depending on the unaided degree of mouth opening.

Group A: maximum mouth opening $\geq 20 \text{ mm}$ n = 38Group B: maximum mouth opening 11-19 mm n = 4Group C: maximum mouth opening $\leq 10 \text{ mm}$ n = 1

Submucosal injection of methyl-prednisolone (20 mg = 0.5 ml) was given to predetermined areas of buccal mucosae of each side for all the patients once a month for 5 consecutive months. Maximum unaided mouth opening was measured using the same measuring device after one month of each injection. All the patients were informed about the causal relationship of the betel chewing habit to OSMF and the hazardous effects if the habit was continued. They were also instructed to quit betel chewing, smoking and alcohol habits.

Men outnumbered women (1.8: 1) though equal numbers were observed in age groups 15-24, 55-64 and >64. All subjects chewed betel with arecanut. Three subjects had stopped their habit before attending the hospital mainly due to the intolerable burning sensation in the mouth. At the end of the 6 month follow up period, a total of 37 cases (86%) from all three groups showed significant improvements in their mouth opening (Z=-5.283, P<0.05). Out of 38 cases in group A, 33 cases (86.84%) showed improvements at the end of 6 months of follow up (Z=-5.003, P<0.05). In group B, although 3 cases out of 4 had shown an improvement at the end of 6 months of follow up the difference was not statistically significant (Z=-1.604, P=0.109).

The results strongly suggest that intralesional injection of methyl prednisolone to both buccal mucosae improves mouth opening to a significant degree. In order to establish the effectiveness of this treatment protocol for management of OSMF, a further study with long term follow up is needed.