



**EFFICACY OF CURCUMIN IN THE MANAGEMENT OF ORAL  
SUBMUCOUS FIBROSIS - AN INTERVENTION STUDY**

**By**

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## ABSTRACT

Oral submucous fibrosis (OSMF) is a chronic debilitating and potentially malignant condition of oral cavity associated with arecanut chewing. A number of studies have proven that the management of premalignant diseases should include antioxidants along with the cessation of the habit. Studies have shown that the process of carcinogenesis occurs by generation of Reactive Oxygen Species, which act by initiating lipid peroxidation. Prevention against lipid peroxidation mediated damage is done by antioxidants. Therefore a study was carried out to evaluate the efficacy of curcumin as an antioxidant in the management of 42 oral submucous fibrosis.

**Methods:** An intervention study was conducted on 42 oral submucous fibrosis cases, 42 patients were divided into two groups, group A (curcumin group), group B (curcumin along with intralesional steroid injections) group C (placebo group). Group A received curcumin 400mg twice daily & group B received curcumin 400mg twice daily along with biweekly intralesional steroid injection of Betamethasone 4mg/ml for 3 months and group C received placebo capsules twice daily. The results were analyzed with paired 't' test & unpaired 't' test.

**Results:** Clinical improvements in mouth opening was significant in the post treatment period of group B and A patients. Group A & Group B groups showed statistically significant reduction in burning sensation. However when groups were compared mouth opening & burning sensation was found to be statistically very highly in group A, group B patients than group C patients.

**Interpretation and Conclusion:** Curcumin can bring about clinical improvements in OSMF patients. The observed effects suggest that curcumin can be used as an adjuvant therapy in the initial management of OSMF patients.

**Key words:** Curcumin placebo, steroid injection, interventional study, OSMF.