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Salivary Malondialdehyde Levels in Patients with Oral Leukoplakia

of

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[Keywords](#)



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**Abstract:** Since leukoplakia is a premalignant condition, it is evident that an effective means of control would contribute to reducing the mortality and morbidity of oral cancer. The reactivity of free radicals and singlet oxygen is believed to be an important factor in the pathogenesis of many degenerative diseases including carcinogenesis. Reactive free radicals may damage cells by induction of lipid peroxidation of the polyunsaturated fatty acids. Buege and Aust's method was used for lipid peroxidation analysis. One way of estimating free radical activity and lipid peroxidation is to determine the concentration of malondialdehyde (MDA) in the body fluids. MDA concentration was determined in a group of 9 patients with oral leukoplakia and 11 healthy subjects as the control group. Mean MDA levels were  $3.835 \pm 1.20$  nM/ml in healthy subjects and  $3.23 \pm 1.33$  nM/ml in patients. The difference between the two groups was not statistically significant. However, we found this result meaningful for our cases of leukoplakias which were all simple leukoplakias without any sign of dysplasia.

**Key Words:** Leukoplakia, malondialdehyde, saliva, lipid peroxidation

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