

Detection of Salivary 8-Hydroxy-2-Deoxyguanosine and Total Antioxidant Capacity in Patients  
with Oral Premalignant and Malignant Lesions

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Study protocol:

Objectives: Investigating the level of salivary 8-hydroxy-2- deoxyguanosine (8-OHdG) and total antioxidant capacity (TAC) in oral premalignant and malignant lesions in order to determine their diagnostic value for the malignant patients.

Design: 48 subjects diagnosed with keratosis, leukoplakia, oral lichen planus (OLP) and oral squamous cell carcinoma (OSCC) along with healthy control subjects were included. Salivary samples from all participants were collected. 8-OHdG was measured by ELISA technique and the TAC level was assessed by a photometric test system.

Statistical analysis:

All obtained data were statistically analyzed to compare means of patient groups with the control group and within different patient subgroup using Tukey multiple comparisons of means.

Data concerning OSCC group were analyzed with malignant grades (i.e. grade I, II and III according to histological findings). Correlation analysis of data with different grades was done.

All statistical work was done using R statistical software version 3.3.3 (R Core Team, 2017) using R Commander Package (Fox, 2005; Fox and Bouchet-Valat, 2016).

Tukey contrast was utilized to compare between the mean values of salivary 8-OHdG level in pg/ml for each two groups.