

Salivary level of NF- κ B cytokines in patients with oral squamous cell carcinoma and oral lichen planus patients compared to healthy subjects

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There are number of studies available in the literature that have studied and showed significant increase of NF- κ B dependent cytokines, TNF- α , IL-1 α , IL-6, and IL-8 in patients with oral squamous cell carcinoma (OSCC) and oral lichen planus (OLP). The aim of this study is to compare concentration level of such cytokines in whole unstimulated saliva (WUS) of patients with OSCC, OLP, and healthy subjects to find a potential simple and non-invasive method for monitoring malignant transformation of OLP. To this end, 25 cases from each OSCC, OLP, and age-sex-dental status matched control were enrolled in the study. The WUS samples were collected, and concentration levels of TNF- α , IL-1, IL-6, IL-8 were determined by ELISA. The results showed that the levels of the mentioned cytokines were significantly higher respectively in OSCC and OLP patients compared with the control group ($P < 0.05$). According to the results, the average concentration level of TNF- α in OSCC was significantly higher than that in OLP, and in OLP higher than healthy subjects, respectively. In terms of IL-1 α and IL-8, the average concentrations in OSCC were found to be significantly higher than that in control group. With respect to IL-6, average concentration in OSCC was determined to be significantly higher than that in OLP and control. The results indicate that change of NF- κ B dependent cytokines in WUS may in part reflect the malignant transformation of OLP and the analysis of saliva may provide a useful and non-invasive method surrogates for monitoring OLP.

Biography

Mahnaz Sahebamee has completed her Doctoral of Dental Surgery and specialty in Oral Medicine and Diagnosis both from Tehran University of Medical Sciences where she currently is a professor of dentistry. She has published numerous refereed scientific articles and has authored/co-authored 5 books. She has conducted several distinguished scholarly research projects leading to outstanding national and international awards.