



Evaluation of salivary PH of the patients underwent hemodialysis treatment

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Introduction: Chronic Renal Failure (CRF) patients have certain oral sign and complications. Because of their systemic condition and adverse effects of kidney disease. One of the most important symptoms is changes in salivary components.

Purpose: The aim of this study was to evaluate the changes in salivary PH in patients with Chronic Renal Failure (CRF) undergoing hemodialysis.

Methods: A group consisted of 100 patients with CRF (27 female, 73 male; mean age: 30.01 yr) who was referred to Imam Khomeini hospital, were selected randomly. PH changes in saliva were analyzed in three stages: before dialysis, during dialysis and after dialysis.

Patients underwent dialysis for 4 hours on average. Unstimulated saliva samples of the patients were collected by the direct method of spitting within 5 to 10 minutes. The PH of salivary samples was determined by PH ion technique using electrometric device. The data were subjected to Analysis of Variance (ANOVA) and central tendency indices.

Twenty-seven percent of patients were female and seventy-three percent of them were male. The mean age of patients was 38.01, SD 14.81 years. The patients received dialysis treatment for 3.45 years on average.

Results: Overall results showed salivary PH of patients were 7.83 before dialysis and 7.82 during treatment and 7.81 after the dialysis. No significant difference was found between the three time intervals regarding patients salivary PH (p_value=0.85). However, salivary PH of CRF patients compared with the results of the salivary PH of healthy specimens showed that increasing of salivary PH is a symptom of the CRF.

