

EVALUATION OF PERIODONTAL STATUS OF PATIENTS UNDERGOING DIALYSIS FOR END STAGE RENAL DISEASE (ESRD)

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The objective of this study was to assess the periodontal status of a group of Sri Lankan patients undergoing dialysis for end stage renal failure.

Patients referred to the Periodontology clinic, Faculty of Dental Sciences, University of Peradeniya from the Nephrology Unit, General Hospital, Kandy from October 2003 to July 2004 for the assessment of oral health were included in this study. The sample consisted of 60 patients (40 males and 20 females).

Information pertaining to age, gender, duration of dialysis and number of dialysis cycles were recorded. A comprehensive oral examination was carried out to obtain plaque levels, bleeding sites, periodontal pocket depths and the presence of gingival recession and gingival overgrowth. Plaque was assessed according to the O'Leary plaque score (PS). Bleeding score (BS) was assessed according to the percentage of tooth sites that bled on probing. The percentage of tooth sites with >2mm of periodontal pocket depth (PP) was also calculated.

Patients were categorized into two groups depending on their periodontal status: patients with acceptable periodontal health (PS≤15%, BS≤1%, PP≤1%) and patients with unacceptable periodontal health (PS>15%, BS>1%, PP>1%). Patients with unacceptable periodontal health were further divided into three groups depending on the plaque score as mild (PS >15 % and < 40%), moderate (PS> 40% and < 65%) and severe (PS>65%).

The mean age of patients at the time of the oral examination was 36.2 years. The mean number of dialysis cycles and mean duration of dialysis were 54 and 6.7 months respectively. Only one patient (1.7%) had an acceptable level of periodontal health. Of the 59 patients whose periodontal health was considered to be unacceptable, 16.9%, 40.7% and 42.4% had mild, moderate and severe plaque scores respectively. Age did not influence the periodontal status of individuals (P=0.8). Periodontal status of males was comparatively poorer than the females ($\chi^2=9.7$, df=3, P=0.02). Periodontal status appeared to deteriorate with the increase in the number of cycles of dialysis (P=0.02) and duration of dialysis (P<0.01). Three percent of the sample had gingival overgrowth and 43.3 % had gingival recession.

This study revealed that patients with ESRD undergoing dialysis have poor periodontal health. Nephrologists should be made aware of this, in view of developing a collaborative management protocol for these patients.