

Oral health and canes related micro flora in children during the first three months following renal transplantation

A. AL NOWAISER^{1,5}, V. S. LUCAS^{2,5}, M. WILSON³, G. I. ROBERTS⁴ & R. S. TROMPETER⁶

Department of Paediatric Dentistry, ²Department of Oral Medicine, ³Department of Microbiology, ⁴Department of Paediatric Dentistry, Eastman Dental Institute For Oral Health Care Sciences, University College London. ⁵Maxillofacial and Dental Department, ⁶Department of Renal Medicine, The Great Ormond Street Hospital For Children, London, UK

Summary. There is little information on the oral health of children undergoing renal transplantation during the early transplant period.

Methods. Twenty-four children undergoing renal transplantation aged 4-13.2 years and their matched controls were recruited. The dmfs, dmft, DMFS and DMFT, plaque, gingivitis and gingival enlargement scores were recorded. The oral microflora was sampled and cultured for *S. mutans*, *Lactobacillus* species and *Candida* species.

Results. There was a significantly lower mean dmfs (0.3 ± 0.9 ; $P = 0.03$), dmft (0.3 ± 0.9 ; $P = 0.03$), DMFS (2.3 ± 5.3 ; $P = 0.01$) and DMFT (1.5 ± 2.6 ; $P = 0.02$), respectively, in the transplant group. There was a significantly greater mean plaque score (14.7 ± 11) for the permanent dentition, at baseline only, compared with 90 days post-transplantation (9.4 ± 10.4 ; $P = 0.02$). There was a significantly greater gingival enlargement score (1.8 ± 1.1 ; $P = 0.04$) 90 days post-transplantation compared with baseline. The *S. mutans* and *Lactobacillus* counts were significantly lower both at baseline ($P = 0.0001$ and $P = 0.004$) and 90 days post-transplantation ($P = 0.02$; and $P = 0.05$), respectively, compared with the controls.

Conclusions. The transplant children had less active dental disease than the controls although gingival enlargement needs careful monitoring.