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

A. AL NOWAISER1.5, V. S. LUCAS2.5, 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 the 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 (904 ± 10·4; P = 0·02). There was a significantly greater gingival enlargement score (1·8 ± 1 A; 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.