0845 Oral Carriage of Yeasts and Coliforms in Stroke Sufferers

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Stroke is a major cause of functional disability in the elderly. Stroke-related limb paralysis and manual dexterity affect the stroke sufferers’ ability to clean their teeth and dentures and to maintain a healthy oral condition, thus stroke sufferers are at high risk of oral opportunistic infections. Objective: To investigate changes in oral carriage of yeasts and coliforms in stroke sufferers over time. Methods: In a prospective longitudinal study, 56 elderly stroke sufferers received oral microbiological sampling using two different methods and clinical assessment on three occasions: during the acute stroke phase, on hospital discharge and six months later. Data were analysed using Cochran Q, McNemar, Friedman 2-way ANOVA, Wilcoxon signed rank tests and logistic regression. Results: The oral carriage of yeasts increased significantly during acute stroke (p<0.05) whereas coliform carriage did not. A reduction in the oral carriage of yeasts was found on hospital discharge and six months later and in coliforms at six-month assessment (p<0.05). Tooth sites with plaque and gingival bleeding decreased over time (p<0.05). Candida albicans was the predominant yeast isolated and Klebsiella pneumoniae the most prevalent coliform. The mean Barthel Index score increased from 51 during acute stroke to 78 on hospital discharge and 82 six months later (p<0.05). Tooth-related difficulty in tooth brushing and denture wearing were associated with higher oral yeast carriage. The use of aspirin was associated with lower oral yeast carriage in stroke sufferers (p<0.05). Conclusions: Oral yeast carriage was closely linked to the level of stroke-related functional disability that improved over time but had not totally resolved six months after hospital discharge. The oral reservoir of stroke patients is noteworthy by care providers as Klebsiella pneumoniae may cause aspiration pneumonia. Supported by CRCG-HKU.

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