

0700 Use of Clinpro™ Cario in diagnosing childhood caries

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Objectives: Childhood caries is one of the major chronic diseases of pre-school children in China. The objectives of this study are: to study the use of Clinpro™ Cario of lactic acid in oral biofilm and correlate its diagnostic efficacy with the levels of *S. mutans* and *Lactobacilli* spp. in saliva, and the dental caries in preschool children. **Materials and Methods:** The sample population: 4- and 5- year old children in 8 kindergartens in two districts in Beijing. Childhood caries was screened according to the criteria by WHO. The DMFS scores were recorded, levels of *S. mutans* and *Lactobacilli* spp. in saliva were measured and the lactic acid produced in oral biofilm from different groups was evaluated by Clinpro™ Cario. **Statistical analysis:** chi-test was used to determine the significance difference exist between two groups of children. **Results:** Preschool children with different DMFS were grouped into low (DMFS=0), moderate (DMFS < 3) and high caries risk (DMFS > 3) groups. The levels of *S. mutans* and *Lactobacilli* spp. in saliva were significantly different among low, moderate and high caries risk groups ($p < 0.05$). The level of lactic acid produced as measured by Clinpro Cario L-Pop™ was not significantly different among low, moderate and high caries risk groups ($p > 0.05$). **Conclusions:** The levels of *S. mutans* and *Lactobacilli* spp. in saliva seems to differentiate different caries risk in preschool children. Lactic acid in oral biofilm did not diagnose caries risk in preschool children in this study. (Financial support from 3M-ESPE (a/c 26002614, University of Hong Kong, China) is gratefully acknowledged.)

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