## Comparison of microhardness of caries detector dye stained and unstained carious dentin

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This study aimed to evaluate microhardness of carious and caries-affected dentin which was determined by two caries detector dyes (Caries Detector and Sable seek). Further, the ability to distinguish carious dentin of the two dyes was compared using microhardness values of caries-affected dentin. Forty human molars with occlusal caries were sectioned longitudinally through the lesions in the mesio-distal plane, polished with aluminium oxide paste. One of half the specimens were stained with Caries Detector, and the remaining specimens were stained with Sable seek. The specimens were microhardness tested using a Knoop microhardness indentor with steriomicrograph examination. The mean hardness values from each group were calculated and compared using one-way ANOVA. The results showed the mean microhardness values from dye-stained dentin were lower than those from unstained dentin (p<0.05). There was no difference between microhardness values obtained from caries-affected dentin determined by the two caries detector dyes.

Supported by Dental Research Fund, Dental research project 3205-312 # 32 / 2002 Faculty of Dentistry, Chulalongkorn University