Caries detection and management: on the basis of current concept of Cariology
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It has been accepted that the concept of caries therapy, with the progress of research on the diagnosis and treatment of early enamel caries, is not merely to replace cavitated lesions within the teeth by restorative materials, but is to utilize the reversible dynamic processes to remineralize caries in the early stages through various artificial interventions. Process of enamel remineralization which is inhibited by the proteins in the saliva can be promoted by slightly elevation of fluoride levels in the oral environment. In recent years, functional foods, functional dental materials and intra-oral device have been developed to maintain a constantly elevated intraoral fluoride concentration. Some of the concrete cases and the relevant background will be presented in this presentation. As a consequence of our increased understanding of the caries process, internationally it is believed that it is not appropriate to carry out a restorative treatment of the permanent teeth of which the lesion is still within the enamel. International Caries Detection and Assessment System (ICDAS) has been proposed as the detection and management system of dental caries, which aims to policy change from restoration to disease prevention and health promotion. However, it has been known that there is a considerable difference among dentists in restorative treatment thresholds. In this presentation, factors associated with dentists’ decision to intervene in caries lesions surgically will be also discussed.