

# Postponing restorative intervention of occlusal dentin caries by non-invasive sealing

March 16 2016

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Today at the 45th Annual Meeting & Exhibition of the American Association for Dental Research, researcher Vibeke Qvist, University of Copenhagen, Denmark, will present a study titled "Postponing Restorative Intervention of Occlusal Dentin Caries by Non-Invasive Sealing." The AADR Annual Meeting is being held in conjunction with the 40th Annual Meeting of the Canadian Association for Dental Research.

In this study, researchers investigated the possibility of postponing restorative intervention of manifest occlusal [caries](#) in the young permanent dentition by non-invasive sealing. This prospective, RCT-designed study included 521 occlusal caries [lesions](#) in 521 patients, aged 6-17 years. Based on clinical and radiographic assessment, all lesions were in need of restorative treatment. After randomization, 368 resin sealings and 153 composite-resin restorations were performed by 68 dentists from 2006 to 2009 in nine public dental health service locations. Treatments were annually controlled, clinically and radiographic, until patients were referred to private dentistry at age 18 years. Chi-square test, Kaplan-Meier survival-analyses and Cox regression-analyses were applied for statistical data-analyses.

After five to eight the dropout rate was eight percent and 54 percent of the treatments were completed due to age (50 percent) or primary caries (four percent). Thirty-one percent of the sealings were replaced by restorations and 12 percent were still functioning although some were repaired/renewed. Seven percent of the restorations were

repaired/renewed and 20 percent were still functioning. No endodontics was performed.

Survival of sealings was not influenced by eruption stage of tooth, nor by surface remineralization/cavitation. Notably, the results indicate the possibility of postponing restorative intervention of occlusal dentin caries lesions in young permanent teeth by non-invasive sealing. As expected, the restorations showed the best survival, but more than half of the sealed lesions were still not restored after the first seven years.

**More information:** This is a summary of oral presentation #0043, "Postponing Restorative Intervention of Occlusal Dentin Caries by Non-Invasive Sealing," which will be presented on Wednesday March 16, 2016, 2:30 p.m. - 2:45 p.m. at the Los Angeles Convention Center, room #403A.

Provided by International & American Associations for Dental Research

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