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**Title:** Preventive effect of ozone on enamel white spot lesions during orthodontic treatment

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**Abstract:** Several clinical studies have confirmed the susceptibility of patients undergoing orthodontic therapy to dental caries. The incidence of decalcification following a course of fixed appliance therapy that lasts approximately 2 years, has been reported to be as high as 50%. The obvious degree of iatrogenic enamel damage during orthodontic treatment suggests the need for preventive programs. Several preventative methods have been applied to overcome the enamel demineralization problem during orthodontic treatment. Two approaches have been proposed in an attempt to reduce potential detrimental enamel changes during orthodontic therapy. The first approach is aimed at reducing acid solubility by the application of topical fluoride before, during and after treatment. The second approach is to protect the enamel surface by using different materials and providing a protective coating. Ozone is one of the most powerful antimicrobial agents that is currently used in medicine or dentistry. Dental caries is caused by an ecological niche of caries producing organisms. Thus it is not surprising that eliminating these organisms provides tremendous clinical and long term preventive advantages for patients. Recently, a number of studies have been undertaken on the effects of ozone on treating dental caries and the reduction of oral microorganisms. Ozone gas application and ozonated water were found to be capable of reducing the number of Ms and streptococcus sobrinus. In this paper we are going to discuss about advantages and disadvantages of ozone therapy on prevention and also treatment of white spot lesions during orthodontic treatments.

**Keywords:** prevention, white spot lesion, ozone, orthodontics

**Presentation:** Poster