

## **CR 27499: Clinical Reversal of Occlusal Pit and Fissure Caries After Using Ozone**

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### **Abstract**

**Objectives:** This study aimed to assess the use of Ozone generated from a novel device<sup>1</sup> to manage pit and fissure caries over a 3 month period in a general dental practice.

**Methods:** Subjects were randomly allocated to one of 2 groups. 98 patients were entered with 279 test carious lesions whilst another 20 subjects were entered with 49 control lesions, which did not receive any treatment. Each carious lesion had been deemed to require conventional drilling and filling. Ozone was applied to each test lesion for 10 to 30 seconds depending on their clinical severity. After 3 months, patients were recalled and the lesions were clinically re-assessed for severity. **Results:** To date, 32 test subjects with 69 test lesions have attended the recall visit. There were no observed adverse events. 58 of the ozone treated primary pit and fissure carious lesions had clinically reversed based on the clinical measurement of lesion severity whilst the other 11 test lesions remained stable or progressed ( $P < 0.05$ ). The control lesions did not significantly change clinically. **Conclusions:** This treatment regime using ozone may be considered to be an effective alternative to conventional "drilling and filling" for primary occlusal fissure carious lesions in general dental practice. <sup>1</sup>HealOzone unit, CurOzone USA.