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Final Report
OE Sensitive Mouthwash produces a transient and reversible deposit
on the tooth surface

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Goal

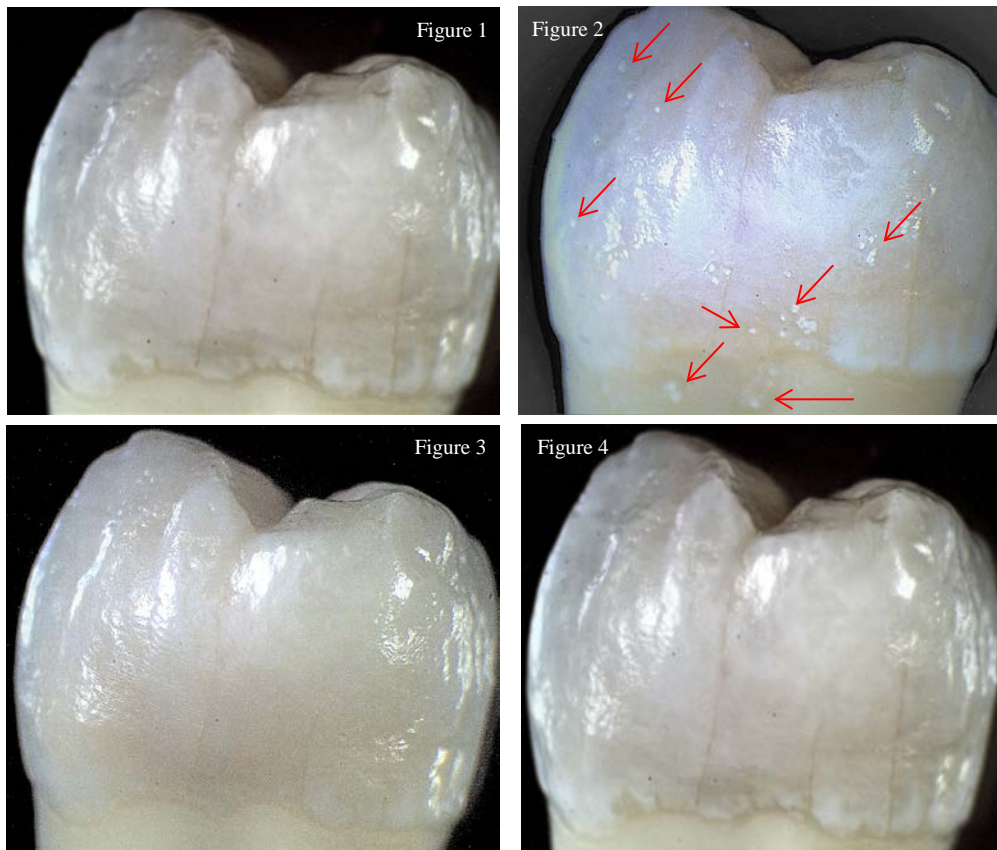
To determine whether the deposit on the tooth surface that results from the use of OE Sensitive Mouthwash is fully removed by physical means such as air/water spray.

Material and Methods

Ten extracted teeth that appeared healthy to the naked eye were stored in artificial saliva (Pickering Test Solutions; <http://shop.pickeringtestsolutions.com>) at body temperature. Twice daily, samples were removed from the saliva solution, and swished for 60s in 20 mL OE Sensitive Mouthwash to simulate twice-daily intra-oral use. Then samples were imaged under the light microscope at a magnification of x13. Next samples were washed with air/water spray for 30s, before being returned to artificial saliva solution, which was replaced daily. This was performed daily for a period of 2 weeks. Photographs and microscope images (x13 Magnification) were acquired before treatment, after the first OE Sensitive Mouthwash treatment, and after one and two weeks of treatment.

Results

Baseline tooth images show that the tooth surface is healthy and clean (Figure 1). Immediately after swishing in OE Sensitive Mouthwash, a small clear granular deposit was visible on the tooth surface (Figure 2). No residual deposits or tooth surface changes were visible during inspection under the light microscope after one and two weeks of treatment (Figures 3 and 4).



Light microscope images (x13) of sample #7 showing typical appearance of samples throughout the duration of this study. Arrows in Figure 2 indicate some of the transient granular deposits on the tooth surface directly after mouthwash use. No deposits and no changes to the tooth surface are visible after 1 week (Figure 3) and 2 weeks (Figure 4) of treatment respectively.

Conclusion

The results of this study demonstrate that use of OE Sensitive Mouthwash produces a transient deposit on the tooth surface that is easily and fully removed by physical means such as air/water spray. Over the 2 week duration of this study, there were no signs of any changes to the tooth surface.