COMMENTARY

ENAMEL MICROABRASION FOLLOWED BY DENTAL BLEACHING FOR PATIENTS AFTER ORTHODONTIC TREATMENT—CASE REPORTS

Kevin James Donly, DDS, MS*

Enamel microabrasion has demonstrated effectiveness in the removal of superficial enamel discolorations. These discolorations can be associated with enamel hypoplasia during tooth development, fluorosis, and remineralized "white spot lesions."

This manuscript discusses the use of microabrasion following orthodontic care and is able to illustrate the utilization of enamel microabrasion in conjunction with vital tooth bleaching, as well as with restorative dentistry, to achieve optimal esthetics.

Dr. Theodore Croll offers the description of the enamel microabrasion technique through many publications that are readily available in the literature. The microabrasion technique removes superficial enamel, leaving a high-polished enamel surface with interprismatic spaces less notable than natural nonabraded enamel. This highly polished surface is more resistant to bacterial colonization and demineralization than nonabraded enamel, demonstrating that the technique does not leave patients at higher risk for the development of caries.

When the author describes the isolation of the teeth to receive microabrasion treatment, you will note that a secured rubber dam with petroleum gel at the free gingival margin is recommended, when possible. This protects the gingival tissue from the microabrasion procedure, as well as the acid within the system. Sodium bicarbonate (baking soda) can also be placed at the free gingival margin to neutralize any acid that might penetrate to that area during treatment.

As the authors describe, microabrasion is effective at eliminating some undesirable enamel discolorations, but the use of a vital tooth bleaching system following enamel microabrasion can provide significant tooth whitening benefits. It is important to note that the authors emphasize that bleaching should be completed prior to resin-based composite restoration placement to ensure an appropriate color match of the tooth and resin.

I would like to commend the authors for providing the journal readers a reminder of the microabrasion/bleaching technique with some postorthodontic patients that obviously received a wonderful esthetic outcome.

*Professor and Chair, University of Texas Health Science Center at San Antonio, Dental School, Department of Pediatric Dentistry, 7703 Floyd Curl Drive, San Antonio, TX 78229-3900

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