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NUMBER 9 • APRIL 2009

Esthetic Results with a Fluoride-Releasing Composite Restorative Sabiha S. Bunek, D.D.S. Enspire Dental, Ann Arbor, MI, USA

Introduction

Dentists are many times faced with the challenge of choosing the right esthetic restorative material for high-risk caries patients. Traditional glass-ionomers provide fluoride release and recharge but fall short when it comes to esthetics. In the quest to solve this problem, Shofu developed a line of restorative materials called "GIOMERS," an esthetic restorative material that combines the characteristics of both composite (excellent esthetics and polishability) and glass ionomer (fluoride release and recharge).

Beautifil II (Shofu), classified as a giomer, is a nano-hybrid composite that can be used for anterior and posterior restorations. It's high filler load ensures long-term stability, high flexural strength, and optimum polishability. **Beautifill II** is supplied in unit dose compules as well as syringes. The "One Touch Cap" of the syringe enhances dispensing and delivery of the material. The composite is available in 12 shades: 8 universal shades, two opaque shades, an enamel shade, and a bleach white shade. Overall, this composite demonstrates excellent handling characteristics as well as nice blending of shades.



Fig 1 Pre-operative view of teeth #2 and #3



Fig 4 Post-operative view of final restorations

Case Presentation

A 29-year-old female presented with recurrent caries around the mesial portion of an old class 2 amalgam, tooth No. 3, as well as recurrent decay under an old class 1 amalgam on tooth No. 2. The teeth were vital and asymptomatic. This case study demonstrates a technique for posterior restorations using *Beautifil II* composite on a high-risk caries patient.

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Procedure

The existing, inadequate restorations led to the development of secondary caries. Local anesthetic was administered and an absorbant cheek pad was used for isolation.



Fig 1 Pre-operative view of teeth #2 and #3

After removal of the existing restorations and secondary caries, a *Composi-Tight Gold (Garrison Dental Solutions*) sectional matrix band and clamp, along with a wedge were placed. *FL-BOND II* primer was applied for 10 seconds and air dryed. *FL-BOND II* bond was applied for 10 seconds, thinned with air, and light cured.



Fig 2 Caries removal



Fig 3 Sectional maxtrix in place

Using *Beautifil II*, an initial layer of B2 shade was placed into the preparation, sculpted, and cured for 40 seconds. A second increment of shade B2 was applied, sculpted into place, and cured for 40 seconds. A final layer of Enamel shade was then sculpted onto the tooth and cured for 40 seconds. After occlusion was verified, the final occlusal contour was achieved. Using an abrasive finishing point, the resin received a final polish.



Conclusion

Fig 4 Final restorations

Beautifil II composite has proven to be a good restorative choice when the benefits of a glass ionomer (fluoride release and recharge) and composite (esthetics and polishibity) are desired. The restored teeth demonstrate that good esthetics can be achieved in the posterior region when using this restorative material.