

**Introduction:** Restoring a single discolored tooth in the anterior region and achieving ideal esthetics is a demanding task and a clinical challenge for the dental practitioner. Tooth discoloration can be caused by various reasons including intra-pulpal hemorrhage, dental trauma or endodontic treatment and can be confronted with different treatment plans. Home or in-office bleaching for vital teeth and internal bleaching for non-vital teeth, should be the first choice of treatment, being the least invasive techniques. However, if a bleaching procedure cannot be implemented or has been applied without a satisfactory outcome, other conservative options should be considered, such as resin composite or ceramic veneers. Resin composite veneers have been established as one of the most commonly used restorative options due to their improved mechanical and surface properties, ability to accurately emulate the natural dental characteristics in a direct manner. Composite resins have inherent limitations in their opacification ability, especially when increments are very thin. Thus, in order to match the chromaticity of the adjacent teeth, the use of opaquers can be suggested. Opaquers are highly pigmented resinous materials, containing metal oxides that are responsible for their potent opacification ability, characteristic hue and saturation. Thin layering of opaquers and/or tints can mask the discolored substrate and enhance the biomimetic appearance of the final composite veneer, especially when it comes to minimal tooth preparation. The purpose of this e-poster is to illustrate the clinical steps of a minimally invasive, direct approach to anterior single tooth discoloration with the aid of resinous color modifiers.

**References :** 1. Felipe LA, Monteiro S Jr, Baratieri LN, Caldeira de Andrada MA, Ritter AV. Using opaquers under direct composite resin veneers: an illustrated review of the technique. J Esthet Restor Dent 2003; 15(6): 327-36.

2. Kim SJ, Son HH, Cho BH, Lee IB, Um CM. Translucency and masking ability of various opaque-shade composite resins. J Dent 2009; 37(2):102-7.

3. Paolone G, Saracinelli M, Devoto W, Putignano A. Esthetic direct restorations in endodontically treated anterior teeth. Eur J Esthet Dent 2013; 8(1): 44-67.

## CASE 1



Fig. 17. Discolored #22. Frontal view



Fig. 18. Discolored #22. Lateral view



Fig. 19. Initial smile. Frontal view



Fig. 20. Initial smile. Lateral view



Fig. 21. Shade selection



Fig. 22. Digital processed contrast and brightness in order to highlight chromatic characteristics of the tooth.



Fig. 23. Preparation of the tooth for composite veneer. The old resin was partly removed.



Fig. 24. Assessment of the depth of the preparation (0.5-0.7 mm)



Fig. 25. Application of opaquer at the cervical part (Pink Opaquer, Cosmedent USA)



Fig. 26. Use of a flat painter's brush for the uniform application of the opaque (Da Vinci, Series 374, Flat No. 4)



Fig. 27. Application of dentin shade and shade modifier at the cervical part (Ice and Chroma Effect Shades, Inspiro, Edelweiss, Switzerland)



Fig. 28. The enamel layer was reproduced with A1 Enamel shade (Filtek Supreme Ultra, 3M ESPE AG)

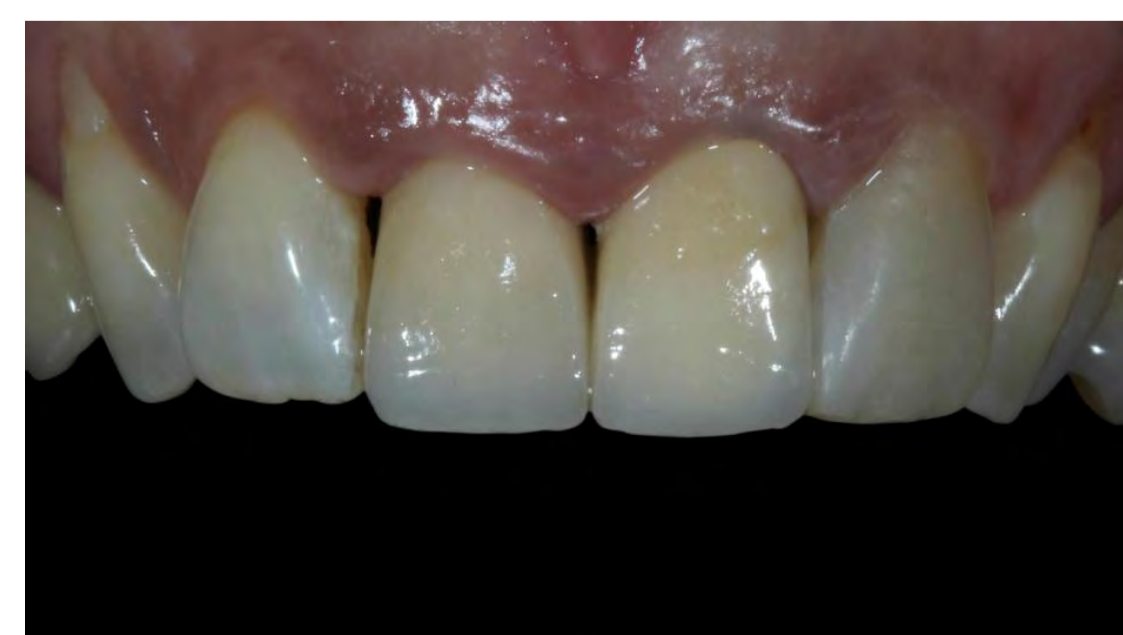


Fig. 29. Final frontal view



Fig. 30. Final lateral view



Fig. 31. Final Smile. Frontal view



Fig. 32. Final smile. Lateral view

## CASE 2



Fig. 1. Discolored #11. Frontal view



Fig. 2. Discolored #11. Lateral view



Fig. 3. Initial smile. Frontal view



Fig. 4. Initial smile. Lateral view



Fig. 5. Shade selection



Fig. 6. Digital processed contrast and brightness in order to highlight chromatic characteristics of the tooth.



Fig. 7. Opaquer application (Ice and Chroma Effect Shades, Inspiro, Edelweiss, Switzerland)



Fig. 8. Use of a flat painter's brush for the uniform application of the opaquer (Da Vinci, Series 374, Flat No. 4)



Fig. 9. View of the second layer of the photopolymerized opaquer



Fig. 10. Stratification of A2 body dentin shade and formation of lobes (0,5mm) (Filtek Supreme Ultra, 3M ESPE AG)



Fig. 11. Reproduction of the halo effect with translucent shade and blue tint (Venus, Heraeus Kulzer, Hanau, Germany)



Fig. 12. Reproduction of the enamel layer with A1 Enamel shade (0,3 mm) (Filtek Supreme Ultra, 3M ESPE AG)



Fig. 13. Final frontal view



Fig. 14. Final lateral view



Fig. 15. Final smile. Frontal view



Fig. 16. Final smile. Lateral view