Replacement of a faulty posterior restoration

By Sushil Koirala, Nepal

A 21-year-old male patient presented complaining of sensitivity and mild pain when chewing on tooth #36. During examination, an underfilled tooth with poor marginal seal and marginal discoloration was visible. The peri-apical radiograph indicated secondary caries.

After careful removal of the faulty composite restoration, the cavity was treated with the fluoride-releasing bonding system Fil-Bond II and restored with Beautifil Flow as a base and Beautifil Fluoride-releasing materials (all Shofu). Effect colors were used on the occlusal surface to mimic the adjacent tooth.

The main challenges in this case were the removal of the faulty composite restoration with minimal intervention of the healthy tooth structure and the mimicking of the occlusal anatomy and proper shade.

Masters of Aesthetic Excellence: 34th Annual ASDA Conference

The 34th Annual ASDA International Aesthetic Dental Conference was held at the JW Marriott Hill Country Resort and Spa in San Antonio on Oct. 20-23. The conference brought together top leaders in aesthetic dentistry.

Speakers and presenters included: Dr. Irwin Smigel, Dr. Paul Belvedere, Dr. George Kirtley, Dr. Robert Lowe, Dr. Hamid Shafie, Dr. Lawrence Hamburg, Dr. Marvin Fier, Dr. George Freedman, Dr. Howard S. Glazer, Dr. Robert Weller, Adrian Jurim, MDT, Dr. Fay Goldstep, Dr. Marvin Fier, Dr. Jack Griffin, Chuck Maragos CDT, Jenny Wohlberg, CDT, and Dr. Dan Ward.

A hallmark of the conference was the daily hands-on participation workshops presented by Masters of Aesthetic Dentistry.

The conference embodied three complete days of lectures and workshops. Lunch and Learn sessions enhanced the presentation of new products and treatments. An impressive Thursday evening ceremony included the induction of nine new members, fellowship to Dr. Paul Landman, and the induction of Dr. Jordan Soll to the American Board of Aesthetic Dentistry.

The presentation of the coveted Smigel Prize to Dr. Seok-Kyun Kim by NYU Assistant Dean Ken Beacham highlighted the evening. The conference concluded on Saturday evening with the 34th annual gala dinner/dance in which ASDA members playing as the “Irwin Smigel Experience” rocked the attendees with their performance.

The ASDA is the oldest esthetic society and was established in 1976 by Smigel, who envisioned the growing interest of the public in esthetic dental procedures. Conferences have been held yearly to train and motivate dentists to provide the best treatment for their patients. The conferences are unique for their comfortable size, their warm and nurturing atmosphere and the open interaction and sharing among the members.

About Dr. Irwin Smigel, DDS

Smigel has been regarded for years in
He is perhaps the most respected dental professional of our time. Smigel introduced the first-ever cosmetic bonding procedure in 1979 on the nationally televised, hit TV show, “That’s Incredible,” demonstrating how easily and painlessly people could beautify their smiles in as little as one visit to the dentist. At that very moment, in front of 50 million viewers, Smigel put the specialized field of dental esthetics on the map.

Smigel’s contributions to the field of dental esthetics are vast. He founded the ASDA in 1978, of which he is the current president, and in June 2009 Smigel was officially recognized by the Smithsonian Institution in a permanent installation called “The Smile Experience,” a two-floor exhibit in Baltimore that pays homage to his contributions to the field of modern dentistry.

Smigel has worked on some of the most famous teeth in the world, from Elizabeth Taylor and Tony Bennett to Jennifer Lopez, Marc Anthony, Jimmy Fallon, Kelly Ripa, Johnny Depp and Justin Timberlake. His office is a regular beauty spot for the fashion elite, including Calvin Klein, Diane Von Furstenberg, Betsey Johnson, Jill Zarin and Tommy Hilfiger (and the list goes on and on).

He is the inventor of Supersmile® Intelligent Smile Care, a clinically proven collection of premium whitening, breath-freshening and cavity-fighting formulations designed to deliver the most comprehensive, safe and effective oral care.

Smigel was the first to create and patent a tooth-whitening formula, called CALPROX® — a proprietary form of calcium peroxide mixed with additional beneficial ingredients that work to dissolve the protein pellicle on teeth to which stains, plaque and bacteria adhere. Without this clear, sticky substance to latch onto, stains are brushed away, leaving teeth noticeably smoother and whiter. This ingredient allows for his whitening toothpaste to be the only formulation of its kind proven to remove stains on both artificial and natural tooth surfaces. Supersmile has had tremendous growth since it was originally developed in the early 1980s. The company currently generates more than $20 million globally and is one of the highest grossing whitening lines in the country.
Fig. 3: Isolation of tooth 36 with rubber dam.

Fig. 4: Application of self-etching primer on the entire cavity.

Fig. 5: Uniform application of bonding agent and subsequent light-curing.

Fig. 6: Application of a thin layer of flowable resin on the cavity floor.

Fig. 7: Application of flowable opaque (#UO) to mask the discoloration.

Fig. 8: Build-up of the dentin layer, obtaining occlusal anatomy.

Fig. 9: Build-up of the enamel layer and carving of the pits and fissures to achieve natural anatomy.

Fig. 10: Application of dark brown stain on the pits and fissures to match adjacent tooth 7, and light-curing.

Fig. 11: Checking the occlusal contact with articulating paper.

Fig. 12: Reduction of the high points with Dura White Stone #FL2.

Fig. 13: Note the restored anatomy comparable to the natural adjacent tooth.

Fig. 14: Restoration after finishing and polishing.

About the author

Dr. Sushil Koirala, VISA president, can be reached at skoirala@wlink.com.np.

This article first appeared in the Dental Tribune International magazine Cosmetic Dentistry: beauty & science, No. 2, 2009. (Photos/Provided by Dr. Koirala)