

Anatomy of a smile makeover

By Lorin Berland, DDS

Transforming less-than-perfect dentition into a stunning, superstar smile is a source of immense gratification for the cosmetic dentist. Cosmetic and restorative dentistry restores and improves the health and integrity of the patient's dentition and, just as importantly, can improve the patient's self-image. Today, to be truly cosmetic, dentists must be clinicians, artists, and communicators. To achieve success in all of these areas, the dentist must pay close attention to every detail, from initial patient consultation through treatment planning, treatment, and follow-up care.

In the past, failures of cosmetic cases were frequently due to inadequately meeting the patient's expectations. By utilizing new technology such as smile selection guides, cosmetic imaging, and temporization techniques — thus creating a "trial smile" — you can reduce this problem and greatly increase patient satisfaction.

In both the esthetic and restorative aspects of dentistry, the dentist is responsible for the patient's functional and appearance-related needs. However, successful treatment planning first involves listening to the patient's desires and concerns as you evaluate his or her needs, be it color, shape, or tooth position. To move toward building a successful case, you must identify the patient's expectations during

your diagnosis and treatment planning.

A pleasing, attractive smile can be attributed to the harmony of color, contour, size, occlusal plane, incisal edges, and midline with the patient's facial features. Often, this harmony can be achieved by treating just the four incisors, the key players in the smile zone. By enhancing their length, width, shape, and alignment, many times you can create a dazzling smile from imperfect teeth. The key to treatment success is creating the smile that the patient wants, not just what you would design. I have found computerized cosmetic imaging to be an essential tool to show patients how they would look with an improved smile — even before any treatment is begun. To maximize this tool, we allow patients to help design their smiles using Smile Shape and Length Selection Guides, and letting them visualize the final result. This generates much enthusiasm and excitement, which increases case acceptance, and facilitates the communication necessary to build a successful case right from the start.

Diagnosis

A 26-year-old female wanted a beautiful smile in time for her upcoming wedding. Tooth No. 9 (Figure 1), had been traumatized early in life and treated with root-canal therapy. It was now darkly discolored. The two centrals had large, unsightly white demineralization marks and were misaligned, mainly due to a space and size discrepancy. The short lengths of the two laterals accentuated the skinny, "rabbit-shaped" appearance of the central incisors, increasing the illusion of their incisal thirds being the same width as the gingival third. Furthermore, due to the malalignment and shape, the gumline was uneven with inflamed interproximal gingiva.

Smile Library and cosmetic imaging

Smile libraries are useful communication and cosmetic diagnostic tools. I place a copy of the Lorin Library Smile Style Guide (Figure 2) in the waiting room and in each operator to encourage patients to thumb through, even if the initial

goal of their dental visit is not cosmetic-related. For this cosmetic consultation, I helped the patient determine her own cuspid shape (pointed), then showed her (with close up-front and side views) the six variations of incisor shapes as they would appear with her natural canines. This step is invaluable for enabling patient participation in the smile design.

The next step is the selection of the relative incisal length from the four variations presented in the Smile Style Guide. In this case, the patient found Smile Design #LL12 (square/round centrals, square round laterals) and Length Code No. 4 (long centrals). We then took a full-face digital picture and used it along with her smile guide selection to simulate her proposed smile makeover using our in-office digital imaging system (Digital Dentist). Using a digital smile library enables dentists or dental assistants to simply drag-and-drop the chosen smile design into their patient's portrait images, allowing quick and effective imaging to be completed in minutes while the patient waits. Digital imaging used with a properly formatted digital smile library provides a quick and easy way to improve diagnosis and treatment planning, increase case acceptance, and provide enhanced dentist/patient/laboratory communication.

The Lorin Library Smile Style Guide displays 18 smile designs that provide a visual aid for smile shape selection. The digital version is used for cosmetic imaging. The Lorin Library enables the dentist to guide the patient in the selection and design of the appropriate smile. Used with or without cosmetic imaging, such smile libraries can provide a powerful tool in case presentation, increasing patient acceptance and satisfaction.

While our patient was having her teeth cleaned, my assistant simulated her new smile, demonstrating how whitening and the selected smile design would look on the portrait photo (Figure 3). At the end of the appointment, we gave the patient a current photo and a cosmetically enhanced smile printed on photo-quality Kodak paper. This visual aid not only allowed the patient to envision



Figure 1 (above)

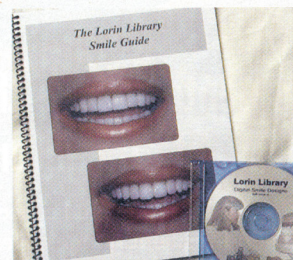


Figure 2 (above)



Figure 3 (above)

herself with straight, perfect white teeth, but also enabled her to share it with friends, family, and her fiancé! She was now anxious to get started to achieve the improvements shown in her smile-enhancement photo. Treatment began with whitening her teeth, and would be followed by inserting a bonded post in the endodontically treated tooth No. 9, and placing porcelain restorations on the four maxillary incisors.

Whitening

In order to achieve her most natural whiteness before continuing with the cosmetic treatment, the in-office Rembrandt and Lightening Plus whitening system was used. We first placed a cheek retractor and protected her soft tissues with a liquid rubber dam. The Rembrandt hydrogen peroxide whitening gel was then applied, and the DenMat Sapphire Xenon Power Arc light with the dual arch whitening crystal was positioned over the teeth to activate the gel for 20 minutes. This

Dr. Lorin Berland has built an international reputation for his expertise in cosmetic dentistry. He has developed an exclusive cosmetic and family dentistry practice in Dallas, Texas. Dr. Berland dedicates his practice to informing and educating his patients and colleagues about cosmetic dentistry, regularly sharing his skills and techniques in seminars and lectures with dentists who travel to see him from around the globe. Dr. Berland, a board-certified cosmetic dentist, is also a Fellow of the American Academy of Cosmetic Dentistry. For more information, log on to www.dallasdentalspa.com or call (214) 999-0110.

