

In the early days of esthetic dentistry, the majority of porcelain laminate veneers were placed without too much thought about the surrounding gingival tissues. Patients came to us interested in improving their smiles, and to most of us, that meant improving the appearance of the teeth.

GINGIVAL RECONTOURING

In general, periodontal surgery, and specifically, crown lengthening, were thought to be strictly posterior procedures. For decades, the gingiva was thought of as a place to "hide" a metal margin. However, as we started to evaluate before-and-after photos of our veneer cases, it became clear that we not only needed to pay attention to the gingiva, but that we needed a predictable way to sculpt the tissue to achieve the optimal esthetic result desired by the patient.

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Gingival Crest Levels

The world's best-looking veneers cannot make up for a situation in which the clinical crown lengths of the central incisors are off by 1 mm as a result of the difference in gingival crest levels. Patients would often say that one central looked "shorter" than the other central incisor at the try-in appointment, and many dentists would check the incisal edge position of the centrals and tell the patient that the teeth were the same length. In reality, the patient was perceiving the difference in length of the clinical crown, and before we began recontouring gingiva, the only place to adjust the length of the tooth was at the incisal edge.

Gummy Smiles

Today, we realize that there is much more to the pleasing esthetic smile than just the teeth, and Drs. Rosenthal and Jacobs demonstrate this dramatically. In fact, I have always noticed that the most stunning before-and-after esthetic changes tend to be those where there has been some degree of gingival recontouring done, as in the gummy-smile case. A patient who expresses dissatisfaction with their smile, saying that his or her teeth are too short, may, in fact, be complaining of a gummy smile.

It bears repeating that even a perfect set of veneers cannot save an esthetic case in which the excess gingival tissue has not been adequately dealt with. On the other hand, correcting the gingival problems to ideal can make up for less-than-perfect veneers because of the dramatic difference in the gummy smile. One of the reasons we still love before-and-after albums is that they allow us to show patients how and why gingival recontouring can make all the difference in the world.

Composite Stents

When we realize that the patient will require a substantial amount of gingival recontouring to satisfy both mine and the patient's esthetic requirements, we will often have our lab make a composite stent for us at the new gingival level and shape. In other words, I will draw a line on the study model indicating where the new gingival heights and contours

are expected to be. The lab then builds a facial composite stent that goes to the new outline, and then we try the stent into the patient's mouth to evaluate the new length for our teeth.

When the gummy-smile patient smiles with the stent in, he or she can immediately see how nice it will look to show more tooth and less gingiva. For our use and the patient's, we will often take a picture of the patient smiling with the stent in. If a periodontist is going to be doing anterior crown lengthening for you, send him or her the composite stent to try it on the teeth during surgery to verify where to position the gingival margins.

Minor Recontouring

If a minor amount of gingival recontouring needs to be done, we will often perform this procedure on the prep date and use the direct provisional technique to bring the margin of the provisional veneer to the new gingival margin, which helps keep it in place during the 2 weeks of provisionalization. A simple case would be 1 mm to 2 mm of reduction with no violation of the biological width, so that no osseous recontouring would be necessary to achieve the wanted gingival outline.

If we perform the recontouring, we add that fee into the overall case fee, although it would usually average about \$150 per tooth. If the recanting is done by a periodontist, it is preferable to have that procedure done 3 to 4 weeks before the prep date to allow the gingival tissues to heal completely at their new levels. You may need to still do some very minor adjustments at the prep date with either an electrosurge or a diode laser.

Importance of Gingival Levels

There are few among us who can look back at many of our veneer cases and see results that were compromised because little to no attention was paid to the gingiva. And although some dentists might find it disturbing, I have enjoyed the few occasions where a patient decided not to get veneers after having the gingival recontouring done at the periodontist simply because an increase in clinical crown length was the main esthetic concern. Those cases, although few and far between, have always reinforced in my mind how important gingival levels are to overall cosmetic success.

CONCLUSION

When having your lab do the diagnostic wax-up for you veneer case, be sure to let them know about your plans to perform gingival recontouring, or they will be forced to add any necessary length to the incisal edge. The difference between ideally sized centrals with minimal gingival show and beaver-like centrals growing from 4 mm of excess gingiva can truly make all the difference in the world. ■



Michael C. DiTolla, DDS
Private Practice
Los Alamitos, California
Phone: 714.995.6611
Fax: 714.633.9647
E-mail: docmike222@aol.com

Dr. Michael DiTolla practices in two locations, both of which emphasize esthetic dentistry and orthodontics, an essential component of esthetic dentistry. He is a nationally recognized lecturer on practice management for esthetic practices, and he serves on the editorial board of Contemporary Esthetics and Restorative Practice. He also lectures regularly for P.A.C.-live, a hands-on esthetic program allowing dentists to treat live patients.