

Introducing the SmileBOND treatment option for cosmetic smile enhancement.

by William C Vuillemot, D.D.S.



1 Treatment visit

- Little-to-no tooth grinding
- Long-lasting





Overview

As dentists, we need to keep abreast of all available treatment options, so we may guide our patients to choosing the best method and material for their case.

This paper presents a cosmetic and functional dental restoration process that results in a beautiful and permanent smile enhancement. The treatment preserves the patient's natural teeth, is usually completed in a single 2 to 3 hour treatment visit, and requires little-or-no anesthetic or tooth grinding.

Branded "SmileBOND", this patented treatment has been successfully performed on over 500 patients over the past 8 years with very favorable patient feedback.

In this paper you will learn:

- How the SmileBOND process works
- Treatment indications for SmileBOND
- Recent technological advancements enabling the treatment
- Why patients are choosing SmileBOND over other restoration options
- Three patient case studies
- How to offer SmileBOND in your practice upon completion of a one-day training course

Introduction

Millions of Americans are unhappy with the appearance of their smiles. For some this results in negative self-consciousness, shame and insecurity, while for others it can reach a point of debilitating anxiety.

When individuals who are dissatisfied with the appearance of their smiles go to the dentist seeking help, they are usually presented with 3 smile enhancement options:

Bleaching



 \triangleright

Porcelain Crowns/Veneers

Orthodontics

Despite the relief that these solutions would provide, many dental professionals report that approximately 4 out of 5 patients will say "NO" to these treatment options for 3 main reasons:

- **COST:** Placement of 6-10 porcelain veneers is very expensive and not feasible for many patients.
- **TIME:** Braces or clear aligners can take from several months to over 2 years just for straightening of the teeth. This treatment does not improve the color or shape of individual teeth, and relapse is very common.
- **FEAR:** Grinding down of the teeth to have crowns placed is a "deal breaker" for many patients. They abhor the thought of having their teeth "ground down to pegs". Furthermore, crowns and veneers are not repairable; when damaged after placement, they require full replacement.



What is SmileBOND?

SmileBOND is a patented cosmetic smile enhancement process that allows dentists to improve the size, shape and color of their patient's teeth, with excellent accuracy and speed, using a patient-specific bonding shell to quickly and reliably deliver state-of-the-art bonding composites rather than porcelain veneers, crowns, or orthodontics.

The patient's original tooth structure is preserved, the results are permanent, reparable, (and reversible if ever need be), and the restored teeth are can be cleaned and flossed as normal.

Unlike "freehand" direct tooth bonding, which is a time consuming procedure that produces varied results depending on the practitioner, SmileBond enables any dentist to quickly and reliably deliver a predetermined ideal natural smile.

Key to the SmileBOND method is a patient-specific bonding shell. This bonding shell, customized to each individual patient by the SmileBond Lab, captures every detail of an ideal smile design and allows the dentist to quickly and reliably deliver bonding composites to the teeth, resulting in a long lasting, beautiful smile.

The process is as follows:

Step 1: Records visit at dental office

The patient reports to the dentist for the records visit. Using the tools and materials provided in the SmileBOND Records Kit, the dentist takes baseline impressions of the patient's teeth and sends the polyvinyl impression to the SmileBOND Lab for workup (the initial models may also be scanned and sent via 3D digital scanner).

Step 2: Custom "bonding shell" created at SmileBOND Lab

The SmileBOND Lab makes a corrected model of the patient's teeth from the baseline impressions. Damage like chipping, wear or abrasion will be corrected to appear as an unworn, natural tooth structure. Spacing and rotations will be eliminated, and the smiling teeth will be enhanced for Golden Proportion and pleasing arch form and symmetry. The custom bonding shell is fabricated over the corrected model. The bonding shell is then sent back to the dental office along with the SmileBOND Treatment Kit, which contains all the supplies needed for the dentist to perform the procedure.

Step 3: Treatment visit at dental office

The dentist prepares the patient's teeth, places the shell over the teeth, and delivers the composite in a procedure akin to injection molding. The visit typically lasts 2-3 hours including breaks, and rarely is there need for anesthetic or tooth drilling. The result of this single treatment visit is a beautiful, long-lasting natural smile.





Treatment indications for SmileBOND

SmileBOND is indicated for cases where the patient is unhappy with the color, size and/or shape of the teeth, where damage and/or wear or tear has occurred, or where orthodontic alignment is not ideal, yet the teeth are not broken down enough to require full or partial coverage crowns.

There are many cases where the use of porcelain crowns or veneers might seem like "overtreatment". Often patients present with front teeth which are in good shape; few if any fillings, little wear or tear, decent occlusion and periodontal health. Yet there may be issues with tooth color, size, shape, proportion and/or alignment which the patient would like improved or corrected.

SmileBOND is an ideal option for these cases, because very little reduction of existing tooth structure is needed and the patient benefits from immediate results.

In Summary, SmileBOND is indicated for:

- Improvement to tooth shade, and/or consistency of shade, where internal or intrinsic stain is not a factor
- Improvements to size and shape and proportion of the "smiling teeth" (#5-12)
- Improvements to orthodontic problems like spacing, rotations, and buccal/lingual torque.
- As a smile enhancement option for patients who will not proceed with work due to cost, time or fear related to traditional offers like porcelain crowns and veneers, or orthodontics.

SmileBOND is not indicated for:

- Severely worn dentition due to problems with clenching or bruxism. Careful exam of the dentition and study of the patient's health history and medications are essential for case selection. SSRI medications are a contraindication due to their reported contribution to bruxism in some users.
- Moderate or severe tooth discoloration due to tetracycline or fluorosis.



Important Improvements in Adhesive Technology

The chemistry and properties of adhesive dental bonding processes have improved steadily over the past 30 years. As late as the 1990s, dental bonding composites were self-cure products, which worked much like epoxy glue. A base color paste, and accelerator were mixed together, and held in place in the matrix for several minutes, until the curing reaction was complete ¬- making use in dental applications very challenging.

However, over the last several years, advancements in composite technology have made tooth bonding a compelling candidate. For example, light curing gives the dentist high control and produces instant and stable results. Improvements in filler particle size and type have produced composites with increased strength and polishing properties.

Today, state of the art products exist which approach the properties of ceramics. Once polymerization is complete, all resin is completely bound with the filler, creating a more ceramic like restoration.

Advances in dentin bonding, including discovery of how to form a predictable hybrid layer, have led to a rapid increase in the number of composite restorations delivered compared to amalgam.

SmileBOND Alternatives

An alternative to using the SmileBOND process is to perform direct tooth bonding "freehand" or by flowing or packing the materials over the teeth using sculpting and carrying instruments. This technique tends to be laborious and time consuming. Depending on the placement, curing and finishing processes, results are unpredictable and may vary greatly from dentist to dentist.

Clear matrix systems are available, offering some improvement to freehand placement. The shapes of the matrix forms are for the most part all similar, resulting in a somewhat unnatural appearance of the restorations.

Another disadvantage of matrix systems and the "freehand" approach is that the dentist can never guarantee to the patient what the final appearance will be.



Why Do Patients Choose SmileBOND?

For comprehensive smile enhancement, the central incisors, lateral incisors and cuspids must be altered to a pleasing size, shape and color. Very often, the 1st bicuspid teeth must be modified as well to enhance lip support. Making significant changes to one of these teeth necessitates changing all of them to match. Costs can quickly add up, making porcelain out of reach for many.

A typical fee for a SmileBOND restoration is roughly ½ that of porcelain, so the affordability of SmileBOND makes comprehensive smile enhancement available to a much broader population of patients.

Delayed gratification is a significant barrier to treatment for many patients, especially when faced with the prospect of unsightly and uncomfortable brackets and wires used for orthodontics. While clear aligners can eliminate the need for metal braces for some, the idea of many months of treatment and multiple trips to the dentist's office is a significant barrier. The fact that orthodontics cannot enhance the color, or change the size or shape of the teeth, and that retainers must be worn indefinitely after treatment, causes many patients to seek alternative options.

When discussing treatment plans with patients, a surprisingly common concern expressed is: "I don't want my teeth ground down to pegs...". Fear of the drilling necessary for porcelain smile enhancement is a serious obstacle to proceeding with treatment for many otherwise willing patients.

SmileBOND is an additive process requiring little to no tooth grinding, complete results are delivered in a single 2-3 hour treatment visit that requires little-to-no anesthetic, and results last a life-time.

This is a welcome relief for many prospective smile enhancement patients. Many who have already decided against porcelain, clear aligners and orthodontics will eagerly proceed with the SmileBOND restoration. In addition, because composite bonding materials blend well with tooth enamel, most composites have enough opacity to enable shade enhancement as well.

Another plus with these restorations is that they are repairable. If the work is damaged or stained, the area can be re-bonded with the original color and blended in very nicely.

Case Studies

V Sarah

Sarah presented with spacing and diastemas due to extensive tooth/arch size discrepancy. While self-conscious of the appearance of her smile, her teeth and periodontium were in otherwise excellent condition.

Orthodontics was not a good option, because moving the teeth together would not solve the problem of small individual teeth, and relapse would be a lifelong risk. She was not interested in porcelain crowns and veneers, both because of cost, and she was reluctant to have her teeth drilled down during preparation.

When made aware of the SmileBOND option, she was intrigued. When we showed her a work up model showing her teeth with pleasing size, shape and form with all diastemas closed, she was very excited and scheduled right away. Upon completion of the upper teeth, she decided to go ahead with a similar restoration of her lower anterior teeth as well.

Here are Sarah's before and after images:



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Dianne's career involved sales and constant interaction with the public. Her complaint was that her teeth looked a little "worn out" and she wanted a "bigger, brighter smile".

Her teeth were in excellent condition. We had already obtained photos and models from a previous records visit and SmileBOND provided a corrected model of her "smiling teeth" showing Ideal Natural Form[™]. She was very pleased with the workup and booked treatment.

Here are Dianne's before and after images:





Most patients interested in cosmetic smile enhancement will choose to brighten the shade of their smile, but some are happy to match or just slightly enhance the existing shade of their teeth. Randy was one such patient. A shade of bonding material 1 level lighter than his natural shade was chosen. The bonding blends in very nicely with the natural teeth in the cervical 1/3s. Randy was very happy with his choice!



Here are Randy's before and after images:

One-day Training and Certification

The SmileBOND clinical technique is taught in a one-day training course. This program combines lecture, case studies, lab work with models, and then treatment of an actual patient during an afternoon over-the-shoulder demonstration. This single day training confers 7 hours of CE credits for attending doctors and staff members. Certification is granted upon completion of the one-day course. Once certified, the dentist will be able to offer SmileBOND as an option to their patients and will be able to deliver the treatment.



SmileBOND Systems, L.L.C.



For information about upcoming training courses, go to the Doctor page at <u>www.smilebond.com</u>