

'Growing Enamel' — Revisited

By David L. Hoexter, DMD, FACD, FICD
Dental Tribune US Editor in Chief

One of the dental field's biggest esthetic priorities, after restoring and preserving health, is enhancing the smile. In 1995, *Dentistry Today* published an article I wrote about a technique I developed, which I called "Growing Enamel." The phrase is erroneous, of course, because, after enamel is formed, it does not grow. But this technique creates an image of it doing so. In the years since the article was published, the concept has been copied in articles and books on cosmetic treatment techniques without reference or recognition. However, imitation or replication is a great form of flattery.

When I wrote the article "Growing Enamel," it was during the early days of a groundswell of esthetic awareness of the mouth, which resulted in the adoption of various oral esthetic techniques and treatments. As a periodontist, I concentrate on the background of a smile to enhance the desired foreground — the appearance of a glowing smile.

Even, symmetrical and appealing

The maxillary anterior teeth are the most visual and the crux of the smile. First impressions are formed here. What we want to see is bright, white, symmetrical teeth; but most teeth fall somewhat short of this desired illusion. When viewed closely, the natural incisal edges are obviously not even. The lateral incisors' edges are usually slightly shorter than the central incisors' edges. The cuspids' shapes are not entirely level to the incisors and typically of a different shape altogether. The technique "Growing Enamel" helps create the image of an even, symmetrical and appealing smile.

There are many causes of an imperfect smile. Perhaps there was an accident that resulted in the breaking of an incisal tooth. Perhaps an anterior tooth changed color. Perhaps incorrect shading was used with an anterior restoration. Virtually anything that changes the desired illusion of a clean, bright, symmetrical flow, might be the culprit. We need to remember that the actual average natural size of the central incisor is 11.5 mm gingival-to-incisal height with an average 9 mm mesial-distal distance.

'Growing Enamel'

The "Growing Enamel" technique is the manipulation of the periodontia when the tissue is such that it distorts the visual appearance of the visible teeth. There must be no loss of supporting alveolar bone, and there must be a healthy zone of keratinized gingiva.

Of vital importance is the preservation of the inter-

proximal tissue. The keratinized interproximal tissue may be manipulated vertically, but the interproximal tissue must be preserved. There is no new blood supply interproximally, so the area, if removed, will show an undesirable dark interproximal space referred to as a "black diamond." The resulting final image should end with a healthy zone of attached keratinized, pinkish-white gingiva forming a background to the desired size and shape of the anterior teeth. Using a form of the apically repositioned flap, with healthy tissue as the esthetic goal, the "Growing Enamel" technique serves as a vital approach to achieving a maintainable smile desired by both the patient and the practitioner.

What it's not

The technique "Growing Enamel" should be part of the esthetic surgeon's choices of techniques. Techniques such as "crown lengthening" imply the exposure of more tooth structure by removing surrounding tissue and bone. "Growing Enamel" relates to the exposure of only the anatomical crown, which too often is covered by hyperplastic or excessive gingiva, preventing natural esthetic properties from being emphasized.

Terms such as "gingivectomy" or popular words such as "sculpting" are just references to removing hyperplastic tissue. There is no definitive desired goal except removing excess tissue, and there is inconsistency when there is no uniform and desired goal. Sometimes the removal of tissue can result in root exposure or inconsistent proportions of tissue that distort the smile.

A definitive surgical technique such as "Growing Enamel" avoids the recession possibilities and adds predictability to the desired symmetrical background.

Case study

In this example case, a 19-year-old woman wanted a beautiful smile she could be proud of (Fig. 1). Initially, she presented with bleeding gingiva, but after a series of non-surgical treatments, which included oral hygiene instruction, the bleeding ceased.

Her #7 appeared to not look clean, with a worn, stained restoration labially. It also appeared short in height. The centrals had a square appearance, not the length of a normal appearing incisor, but shorter and not streamlined. The cervical line was irregular, the cuspids being higher and the centrals irregular and lower.

Using the "Growing

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Fig. 1: Before, patient wanted a nicer smile. Photos/ Provided by Dr. David L. Hoexter



Fig. 2: Periodontal tissue repositioned sutured with sling suture technique.



Fig. 3: Healed periodontia. Enamel exposure full and natural. Tooth #7 restored.



Fig. 4: Patient loves and is motivated to care for her new, bright, symmetrical smile.



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IADFE to meet during GNYDM

International Academy for Dental Facial Esthetics 21st annual meeting is Nov. 27

The International Academy for Dental Facial Esthetics (IADFE) holds its 21st annual meeting with the Greater New York Dental Meeting on Monday, Nov. 27.

The convocation of awarding fellowships will be held at the historic house designed by Sanford White, which today is called the Harmonie Club, 4 E. 60th St. (between Fifth and Madison avenues.)

The ceremony will begin at 6 p.m. Last year's commencement speaker was the always popular Dr. Gordon Chistiansen, who presented to a packed audience.

This academy is a blend of dentists, physicians and other professionals involved in enhancing facial esthetics. Last year's meeting included participants from more than 28 countries. The ceremony concludes with the academy's traditional cap tossing in celebration of the awarding of fellowships.

To learn about the IADFE, contact Dr. David L. Hoexter at (212) 355-0004 or drdavidlh@gmail.com or Dr. George Freedman at (905) 513-9191 or info@iadfe.org.

(Source: IADFE)



From left, IADFE 2016 leaders and honorees Dr. J. Massad (United States), Prof. E. Lynch (United Kingdom), Dr. G. Christensen (United States), Dr. N. Nogoro (Japan), Dr. G. Freedman (Canada), Dr. D.L. Hoexter (United States) and Dr. J. Ochoa (Peru). Below: The traditional tossing of mortar boards to celebrate newly conferred fellowships. Photos/ Provided by Dr. David L. Hoexter



'Raising the Bar' at Yankee Dental Congress

Yankee Dental Congress 2018 (Yankee) will be held from Jan. 24 to 28 at the Boston Convention & Exhibition Center. Yankee, which is known as New England's largest dental meeting, is sponsored by the Massachusetts Dental Society, in cooperation with the dental societies of Connecticut, Maine, New Hampshire, Rhode Island and Vermont.

Nearly 27,000 dental health professionals and guests from around the U.S. are expected to attend the 2018 event.

The theme of Yankee 2018 is "Raising the Bar." According to meeting organizers, this theme exemplifies how dental professionals can find innovative continuing education opportunities for clinical development in the dental field to grow the profession for the future.

Among the education highlights, Yankee has teamed up with Pride Institute and Tufts University Dental Continuing Education to offer a nine-day practice management continuum program. The program will kick off with a two-day event at Yankee beginning on Wednesday.

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Yankee is again bringing recent legislation efforts to the forefront with the "Interprofessional Symposium: High Stakes — Medical Marijuana Pitfalls and Considerations." This program will illustrate how dentists and the dental team need to be aware of the treatment considerations for medical and recreational marijuana users. This symposium will broaden attendees' understanding of marijuana and how it impacts patients.

The new "CE RECHARGED" program offers continuing education like no other, meeting organizers say. On Thursday, Planmeca USA will immerse attendees in digital technology, and Henry Schein Dental will explore how innovations and concept modifications shape skills and treatment-planning solutions.

On Friday, the team that produces Dentsply Sirona World will present Digital Summit 2018, where attendees will experience live-patient dental education. Successful cone beam computed tomography (CBCT) and ethical patient education with more world-renowned

speakers will end the week brought to attendees by KaVo Kerr.

Along with more than 300 C.E. and hands-on courses and events presented by leading experts in the dental profession, Yankee is bringing together dental peers and industry experts for a day of sharing programs and clinical practices. The "Yankee FAST TRACK: Enhance Your Practice, Boost Your Revenue" program will demonstrate strategies for cost effectiveness and practice enhancement.

Yankee also features a wide range of the latest dental technologies and products from more than 450 exhibitors, along with several education pavilions located on the exhibit hall floor.

Special presentations include Olympic medalist Nancy Kerrigan, as well as best-selling author Michael Patrick Macdonald, a leading activist and organizer who has developed gun buyback programs and local support groups for survivors of poverty, violence and the drug trade.

For registration and details, visit www.yankeedental.com or call (877) 515-9071.

(Source: Yankee Dental Congress)

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Enamel" technique, I locally numbed the area with lidocaine. A sharp blade incising intrasulcular was done, followed by an elevator to reflect the flap. Before any surgery, radiographs — in conjunction with probing of all areas of the periodontia — were taken, detailed, listed and used. Repeating a major point: No interproximal tissue was removed.

The tissue was now placed at the desired level, usually at the symmetrical cervical height. Using the cuspid cervical height, in this case, the laterals and the centrals were positioned and sutured with a sling suture technique (Fig. 2) at the desired symmetrical level. Notice that the natural length of the incisors are exposed, but not the roots. The interproximal tissue is maintained to avoid the previously mentioned black-diamond appearing spaces that result when the interproximal tissues are removed. Notice the now exposed full enamel covering of the

teeth involved, giving the length of the teeth the exposure required for the goal of "that smile" (Fig. 3). After the final stage, the young woman was ecstatic about her new bright smile. Her #7 was restored with a composite restoration. She maintains her oral health enthusiastically with oral hygiene, keeping the now healthy anterior periodontia maintained. The homogeneous color of the gingiva is symmetrical in lateral and vertical dimensions. There are no dark spaces interproximal, and the cervical symmetry of the teeth aid her ability to enjoy her glowing smile. The previously square-appearing teeth, are now restored to a natural, longer-appearing crown length, with the cervical gingiva on an even, lateral-linear appearance.

This case presentation exemplifies the "Growing Enamel" technique and its ease of use when correctly diagnosed to turn an undesirable-appearing smile into a bright, glowing and symmetrical one that the patient will love and enthusiastically maintain.