INSIDE THIS ISSUE: Full-mouth rehab · Cybersecurity · Going fee-for-service

Dentaltown®

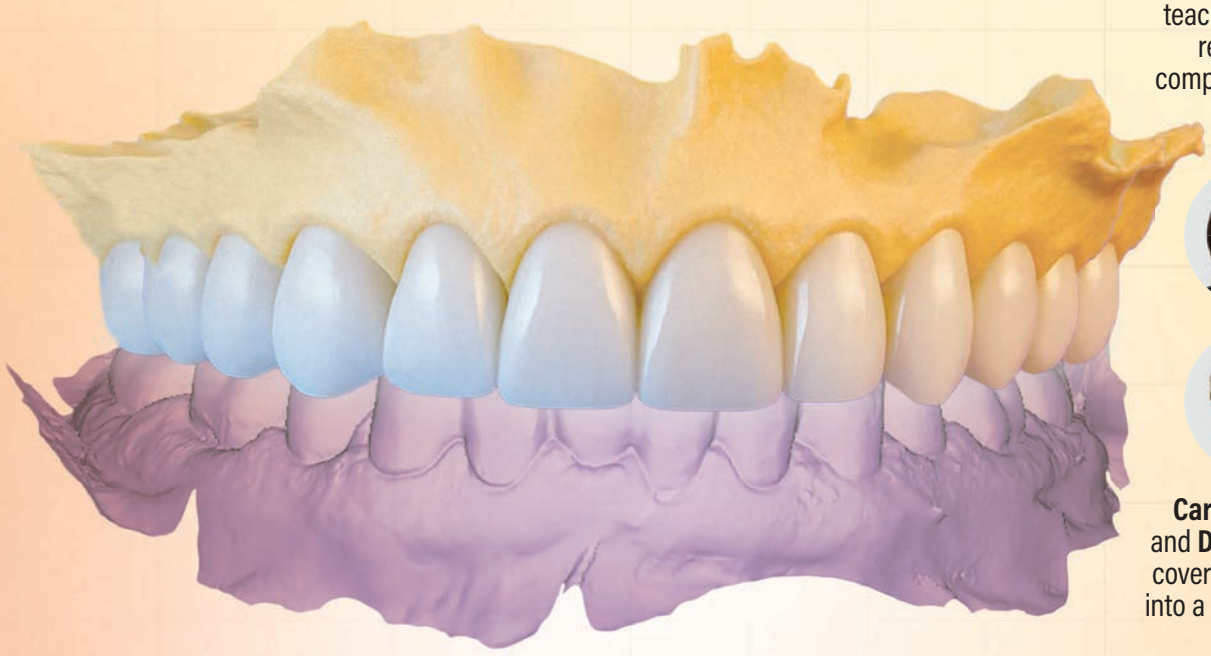
MAY 2025

REAL DENTISTRY FOR REAL DENTISTS

MAY 2025 VOL. 26, ISSUE 5

Dentaltown®

REAL DENTISTRY FOR REAL DENTISTS



CE COURSE

Dr. Leif Stromberg teaches accurate records for complete dentures

Carrie Webber and **Dru Halverson** cover the transition into a fee-for-service practice

Robert Niles outlines how practice owners can improve their cybersecurity

Tech-Driven Full-Mouth Rehab

Drs. Jarron Tawzer and **Joshua Nagao** showcase how once complex cases have evolved into more predictable, manageable and profitable opportunities for general dentists.

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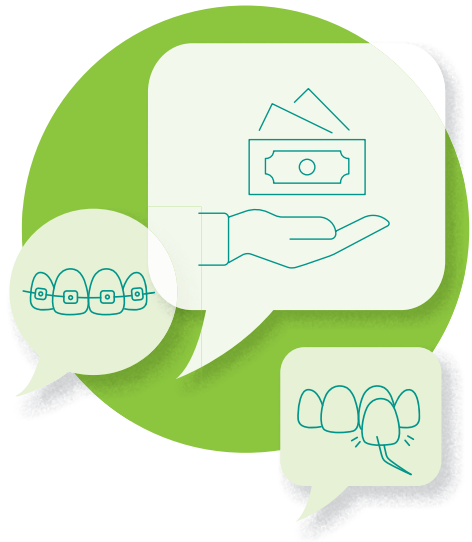

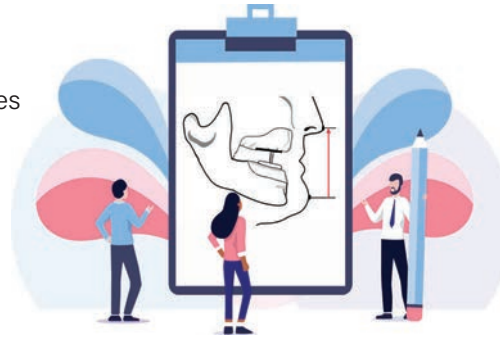

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DR. HOWARD FARRAN, DDS, MBA
Founder and CEO

Build Your Dental Career Outside the Operatory

BY DR. HOWARD FARRAN, DDS, MBA

Ever since we mailed out the first issue of *Dentaltown* magazine back in December 1999, I've used this Howard Speaks column to hammer home one key truth: Dentistry is a people business. Young dentists, listen up—your clinical skills alone won't guarantee success. You've got to get out of the operatory and into your community.

In dental school, you mastered molars and composites. Now it's time to master communication, leadership and networking. In my 30+ years of practice, I've seen time and again that the most successful dentists are those who engage with patients, peers and the public. In other words, if you want a thriving practice, you can't just fix teeth; you need to fix your attention on people. Communication isn't a "soft" skill. It's foundational to dentistry. As I've bluntly told dentists who struggle with case acceptance or staff issues on Dentaltown: "Buddy, you need to learn communication."

If you're a recent grad, odds are you spent the last several years buried in textbooks and labs, not working the cocktail party circuit. Dentists are often naturally introverted—you don't ace organic chem and anatomy by being class president. But to truly succeed in practice, you must communicate effectively with patients and staff. The good news is communication is a learnable skill. One of the best ways to learn it is by joining Toastmasters International, a public speaking club with chapters worldwide.

Everybody I know who's "in the people business" and at the top of their game has done Toastmasters. Up north, 95-year-old Canadian dentist Dr. Saul Yorsh has been a Toastmaster for decades and attributes much of his success to it. He encourages dentists to join Toastmasters to make "every word, gesture, smile and move count" in giving patients confidence.

Personally, I'll confess that my journey into public speaking was through a less traditional route: I dabbled in stand-up comedy. True story. I did open mic nights at comedy clubs to conquer my stage fright. It was terrifying at first, but it taught me to think on my feet. And guess what? It even brought me new patients. After a gig, people would ask, "Are you really a dentist? Can I get an appointment?"

When you can speak so people listen, you can present treatment plans that patients trust, calm anxious folks and motivate your team.

Serve and network

Now let's talk networking. Not the slimy, business-card-shoving kind, but genuine community connection. Joining civic service organizations like Rotary Club International, Kiwanis International or Lions Clubs International is one of the smartest moves a young dentist can make.

Dr. Gordon McInally, a dentist from Scotland, joined his local Rotary club in his 20s. He wondered how much difference "a dentist working in isolation in Edinburgh" could make in the world. McInally went on to become president of Rotary International (so yeah, dentists can lead far beyond their operatory walls!).

Kiwanis International is similarly impactful, with a special focus on youth. Joining a Kiwanis club might have you working on reading programs at local schools or fundraising. Imagine the connections you'll form by organizing a charity race alongside school superintendents or helping coach a youth sports team.

Then we have the Lions Club, an organization known worldwide for tackling vision and health issues. Becoming a Lion connects you with salt-of-the-earth community elders and leaders who have often been serving for decades.

The bottom line is that civic clubs offer a win-win: you're doing good for others and doing well for yourself. You'll build a reputation as the dentist who shows up for the community. When the Rotary president or the Kiwanis treasurer needs a new dentist, who do you think they'll call? **DT**

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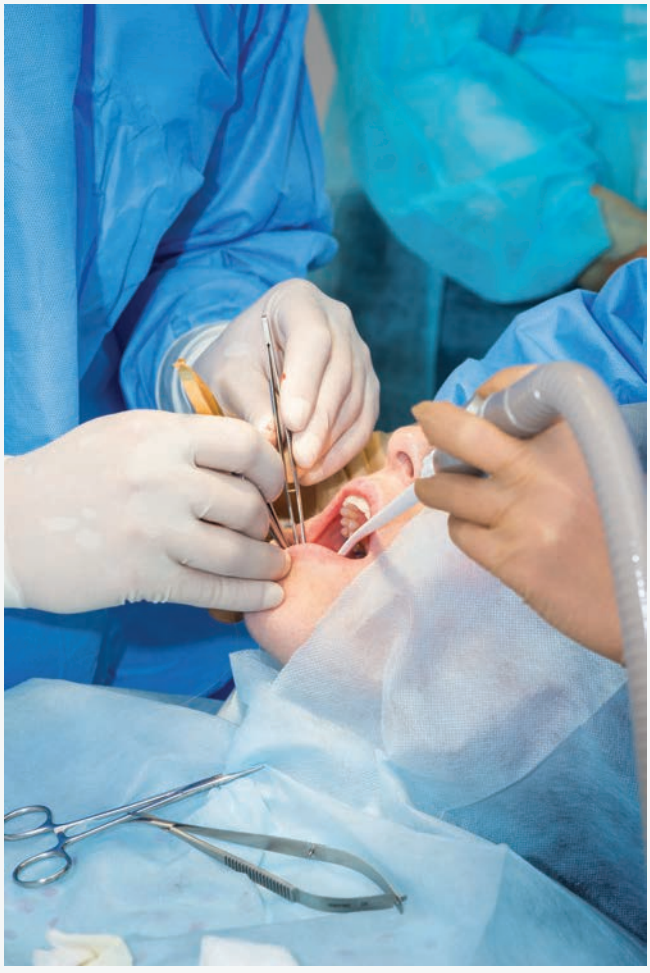

Practical Oral Surgery for the General Dentist
by Dr. Jay B. Reznick

This series will cover the basics of oral surgery for the general practitioner. The typical dentist's training in oral surgery is usually quite rudimentary, but in private practice, referral to a specialist may not be an option in every case. Yet, should a problem arise, general practitioners are held to the same standard of care as the specialist.

The 10 courses included in this series aim to increase the knowledge level and comfort zone of the general dentist when performing surgical procedures.

Topics covered include evaluation of the patient's medical history, management of the patient on anticoagulants, antibiotic prophylaxis, and informed consent, presurgical planning, local anesthesia, design and use of surgical flaps, handpieces and hand instruments, classification of third molar impactions, surgical techniques for impacted teeth, and management of the surgical site, biopsy indications and techniques, and management of complications. Many of the surgical techniques will be illustrated using video of the procedures discussed.

Long-term Single Implant Survival
by Dr. Zhouyu Ding

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by Dr. Leslie Hovda

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1. Friedman JW. The prophylactic extraction of third molars: a public health hazard. Am J Public Health. 2007 Sep;97(9):1554-9. doi: 10.2105/AJPH.2006.100271. Epub 2007 Jul 31. PMID: 17666691; PMCID: PMC1963310.
2. 2023.1.9 • Colgate https://www.colgate.com/en-us/oral-health/tooth-removal/when-surgical-extraction-of-teeth-is-necessary#
3. Mamoun J. Dry Socket Etiology, Diagnosis, and Clinical Treatment Techniques. J Korean Assoc Oral Maxillofac Surg. 2018 Apr;44(2):52-58. doi: 10.5125/jkaoms.2018.44.2.52. Epub 2018 Apr 25. PMID: 29732309; PMCID: PMC5932271.

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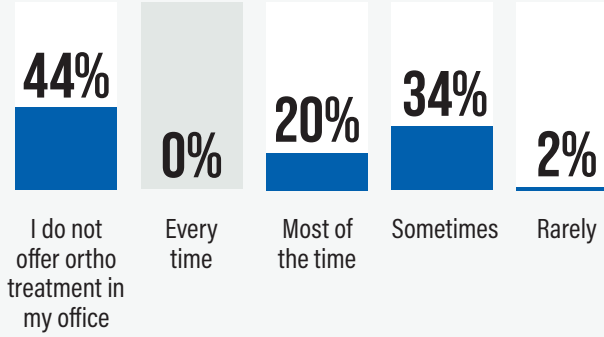
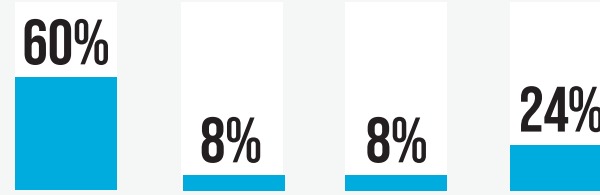
Dentaltown's monthly poll helps you see how other practices operate—what's working, what isn't—and how dentistry is evolving. This poll was conducted from March 25 to April 23 on Dentaltown.com.

Orthodontics and Sleep Dentistry

How often do your patients accept orthodontic treatment when it is presented to them?

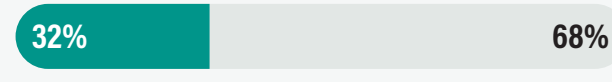


Which of the following clear aligner business models is most appealing to you?



How would you rate your interest in incorporating sleep dentistry into your practice?

Does your practice screen for sleep apnea?



Scan here to take this month's poll!

Hold your phone's camera over the QR code at left to go straight to this month's poll questions about practice management software. The final tallies will appear in the June issue of *Dentaltown* magazine.

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Digital-Analogue Hybrid Composite Smile Makeover

DrThomasSealey *Post: 1 of 24* 2/19/2025

Introduction

This case demonstrates a hybrid approach to a composite smile makeover using the accuracy of a digital planning and a stent system for delivery, in combination with the artistry of hand-layering.

Fig. 1: This is the presenting smile. Showing old composite restorations on teeth #6–10. Gum asymmetry and incisal edge cant/maxillary cant up to the left.

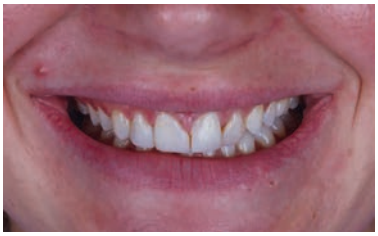

Fig. 2: This is the result at the six-week review following this hybrid approach to composite smile makeovers.

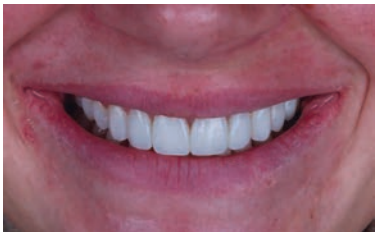

Fig. 3: I began by marking up the smile in the Windows Paint application to just explain to the lab what I was trying to achieve with this smile and the changes I'd like to make.

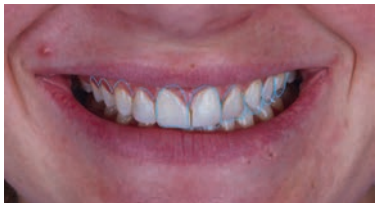

Fig. 4: The first stage was to plan the gum recontouring and balance the incisal edges by lengthening the teeth on the left and taking the gums up higher on the right. This was completed using SmileFast digital planning.

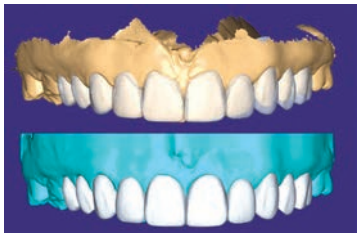

Fig. 5: A 2D and 3D overlay was created to show the patient the expected results and gain consent. This was followed by a trial smile based on the 3D model.

Fig. 6: On the day of preparation, the gums were lasered to improve their contour, raising the gum level on the right side only.

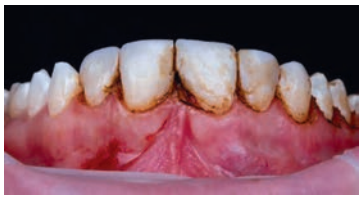

Fig. 7: The old composite was removed using a sequence of high-speed diamonds followed by Sof-Lex discs.

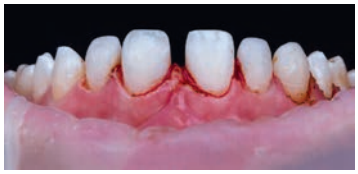

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Fig. 8: The Unica matrix from Optident was used to create the box shape and contour of the anterior four teeth. This created nice smooth emergence and shapes. A flowable was used first and then CO Venus Pearl packed in on the mesial and distal walls to create the box shape.

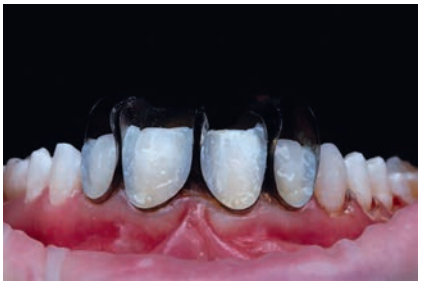


Fig. 9: This was then refined and sandblasted.

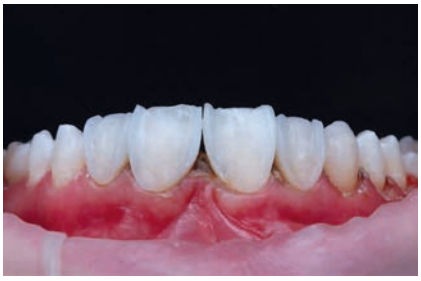


Fig. 10: The teeth were re-etched and re-bonded.

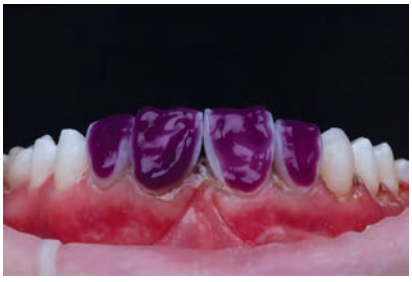


Fig. 11: Some internal dentine and effects were placed, using GC Essentia LD and IPS Empress Direct Trans Opal.

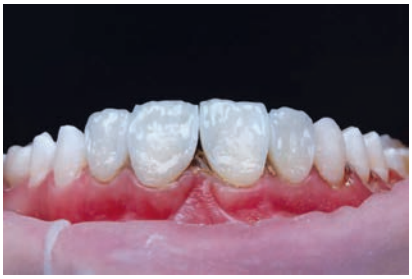


Fig. 12: All 10 teeth were then bonded, and some dentine was laid down on the teeth I planned to increase in size. I use a dentine layer (based on and guided by a putty stent of the final planned tooth shape) to build out the mass of the teeth first. If I were to just use enamel composite, the higher translucency would end up "greying-out" the teeth with thicker composite. The idea here is that the final enamel layer is roughly the same thickness across all teeth, to create a uniform final color.

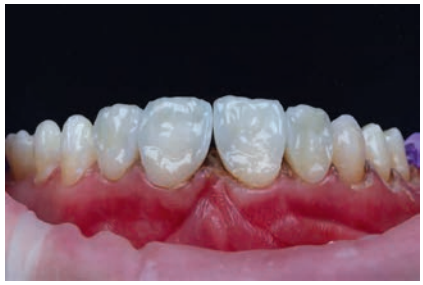


Fig. 13: The SmileFast Direct Stent was prefilled with IPS Empress Direct BL-XL enamel composite, heated and then placed onto all 10 teeth at the same time. This stent has separators between each tooth so you can restore all 10 teeth simultaneously.

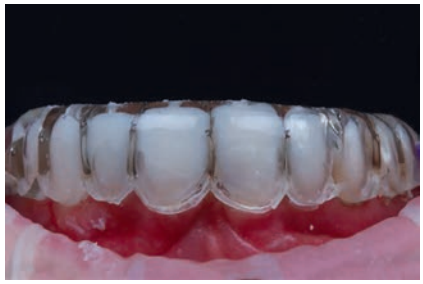


Fig. 14: On immediate removal of the stent, you can see perfect replication of the digital plan transported incredibly accurately across all 10 teeth, with minimal excess to clean up, and all completed at the same time.

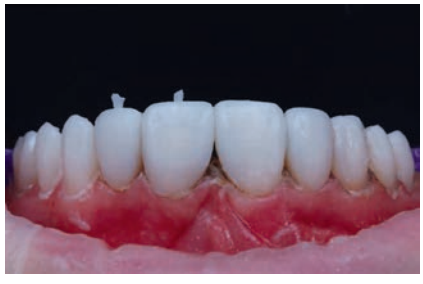


Fig. 15: After about 20 minutes, the teeth are finished and I'm happy with the provisional clean-up and polish. The patient will return in two weeks for the second stage.

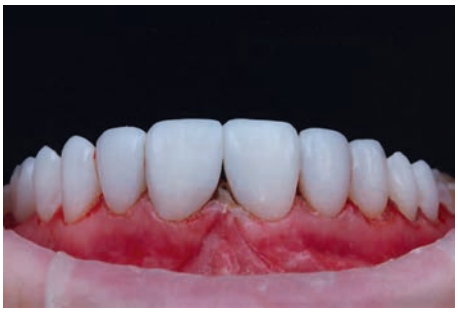


Fig. 16: At two weeks the patient returns and you can see the early healing of the gums. The teeth are now prepared for the second stage of treatment.

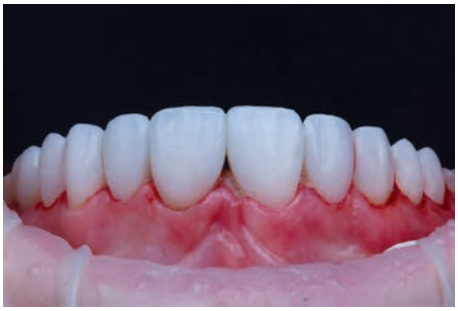


Fig. 17: I cut back into the restorations to create space for the incisal third effects. The restorations are sandblasted and etched, and a silane-containing bond applied.

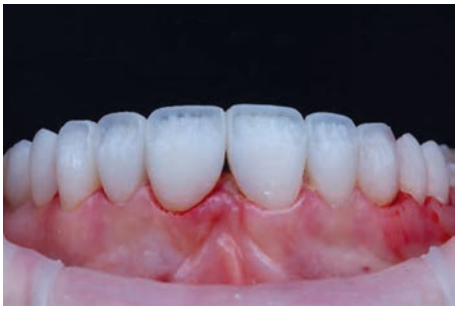


Fig. 18: Incisal effects are added with a combination of white opaquer, a blue hue clear and then a final layer of BL-XL to cover the facial.

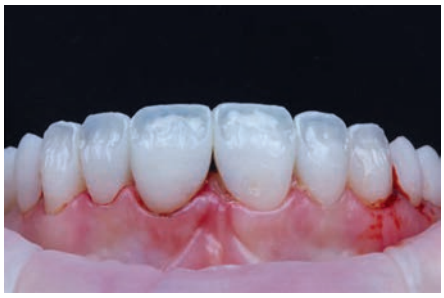


Fig. 19: The final review at six weeks shows the natural aesthetics and accuracy of replication of the digital plan to the final delivered veneer restorations.

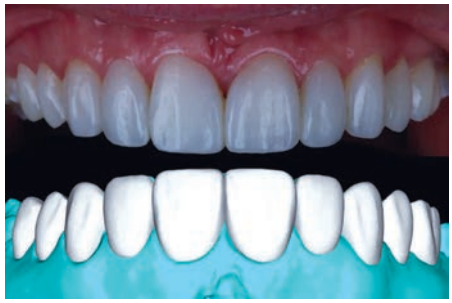


Fig. 20: Patient smile before.

Fig. 21: Patient smile after. Now showing a fuller and more balanced smile with correct symmetries.

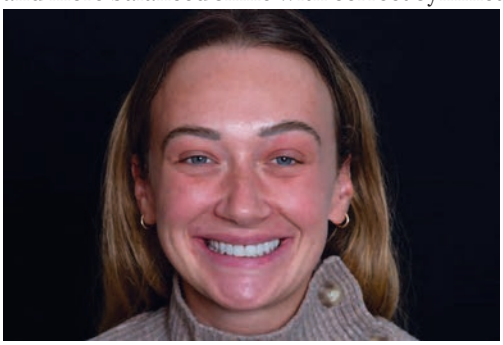


Fig. 22: Retracted view before.

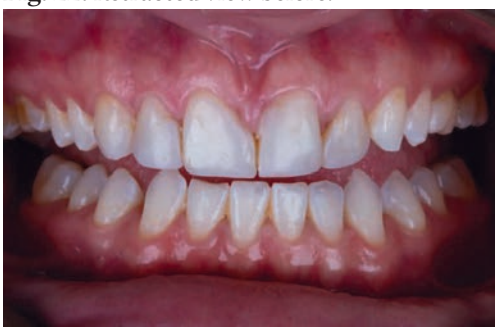
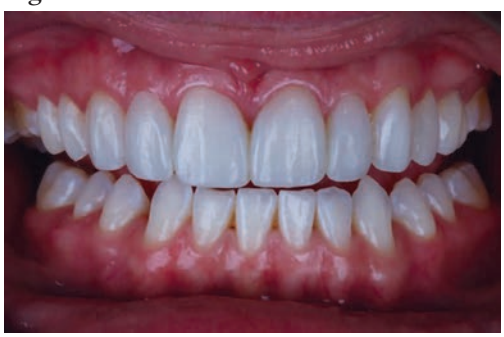


Fig. 23: Retracted view after.



Conclusion

By using the hybrid approach, I can retain the accuracy and the speed of delivery that is synonymous with the SmileFast stents, yet still create more natural aesthetics than the otherwise single-shade restorations that are usual to deliver. This approach works well for me and combines the best of both the digital and the analogue world of composite resin. ■

darce *Post: 2 of 24* 2/19/2025

Excellent case. I have been using SmileFast for a couple years now. Love the process. I have never tried to do a cut back to add depth and characterizations. Thanks for the inspiration! ■

shap *Post: 3 of 24* 2/19/2025

Great case. I had signed up for a class so I can start doing SmileFast but they were cancelled (I got a refund right away so thanks to SmileFast for that). But there were no more classes that I could get to. Is the seminar still required to use this system? Great job on those cases. Do you have any issues if the patient has tight contacts to seat the tray? Do the separators inhibit seating in this situation? ■

Neyb *Post: 4 of 24* 2/19/2025

Could you have done this case with just the composite loaded stent? From prep to stent? Skipping all those other individual matrices steps? ■

DrThomasSealey *Post: 7 of 24* 2/20/2025

SmileFast does a direct to doctor kit which allows you to learn the course and the technique from your own office. It's called the In-Office kit. Contact them on their website. The course dates are on there too and they're doing more dates with the Seattle Study Club, if you're a member.

Regarding tight contacts, I always run an extra-fine finishing strip between all contacts just to ensure that there's no tightness, debris, etc. But teeth move in the PDL so the way you wiggle the stent as you seat it allows the teeth to wiggle a little and the strips slide down passively. Once you remove the stent and the strips, the teeth bounce back and the contacts are tight again. ■

Why I Switched to EdgeOne Blaze Utopia

BY DR. DENISSE GOMEZ

As a dentist committed to excellence in endodontic care, I continually seek instruments that enhance both efficiency and patient outcomes. After extensive experience with WaveOne Gold files, I transitioned to EdgeOne Blaze Utopia from EdgeEndo and have observed notable improvements in clinical performance.

EdgeOne Blaze Utopia files exhibit superior cutting efficiency, allowing for more precise and swift dentin removal. This enhancement reduces chair time and minimizes patient discomfort. My successful cases have proven that these instruments possess favorable mechanical properties and improved my cutting performance.

The metallurgical characteristics of EdgeOne Blaze Utopia contribute to its flexibility and resistance to cyclic fatigue. These properties enhance the instrument's durability and reduce the risk of file separation during procedures. Although direct studies on EdgeOne Blaze Utopia are scarce, analyses of comparable instruments like EdgeOne Fire have demonstrated promising mechanical performance, which may translate to clinical advantages.[1]

In addition to clinical benefits, EdgeOne Blaze Utopia offers a more cost-effective solution compared to WaveOne Gold. This affordability allows practices to maintain high-quality care while managing operational costs effectively.

Incorporating EdgeOne Blaze Utopia into my practice has led to improved efficiency, safety and economic benefits.

I encourage colleagues to consider this system to enhance their endodontic procedures.

Reference

1. *https://www.jendodon.com/article/S0099-2399(22)00405-8/abstract*

Denisse Gomez, DMD, is a general dentist in Santa Cruz, California, where her practice offers general, preventive, restorative and cosmetic dentistry. Website: drgomezandsmith.com.

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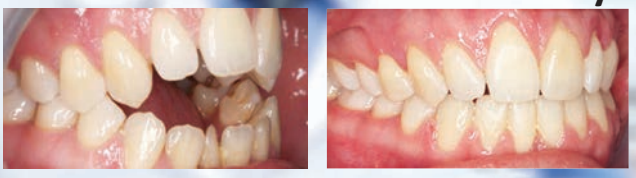

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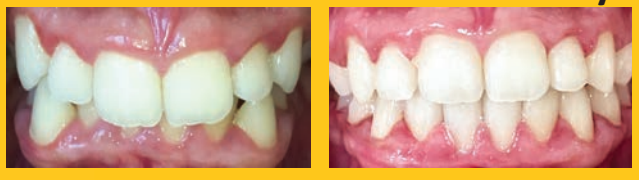

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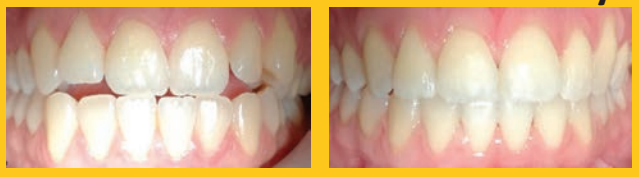

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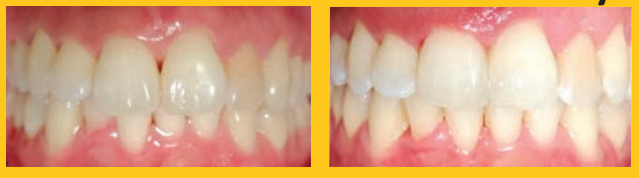

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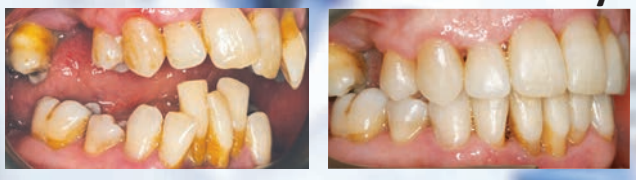

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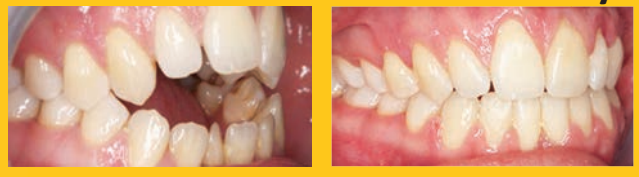

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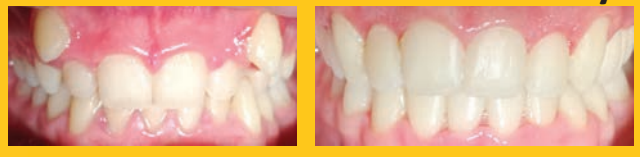

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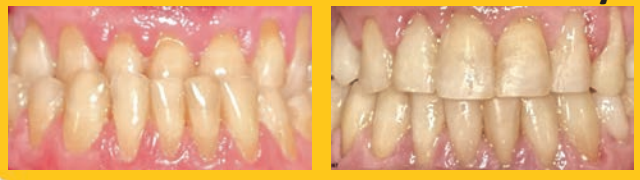

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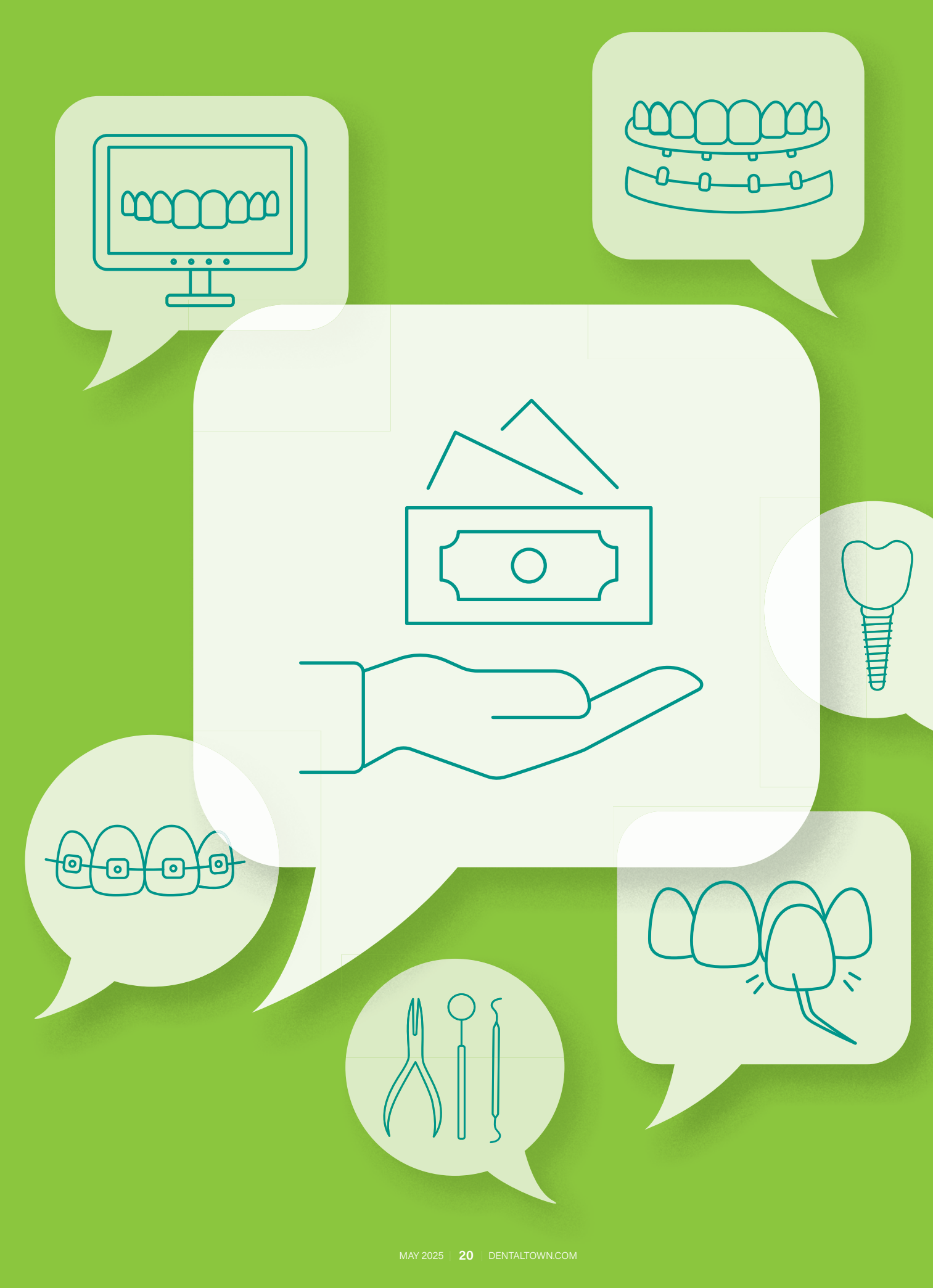

Beyond the Network

Key communication strategies for fee-for-service practices

BY CARRIE WEBBER AND DRU HALVERSON

Are you considering transforming your practice into fee-for-service? Now is the time to work diligently on your patient experience. Every interaction is key to building up your patients' perception of value.

It takes a confident, prepared and practiced team approach to communicating to patients with care while also executing a leveled-up patient experience that exceeds patients' expectations.

If your plan is to transition away from insurance involvement and into fee-for-service, it is important to plan ahead for a successful shift. Going out-of-network with plans includes proactively planning communication time and outlets with your patients. We suggest this can take six to 12 months when done well.

To support this shift, consider using multiple touchpoints to communicate with your patients. These can include in-person conversations during their appointments, written communication through letters and emails, and discussions over the phone. It's also helpful to communicate when scheduling appointments and to follow up afterward to ensure clear expectations for future visits. Additionally, use your social media platforms and website to share updates and reinforce key messages.

Practicing the verbal skills for these conversations long before they are necessary helps lay the groundwork for a smooth and successful transition. To have successful conversations with patients, the team must be clear on why the change is happening and the benefits of shifting to out-of-network, and be ready to engage in these patient conversations with competence and confidence.

> **You must know the truth of your current state of business so you make educated decisions for your practice's future.**

In-network vs. fee-for-service

If you are trying to determine the pros and cons of being in an insurance network vs. going fee-for-service, inspect what you expect. You must know the truth of your current state of business so you make educated decisions for your practice's future. Your current collections, accounts receivables and treatment acceptance numbers will show where your business is healthy and where it is struggling and needs stronger execution.

- **Are you tracking treatment acceptance over four months?** Aim for 85% treatment acceptance by month four.
- **Are you running aging reports?** Your accounts receivable total should be half of your monthly production, and it should be all current—not older than 60 days.
- **Are you monitoring write-offs?** Identify how much of your production is being written off because of non-reimbursement or bad debt.
- **Are you monitoring the maximization of patient financing in your practice?** A financing utilization report like CareCredit's "Activity at a Glance" can show you how many applications are coming from your practice and the status of the applications.

These numbers can help guide you on big decisions for your practice. They also drive home the need for strong financial options and collections processes in your practice.

Are you ready for fee-for-service?

Before you make the shift to fee-for-service, make sure you are in the right condition to do so.

Does your practice reflect excellence in customer service and in your patient experience? Patients may choose to move to a practice that takes care of their insurance billing, so customer service is more important than ever before in the fee-for-service model. Your internal processes and skillsets for delivering consistent excellence in these areas need to be sharp. Each team member can make or break the patient's relationship with the practice and their perception of value for treatment.

Does your team understand and confidently explain payment options?

Knowing this can be the largest barrier to treatment acceptance and completion, it is important you mention financing options early in the patient experience. You still want to make it convenient for patients to pay for care even though you no longer accept insurance benefits.

Are you practicing communication strategies regularly?

Your team should be comfortable discussing objections, finances and how insurance will be handled going forward. Role-playing these conversations improves outcomes. The intentional pursuit of continuous improvement separates the good practices from the great practices.

Introducing the insurance change

As you begin discussing with patients your change of relationship with their insurance program, make sure you address the positive aspects of the change. Know that the "why" is always the motivator of behavior. Stress the why in a positive way—not negative.

Remember, one of the key conversations you will have is when you are face to face with the insured patient at their next appointment. Be prepared, keep the conversation positive and be ready to stress the benefits of your practice, your dental care, your doctor and your team. Here are some two common scenarios:

ONE SIMPLE QUESTION

may help increase treatment acceptance.

"Do you have a CareCredit credit card?"

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1. "Mrs. Jones, we are changing our relationship with your insurance company. You may not notice much of a change. We can still file your claim with your insurance company; however, they will send you the insurance reimbursement. We will collect the total payment from you and the insurance company will send a check to you for their portion."
2. "Mrs. Jones, the amount an insurance benefit pays for a procedure is not based on how much the patient needs that procedure. The amount your benefits cover has little to do with the dentistry you need and more to do with the specifics of your benefits. Therefore, we have selected to go out-of-network with your plan."

Addressing cost concerns

Patient financing is a tremendous resource for patients to continue to move forward with recommended dental care while supporting the need to make it financially manageable.

Here are some examples that can be practiced and personalized to help address cost as a barrier to care when introducing patient financing:

1. "We work with a trusted third-party financing partner called CareCredit. With this option, you may be able to make monthly payment arrangements over time. This way we can help you fit the investment for your treatment into your monthly budget more comfortably. Many of our patients are using it and love it! Would you like more information about that?"
2. "Mrs. Jones, before I give you the results of my review of your treatment and what I'm recommending for you, let me tell you that if you have any concerns about the financing of your treatment, we have convenient, long-term options available right here in our practice."

Use active listening

"It sounds like you have some concerns about paying for your dental care."

"I can understand how you feel."

Offer solutions

"We have options available for patients to pay for needed and wanted dental treatment. Would you be interested in exploring third-party financing?"

"Are you aware of the varied options we have for you to get the dentistry you need and fit it within your budget?"

In the end, there are three key components of having a strong fee-for-service practice. First, give patients with insurance a reason to stay by delivering the best treatment and best service. Next, give your patients a variety of ways to pay for their treatment. Finally, get out of the way and give your patients the chance to say yes to the very best. That is the basis of a strong fee-for-service, patient-practice partnership. **DT**

Carrie Webber is owner of The Jameson Group, a dental management coaching and marketing firm. Webber is a contributing author to several publications and blogs on the topics of dental management, leadership, marketing, customer service and business development, as well as a popular speaker at dental meetings nationwide. She is a member of the Speaking Consulting Network and was named a Leader in CE by *Dentistry Today* for the past seven years. For more information on Webber and The Jameson Group, visit jmsn.com.

Dru Halverson, RDH, BS, has worked with The Jameson Group for more than 35 years and is currently the chief of Advisor Development where she leads the Jameson team of advisors and the streamlining of Jameson services to ensure great delivery and results every time for every client. She has proven herself as an effective advisor for dental practices nationwide in both the management and clinical aspects of the consultation experience.

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1. Jalalian E, Meraji N, Miraei M. A comparison of the efficacy of potassium nitrate and Gluma desensitizer in the reduction of hypersensitivity in teeth with full-crown preparations. J Contemp Dent Pract. 2009 Jan 1;10(1):66-73. / 0425037

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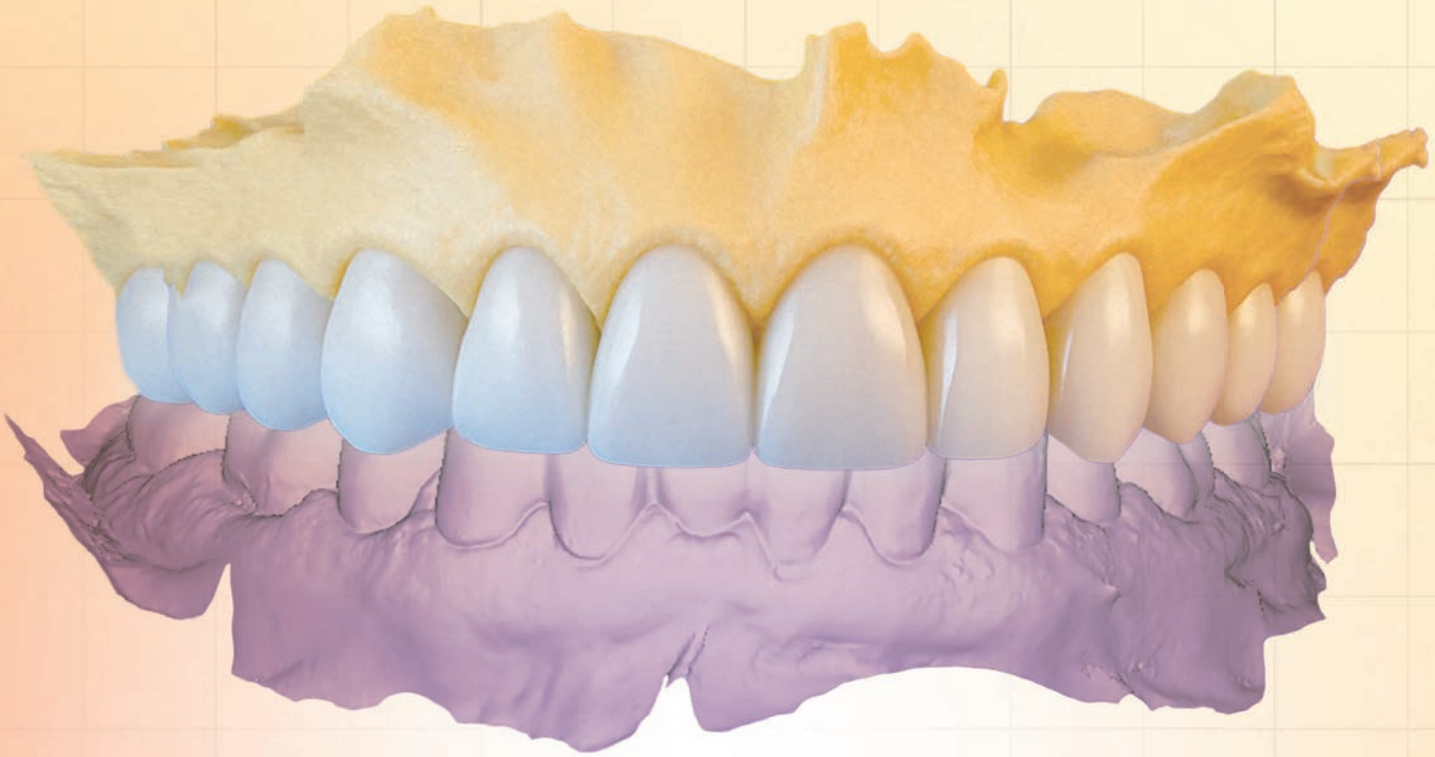


Tech-Driven Full-Mouth Rehab

BY DRS. JARRON TAWZER AND JOSHUA NAGAO

Introduction

Cases in dentistry involving multiple disciplines can often become overwhelming for the general practitioner, especially when they involve more complex treatment planning, modification of multiple biological structures and tissue types, and outlying the actual timeline of the treatment itself.[1] Luckily, over the last decade, technology has improved to the point where these cases can become much more predictable, easier to manage and, in the end, more profitable.

Full-mouth rehabilitation cases are some of the most complex of the above-mentioned treatments, as they can involve modifying gingival height, tooth position and vertical dimension of occlusion. The sequence of these cases and timeline of treatment is crucial in the overall success. New technology such as intraoral scanning, 3D printing, CBCT imaging, advancements in biologics and the ability to digitally design cases have made it so these challenging cases, which previously took many months to complete or were referred, can now be predictably completed. In this article, we will overview the treatment of a patient where complex, interdisciplinary treatment was achievable with the use of these technologies.

Patient presentation and history

The patient featured in this case is a 67-year-old-female who presented with a chief complaint of sensitive teeth. She had been using "remineralization liquid" to "help build her enamel back." Her health history showed a history of Stage 4 cancer and chemotherapy treatment and silent GERD. She found our office online, seeking an additional opinion on her dental needs. She had been to multiple dentists in the area who had given her a wide variety of different recommendations from, in her words, "anywhere from a couple crowns to implant dentures." Obviously, after hearing such differing treatment options, the patient was confused as to her actual dental needs and even the current condition of her teeth. Unfortunately, similar situations—where wildly differing clinical treatment recommendations are given—are common in dentistry and can make it difficult for a patient to know which treatment option is right for them.[2]

Initial assessment and treatment plan

A full series of radiographs and set of photos were taken on the patient before a comprehensive examination. This way she was able to see photos of her actual teeth as the recommended treatment was explained to her. The patient had a variety of existing dental problems (Fig. 1). One of the first things noticed was the gingival excess, or a gummy smile. This is likely a result of altered passive eruption[3] but creates the look of small, square, undersized teeth (Fig. 2). The second major issue was the cervical abfraction throughout the mouth. This is likely attributed to the patient's history of both cancer and dry mouth associated with treatment modalities, and functional habits such as clenching and grinding.[4] Other factors that were apparent when evaluating the patient's mouth were the excessive overbite of the upper teeth and lower teeth in occlusion, robust gingival tissue type, acceptable maxillary incisal edge position, and cant in the patient's lip line (Fig. 3).

After discussing all of the factors present, full-mouth rehabilitation was recommended with maxillary hard- and soft-tissue crown lengthening.[5] Because the patient had been made clearly aware of the condition of her teeth and the limitations and risks of other treatment options, she agreed to the full treatment plan presented.

Records appointment

The first appointment following consent to treatment was a records-gathering appointment. This time was used to acquire additional photos and intraoral scans, discuss treatment timeline, discuss shade and appearance of teeth, obtain written consent approval for treatment, and perform presurgical assessment for IV sedation.

It is important to note that the intraoral scans and bite records were taken in the desired vertical (open) position (Figs. 4 and 5). This position was established based on the amount of additional vertical dimension needed. The scans were taken with a leaf gauge placed between the anterior maxillary and mandibular teeth. Taking this "open bite" record is a more predictable way of ensuring proper occlusion in the printed temporaries, as opposed to virtually opening the bite via software, as it maintains the jaw relationship in vivo. It should be noted that one drawback of using a leaf gauge is the potential distalization of the mandible in the recorded position. One way to potentially increase

Fig. 1

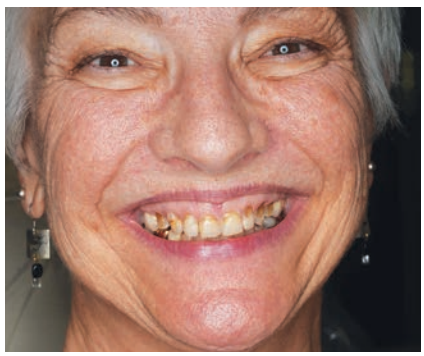


Fig. 2

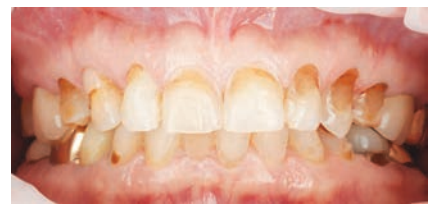


Fig. 3

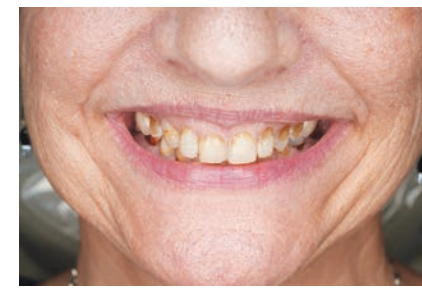


Fig. 4

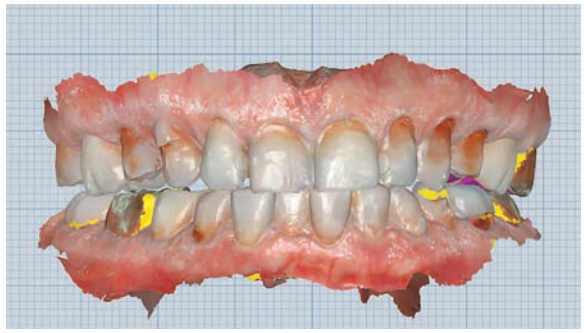
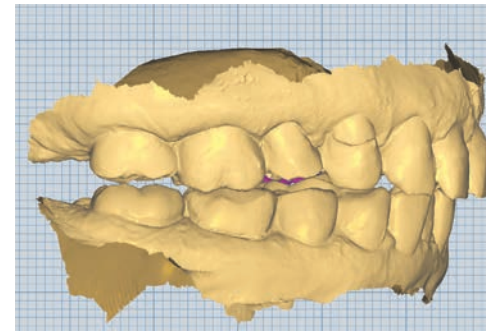


Fig. 5



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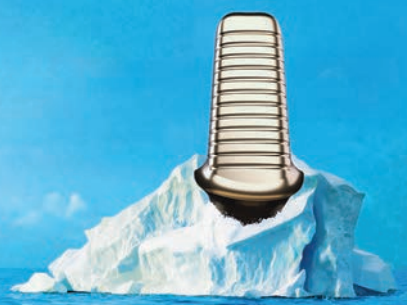

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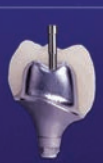

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the accuracy when opening the vertical is using a deprogrammer and digital functional tracing via equipment like Modjaw movement tracker or Zebris digital facebow by Amann Girrbach.[6]

Once these records were taken, proposed designs to be used for same-day printed temporaries were designed using Exocad. These preliminary designs can be done by the provider or clinical staff, or they can be outsourced to a lab and serve as a virtual wax-up of the case moving forward. These designs can be 3D printed for patient education or traditional bisacryl temporary fabrication if the provider does not have the ability to fabricate 3D printed temporary crowns in-office.[7]

Treatment timeline

Once the records were taken and temporary designs completed, the patient was scheduled for treatment of the maxillary arch. The patient was sedated for the procedure using IV Versed, fentanyl, Benadryl and Precedex. Gingivectomy was performed first to establish an appropriate gingival margin aesthetically (Fig. 6). The amount of removal was determined by the amount of gingival height reduction the patient needed in full smile.

Fig. 6

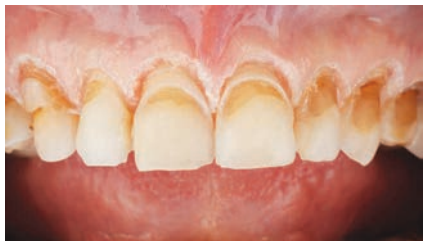


Fig. 7

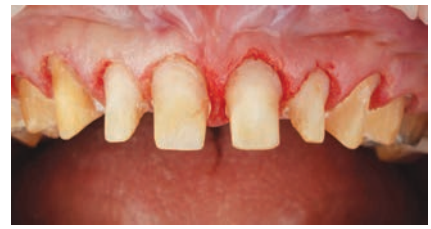


Fig. 8

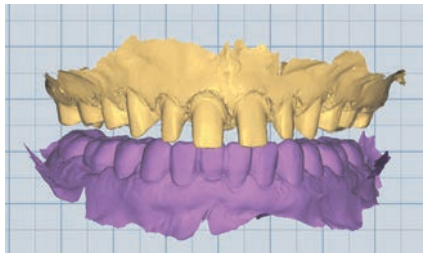


Fig. 9

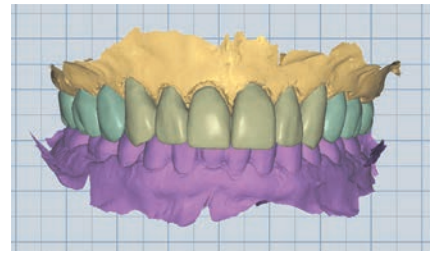


Fig. 10

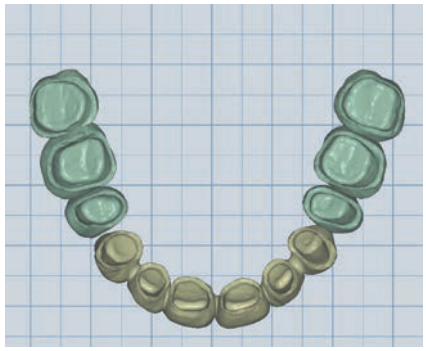
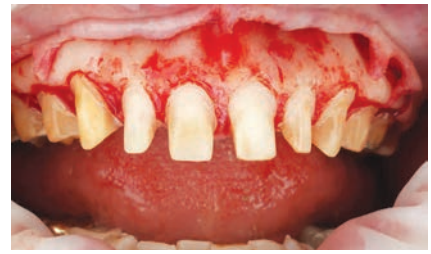


Fig. 11



Once the appropriate gingival margin was established, the teeth were prepared, leaving the margin of the crowns at the newly established gingival margin. Existing restorations and decay were excavated from the maxillary teeth before placing build-ups where needed (Fig. 7). The preparations were finalized, ensuring a path of draw could be established within sextants, as the provisionals were designed as splinted sextants.

A final prep scan was taken at this point for design/adaptation of the pre-design to the prepared teeth. This scan was merged into the previously taken records, where temporary crowns were designed at the planned open vertical (Fig. 8). While design and fabrication of the temporary crowns was being completed (Figs. 9 and 10) (3D printing in resin-ceramic, washing, curing and characterization according to the Sprintray printing workflow),[8] a full thickness flap was created to access the maxillary alveolus (Fig. 11). Hard tissue crown lengthening was then completed to ensure proper biologic width from the new margin. Alveolar shaping was also completed to reduce the overall bulkiness of the bone and improve the topography (Fig. 12).[9] Vertical sling sutures (6-0 PGCL) were placed to approximate tissues in place and maintain the vertical position of the tissue during healing (Fig. 13).[10] At that point, the provisional crowns were complete and placed with temporary cement (Fig. 14). Upon delivery, it was noticed that there was a significant cant in the anterior (Fig. 15). The patient was informed that the anterior temporary crowns (splinted 6-11 as seen in Fig. 16) would be replaced at her next visit (three days later). The design was immediately updated in Exocad and new,

Fig. 12

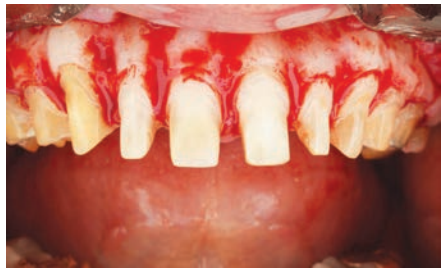


Fig. 13

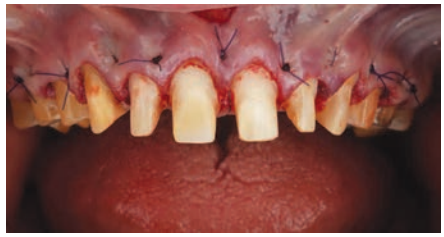


Fig. 14

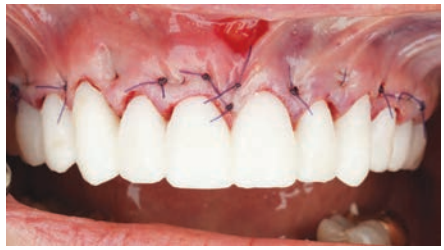


Fig. 15

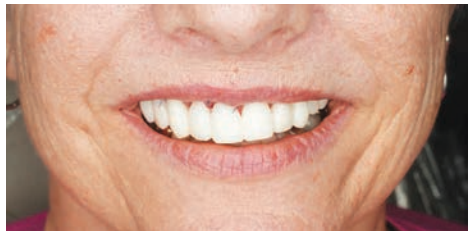
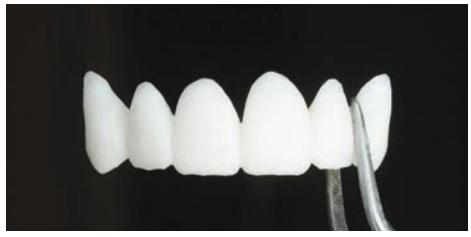


Fig. 16



uprighted temporaries fabricated to be delivered at her post-op appointment. The authors would note that the ability to quickly and affordably redesign and fabricate provisional restorations is one of the biggest advantages of in-office 3D design and printing.[11]

Fig. 17

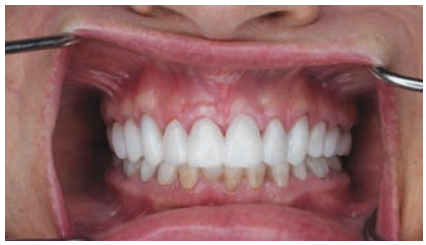


Fig. 18

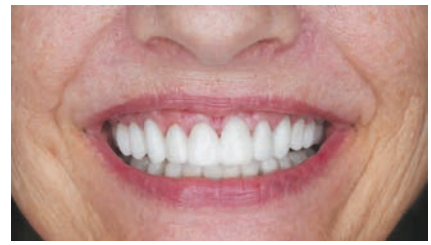


Fig. 19

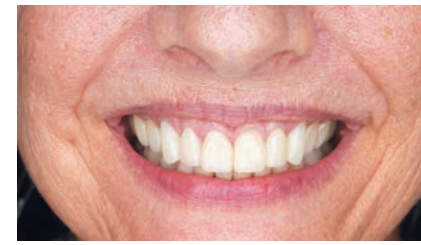


Fig. 20

The patient was seen again at two weeks post-surgery for suture removal and new photographs were taken of her updated provisionals (Figs. 17 and 18). A temporary occlusal guard, which had been designed and 3D printed in-office, was also delivered at this time.

The patient was seen two weeks after suture removal for preparation of the lower arch. The same sequence was performed for the lower arch with the exception of hard- and soft-tissue crown lengthening. The patient was allowed to function in the provisional crowns at the new vertical dimension for approximately six weeks to assess comfort and function of the new tooth height and jaw position. Minor occlusal adjustments were made during this time, and once an acceptable occlusal relationship was established, upper and lower scans were taken with corresponding bite so the information could be transmitted to the lab to maintain the current jaw and tooth relationship in the final restorations.

The restorations were fabricated out of high-translucency, multi-layered, milled zirconia. This material was chosen for its combination of strength, wear properties and its higher aesthetic characteristics compared to monochromatic zirconia.[12] The restorations were cemented with reinforced glass ionomer cement from GC America and the occlusion was minimally calibrated. Reviewing the patient's final restorations and result (Figs. 19 and 20) reveal the main goals of treatment were met. The gingival height was adequately improved, decay controlled, vertical dimension appropriately opened and an acceptable aesthetic result achieved.

This case highlights the transformative impact of integrating advanced dental technologies into complex full-mouth rehabilitation. By leveraging intraoral scanning, 3D printing and advanced imaging, what was once a daunting and lengthy process has been streamlined into a more predictable, efficient and aesthetically pleasing treatment outcome. The patient, previously overwhelmed by conflicting treatment plans, benefited from a clear, technology-driven approach that not only addressed her clinical needs but also enhanced her understanding and acceptance of the treatment process. This case underscores the potential of modern dentistry to not only restore function but also to significantly improve the quality of life for patients with complex dental issues.

As dental technology continues to evolve, the ability to achieve such comprehensive and precise results will undoubtedly become more accessible, setting new standards in dental care excellence. **DT**

References

1. *Minervini, G. Dentistry: A Multidisciplinary Approach. Medicina 2024, 60, 401. https://doi.org/10.3390/medicina60030401*
2. *Caplin RL. Dentistry - art or science? Has the clinical freedom of the dental professional been undermined by guidelines, authoritative guidance and expert opinion? Br Dent J. 2021 Mar;230(6):337-343. doi: 10.1038/s41415-021-2726-4. Epub 2021 Mar 26. PMID: 33772186; PMCID: PMC7995380.*
3. *Alpiste-Illueca F. Altered passive eruption (APE): a little-known clinical situation. Med Oral Patol Oral Cir Bucal. 2011 Jan 1;16(1):e100-4. doi: 10.4317/medoral.16.e100. PMID: 20711147.*
4. *Nascimento MM, Dilbone DA, Pereira PN, Duarte WR, Geraldeli S, Delgado AJ. Abfraction lesions: etiology, diagnosis, and treatment options. Clin Cosmet Investig Dent. 2016 May 3;8:79-87. doi: 10.2147/CCIDE.S63465. PMID: 27217799; PMCID: PMC4861607.*
5. *Guzman-Perez, G.; Jurado, C.A.; Azpiazu-Flores, F.X.; Munoz-Luna, H.; Afrashtehfar, K.I.; Nurrohman, H. Soft Tissue Grafting Procedures before Restorations in the Esthetic Zone: A Minimally Invasive Interdisciplinary Case Report. Medicina 2023, 59, 822. https://doi.org/10.3390/medicina59050822*
6. *Stafeev A, Ryakhovsky A, Petrov P, Chikunov S, Khizhuk A, Bykova M, Vuraki N. Comparative Analysis of the Reproduction Accuracy of Main Methods for Finding the Mandible Position in the Centric Relation Using Digital Research Method. Comparison between Analog-to-Digital and Digital Methods: A Preliminary Report. Int J Environ Res Public Health. 2020 Feb 3;17(3):933. doi: 10.3390/ijerph17030933. PMID: 32028674; PMCID: PMC7037659.*

7. Rizzante F, Bueno T, Guimarães G, Moura G, Teich S, Furuse A, Mendonça G. Comparative physical and mechanical properties of a 3D printed temporary crown and bridge restorative material. J Clin Exp Dent. 2023 Jun 1;15(6):e464-e469. doi: 10.4317/jced.60507. PMID: 37388428; PMCID: PMC10306384.
8. https://sprintray.com/oracle/uploads/2023/05/SprintRay-Workflow-Guide-Crown.pdf
9. Souza-Passaroni B, Vieira-Falabella ME, Mendonça-Falabella M. (2024). Aesthetic Crown Lengthening: Case Reports. International journal of odontostomatology, 18(2), 194-199. Retrieved Sept. 20, 2024, from http://www.scielo.cl/scielo.php?script=sci_arttext&pid=S0718-381X2024000200194&lng=en&tlng=en
10. Ronco V, Dard M. A novel suturing approach for tissue displacement within minimally invasive periodontal plastic surgery. Clin Case Rep. 2016 Jul 23;4(8):831-7. doi: 10.1002/ccr3.582. PMID: 27525096; PMCID: PMC4974440.v
11. Jain S, Sayed M, Shetty M, Alqahtani S, Dafer M, Wadei A, Gupta S, Abdulsalam A, Othman A, Alshehri A, Alqarni H, Mobarki A, Motlaq K, Bakmani H, Zain A, Hakami A, Sheayria M. (2022). Physical and Mechanical Properties of 3D-Printed Provisional Crowns and Fixed Dental Prosthesis Resins Compared to CAD/CAM Milled and Conventional Provisional Resins: A Systematic Review and Meta-Analysis. Polymers. 14. 2691. doi: 10.3390/polym14132691
12. Ahmed M, Malallah A, Hasan N, Sulaiman T. (2024). Translucent Zirconia: A Literature Review. Al-Rafidain Dental Journal. 24. 26-36. doi: 10.33899/rdenj.2023.143906.1228.

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Protect Your Practice

A dentist's guide to cybersecurity resilience

BY ROBERT NILES

Picture this: It's Monday morning, and you arrive at your practice ready for a busy day. But your computers won't start, and a message appears demanding millions in cryptocurrency to unlock your systems. Patients start arriving, your team is panicking, your schedule is full, but you can't access any patient records or imaging systems. Every minute of downtime is costing you money and patient trust.

Even worse, paying the ransom doesn't guarantee your patients' sensitive information wasn't stolen. Losing their trust because of a data breach could result in a devastating blow to your reputation—one you might never recover from.

This nightmare is becoming increasingly common in dental practices. In 2024 alone, health care providers faced 181 confirmed ransomware attacks, with dental practices increasingly targeted for their valuable data and limited security resources. The stakes are staggering:

- Average health care data breaches cost $9.77 million.
- Ransomware demands average $5.7 million, with actual payments averaging $900,000.
- Smaller practices can still face significant penalties. One dental group was recently fined $350,000.

The consequences of ransomware attacks extend far beyond the immediate monetary losses. For dental practice owners, the impact reaches into every corner of your business, affecting your operations, reputation and ability to retain and attract patients. Even practices with cyber liability insurance and backup protocols are not immune to the ripple effects of a breach. It's not just about recovering stolen data or paying a ransom—it's about rebuilding trust and restoring normalcy in the aftermath of a crisis. Beyond the immediate financial impact, a breach can devastate your practice through lost revenue during system downtime, damaged reputation and patient trust, costly forensic investigations and repairs, regulatory fines and legal expenses from HIPAA violations, long-term patient retention and attraction issues, as well as increased insurance premiums and potential coverage denials.

No matter how strong you believe your defenses are—or if you think this could never happen to you—the real question isn't if your practice *will* be targeted, but *when*. The good news? You don't need a Fortune 500 security budget to protect your practice. The most effective security measures cost little or nothing to implement—they just require attention and consistency. This is your roadmap to cybersecurity success.

1 Build your password defense

Passwords are the locks on your practice's digital doors. You wouldn't use the same key for your house, car and office, so you shouldn't reuse passwords across different systems. Most breaches start with compromised passwords, making this your first line of defense.

Strong passwords are essential for safeguarding your data from cyber threats. Secure and memorable passwords can protect sensitive information without sacrificing convenience. Use lengthy passphrases instead of complex combinations.

SunnyDaysAtTheBeach2025! is both strong and memorable. Avoid personal information like birthdays, addresses, phone numbers, practice names or names of family members. Never use passwords known to be compromised in previous breaches.

Multi-factor authentication

A major health care company recently experienced a devastating data breach that could have been prevented with one simple step: enabling multi-factor authentication (MFA). MFA significantly reduces the risk of unauthorized access and helps protect sensitive information, especially in systems containing patient data. MFA works by adding a second verification step beyond passwords, and for better security, authenticator apps should be used instead of SMS when possible. MFA should be enabled on all critical systems, particularly those with patient data, and staff should be trained on its setup and usage.

Deploy a password manager

Password managers securely store and generate unique passwords, reducing breach risks while simplifying access across all devices. They also allow secure credential sharing with team members and support audit logging to track password usage.

2 Minimize vulnerable points

Think of your practice's technology like a house—every unused door or window is a potential entry point for intruders. Regular maintenance and monitoring can significantly reduce your risk. Here's how to reduce these vulnerabilities:

Clean house regularly

- Remove unused software and applications.
- Create and maintain a software inventory.
- Disable unnecessary remote access tools and update all systems and software promptly.
- Document your technology inventory.
- Do regular security scans for unauthorized software.
- Monitor system performance for signs of compromise.

Secure remote access

- Require MFA for all remote connections (use enterprise-grade VPN solutions).
- Monitor and log remote access attempts and review access permissions.
- Implement time-based access restrictions and geographic access controls when possible.
- Test remote access security.

Network security

- Segment your network to isolate critical systems.
- Implement and maintain firewalls.
- Monitor for unauthorized devices.
- Secure wireless networks with strong encryption.
- Isolate guest networks from practice systems.
- Review network security logs.

3 Train your team

Your team is your first line of defense and your greatest cybersecurity asset. Look for cybersecurity training programs offered by reputable organizations, local IT consultants or industry associations.

Implement effective training

- Conduct annual security training.
- Run regular phishing simulations.
- Share monthly tips and updates.
- Require role-specific security training for different staff positions.

Create a security-aware culture

- Encourage reporting of suspicious activities and celebrate security wins and learning moments.
- Share real-world examples during team meetings.
- Have clear incident reporting procedures.

Develop security procedures

These include:

- Written security policies and procedures with clear roles and responsibilities.
- Incident response plans.
- Business continuity procedures.
- Regular policy reviews and updates with documentation of security processes.
- Training materials and resources.

4 Guard digital crown jewels

Your patient data and practice information are invaluable assets requiring robust protection. Implementing strong data protection measures is essential.

Implement strong encryption

- Encrypt all devices containing patient information.
- Encrypt data during transfer and storage.
- Use industry-standard encryption tools.
- Regularly verify encryption effectiveness.
- Encrypt key management procedures.
- Perform regular encryption audits and testing.

Master the backup strategy

- Follow the 3-2-1 backup rule (three copies, two different media, one offsite). Having two local copies assists in recovering from hardware/data failures (faster recovery). Having one offsite copy assists in recovering from disasters (earthquake, water, fire, etc.).
- Have a full and incremental backup.
- Take periodic snapshots of your data.
- Ensure your backups are secure and encrypted.
- Verify and test backups regularly with full restoration drills.
- Document restoration procedures.

I have multiple backups, two copies of data on each system, at least one offsite (I often have more than that). On the offsite copies, I take snapshots, so I can go back in time and grab the best and latest copy. Imagine making a full backup each night, but you only have one backup. Someone ransoms you on Thursday and you wouldn't notice it until Monday.

Data management

Good data management includes:

- Regular data inventory and classification.
- Data retention policies.
- Secure data disposal procedures.

- Access control reviews.
- Data flow documentation.
- Privacy impact assessments.
- Regular data security audits.

5 Manage vendor risks

By proactively managing vendor relationships, monitoring their security measures and setting clear expectations, you can protect your practice from vulnerabilities outside your control.

Vendor management program

- With PHI, require Business Associate Agreements (BAAs).
- Use access control procedures.
- Monitor data security and storage.
- Require incident reporting.
- Use service level agreements.
- Hav regular security updates.
- Use a vendor security program.

Establish vendor controls

- Identify potential security risks.
- Limit vendor access to carry out their services.
- Monitor vendor access to your systems.
- Maintain an updated vendor inventory.
- Perform regular vendor security assessments.
- Review vendor incident response procedures.

Your success story starts now

While cybersecurity might seem complex, you've already taken the first step by reading this guide. You don't have to implement everything at once. Use strong, unique passwords and MFA, keep software updated regularly, train your team, maintain reliable backups, and review vendor security.

The most expensive security system isn't necessarily the best. The most effective security measures are the ones consistently used. Start your security journey today and take control of your practice's digital future. **DT**

Robert Niles is the information security officer at Productive Dentist Academy and a certified information systems security professional (CISSP). He can be reached at robert@productivedentist.com.

Disclosure: The author declares that neither he (she) nor any member of his (her) family has a financial arrangement or affiliation with any corporate organization offering financial support or grant monies for this continuing dental education program.

PART 3B OF A 6-PART CE SERIES

Simplified Accurate Denture Records

How to determine and record VDO and centric relation

BY DR. LEIF STROMBERG

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Keys to Success and Predictibility with Fabrication of Complete Dentures

PART 1: The consultation/examination appointment
PART 2: Simplified techniques for final impressions
PART 3A: Establishing tooth positions
PART 3B: (This month): Accurately recording vertical dimension of occlusion and centric relation
PART 4: The wax try-in appointment for denture success
PART 5: Delivery of successful complete dentures

Abstract

This course covers essential concepts for successfully fabricating tissue-supported complete dentures, including vertical dimension of occlusion (VDO) and centric relation (CR). It offers practical techniques such as using phonetics to determine VDO and using the gothic arch tracing device to accurately determine CR and record VDO and CR.

Educational objectives

After completing this course, readers should be able to:

1. Understand the definitions and clinical significance of VDO and CR in complete denture fabrication.
2. Discuss a simplified technique for accurately locating and recording CR using the gothic arch tracing device.
3. Compare the differences between vertical dimensions of rest, speech and occlusion, and their roles in denture fabrication.
4. Implement procedures for recording accurate VDO and CR using simplified techniques.

Introduction

Achieving predictability and success in fabricating tissue-supported complete dentures requires a thorough understanding of key elements, such as determining and recording vertical dimension of occlusion (VDO) and centric relation (CR). This continuing education course addresses concepts and techniques applicable to all types of tissue-supported complete dentures, including digital, implant-retained and traditional analog approaches.

The course covers three common challenges encountered during denture fabrication and offers practical strategies for effective resolution.

Common challenges addressed

1. Determining a clinically acceptable vertical dimension of occlusion.
2. Precisely locating centric relation.
3. Accurately recording vertical dimension of occlusion and centric relation.

This course is designed to help dentists develop skills to confidently manage complexities of complete denture fabrication, enhancing both the success and predictability of outcomes.

After adjusting the aesthetic wax rim (as covered in part 3A of this course series), proceed with determining and recording VDO and CR.

VDO and its clinical significance

An adequate VDO is crucial for achieving predictable success with removable tissue-supported complete dentures. This course discusses VDO by focusing on its definition, significance, and challenges involved with its determination and accurate recording.

Three important vertical dimensions will be defined and discussed in relation to complete denture fabrication:

- VDO
- vertical dimension of speech
- vertical dimension of rest

VDO definition: VDO refers to the vertical distance between two selected points on the patient's face, one commonly on the tip of the nose (on the maxilla) and the other on the chin (on the movable mandible), when the mandible is in its fully closed position and the teeth are occluding in maximal intercuspal position (Figs. 1, 12).

Fig. 1: VDO

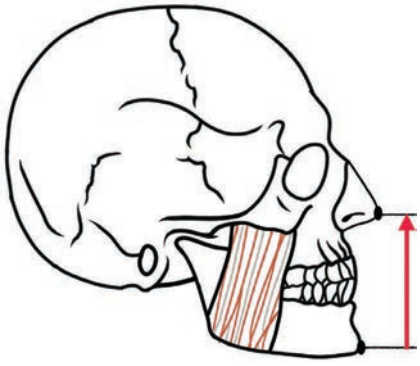


Fig. 2: Determining VDO for edentulous patient

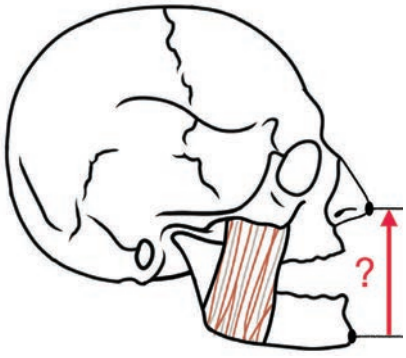
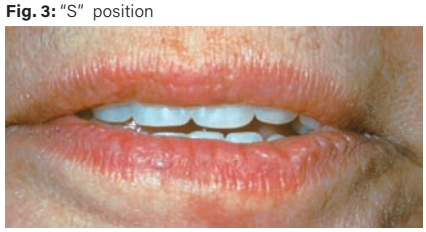


Fig. 3: "S" position



Clinical significance of VDO for complete dentures: For edentulous patients, establishing an adequate VDO is important for maintaining health, harmony, balance and functionality of the stomatognathic system, as well as for clear and comfortable speech.

Physiological considerations for VDO (muscle length and eruptive forces of teeth): For an edentulous patient with no teeth to occlude, the dentist must determine the appropriate positions for the replacement teeth to reestablish an acceptable VDO (Fig. 2).

Muscle length: The length of the mandibular elevator muscles—the masseter, temporalis and medial pterygoid muscles—is a primary determinant of VDO. These muscles play a critical role in establishing VDO through their length and tonicity (Figs. 1, 2). Together, these factors determine the amount of space between the alveolar ridges available for erupting teeth.

Eruptive force: During the eruption of natural teeth, a constant eruptive force causes the teeth to continue erupting until they encounter an equal opposing force. Typically, the opposing force is provided by the erupting teeth on the opposing arch. This dynamic equilibrium guides the eruption and positioning of teeth within the oral cavity, ultimately contributing to the establishment of VDO.

Establishing VDO in edentulous patients: For edentulous patients, the dentist determines the VDO. This establishes the space between the alveolar ridges to accommodate the prosthetic restorations (Fig. 2).

Vertical dimension of speech: definition and importance

The vertical dimension of speech refers to the vertical distance between two selected points on the face, typically on the tip of the nose and the chin, when the mandible is in its most closed position during speech. The vertical dimension of speech measurement is very important for determining VDO.

The most closed position the mandible assumes during speech occurs when "S" sounds are spoken, such as when counting from 60 to 70 or saying six and seven when counting from one to 10 (Fig. 3).

The "S" position represents the most closed position the mandible assumes during speech and the closest the mandibular teeth come to contacting the upper teeth while speaking. It is important to note the upper and lower teeth should not make contact during speech. The VDO must be slightly more closed than the vertical dimension of speech, which is crucial when determining the patient's VDO (Fig. 4).

Fig. 4: Tooth positions at vertical dimension of speech

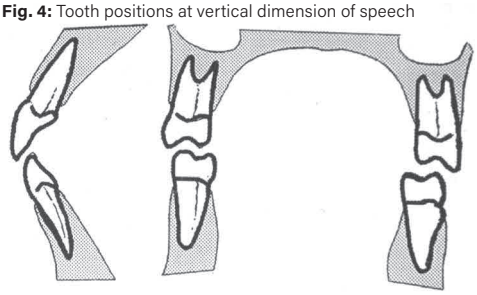


Fig. 5: Vertical dimensions compared

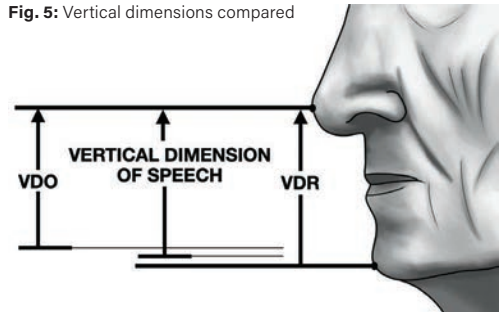
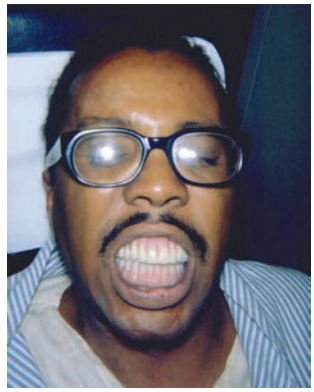


Fig. 6: VDO excessively opened



Vertical dimension of rest: definition and importance

The vertical dimension of rest (VDR) refers to the vertical distance between specific facial landmarks, typically the tip of the nose and the chin, when the mandibular muscles are in minimal contraction. This measurement is taken when the mandible is naturally positioned and at rest while the individual is seated or standing in a neutral posture.

At the vertical dimension of rest, the mandibular elevator muscles are in a state of minimal contraction, and the mandibular depressor muscles are similarly at rest. In this balanced state, the elevator and depressor muscles are in equilibrium.

The vertical dimension of rest is typically greater (more open) than the vertical dimension of speech, which, in turn, is greater (more open) than the VDO (Fig. 5).

While the vertical dimension of rest can serve as a rough guideline for determining VDO, relying solely on this measurement can lead to inconsistent and unreliable results. This is because the vertical dimension of rest naturally fluctuates because of normal changes in muscle tonicity throughout the day.

Using the vertical dimension of rest to establish VDO may result in an excessively open and unacceptable VDO, leading to the teeth contacting when speaking. This would indicate an inadequate VDO, as the teeth should remain apart during speech.

Why is VDO important for complete dentures?

An adequate VDO is important for patient function and comfort with complete dentures. An excessively opened VDO can lead to muscle strain, soreness of denture-supporting tissues, fractured restorations and imbalances in the stomatognathic system.

If the VDO is increased (opened) to an unacceptable dimension by lengthening the prosthetic teeth beyond an acceptable dimension, the mandibular elevator muscles become overstretched, placing stress on the stomatognathic system. This imbalance can potentially cause far-reaching effects on various areas (Fig. 6), such as:

1. **Muscle activity:** Stretched elevator muscles will attempt to return to their original length, leading to efforts to intrude (tooth movement in an apical direction) the lengthened teeth.
2. **Tissue-supported dentures:** For complete dentures with an excessively opened VDO, these intrusion forces can cause soreness in the denture-supporting tissues. Because the denture teeth cannot be intruded, the pressure is transferred to the denture-supporting tissues, often causing tissue discomfort,

Fig. 7: Centric relation

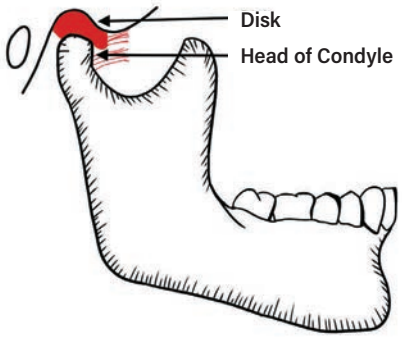


Fig. 8: Denture teeth set to CR

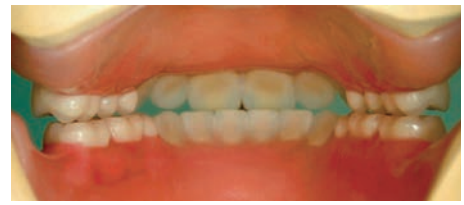


Fig. 9: Positioning mandible in CR

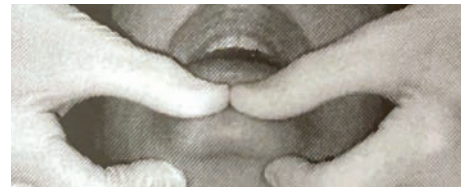


Fig. 10: Tongue to roof of mouth method is inaccurate

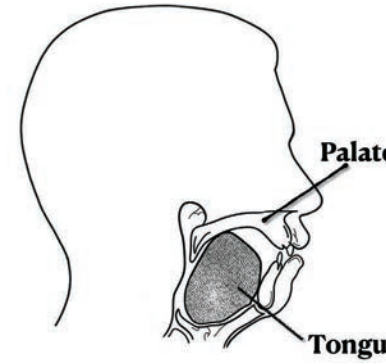


Fig. 11: Setting gothic arch tracer to VDO

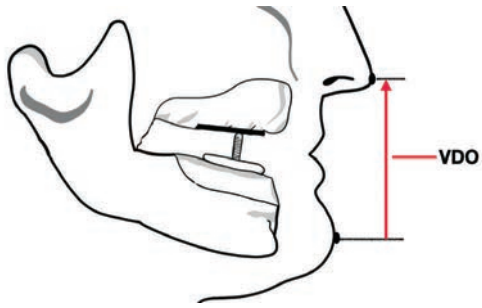


Fig. 12: Reference dots on face

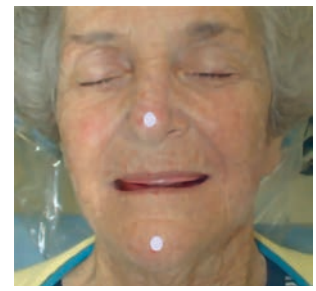
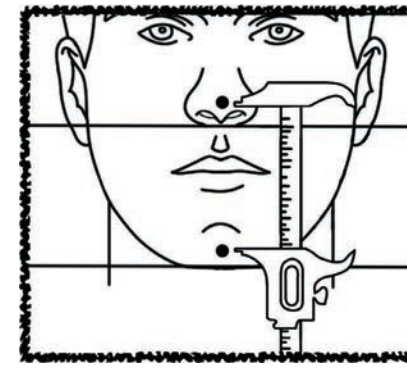


Fig. 13: Using Boley gauge



inflammation and, in some cases, alveolar bone loss.

3. **Implant-supported restorations:** With implant-supported edentulous restorations, an excessively open VDO can lead to the restoration breaking or implant failure. This occurs as the muscles attempt to return to their original length by intruding teeth.

Dentists may tell a patient with ill-fitting dentures: "It will take a couple of days to get used to them." However, it is crucial to recognize that adapting to pathology has undesirable side effects (Fig. 6).

Understanding CR and its importance in removable prosthodontics

Centric relation is the relationship between the mandible to the maxilla when the heads of the condyles of the mandible and the articular disks of the temporomandibular joints are correctly oriented in the glenoid fossae of the temporal bones. In CR, the condyles are fully seated on the disks in the glenoid fossae (Fig. 7).

One of the primary goals of complete denture occlusion is to fabricate dentures so that when the mandible closes in CR, all posterior teeth contact uniformly in maximum intercuspation (Fig. 8).

CR is an unstrained, comfortable, stable and physiologic maxillomandibular relationship. It is not muscle-supported and is a clinically useful, repeatable mandibular position. CR enhances the function and stability of complete dentures, contributing to improved patient outcomes.

Techniques for locating CR for patients with complete dentures:

- **Bilateral mandibular manipulation method:** This method for locating CR is highly valuable for guiding the mandible to CR and verifying the accuracy of this position. However, with this method, it can be very challenging to successfully record CR with movable tissue-supported

baseplates (Fig. 9). When baseplates are stabilized with implant retention, the bilateral mandibular manipulation method can often be used successfully for locating and recording CR.

- **Tongue to the roof of the mouth method:** This method is often inaccurate as it positions the heads of the condyles posteriorly and inferiorly to the CR position (Fig. 10).
- **Use of the gothic arch tracing device:** This method is recommended for precisely locating and accurately recording CR for complete denture fabrication.

Recording verticentric VDO and CR

Accurate records are essential for predictability and success of complete dentures. The verticentric record, which is a simultaneous recording of VDO and CR, is typically made using wax rims or a gothic arch tracer (Fig. 11). An accurate verticentric recording allows the master casts to be mounted on the articulator with precise VDO and CR, allowing for effective denture creation.

Phonetics (the vertical dimension of speech) is the preferred method for determining VDO. Because no single method for determining VDO works for all patients, it is advisable to employ multiple methods and compare the results. These methods include:

1. Position the patient upright. Then, insert a comfortable and retentive maxillary record base with an adjusted wax rim or the patient's existing maxillary denture. If needed, secure it with denture adhesive.
2. Place reference marks on the patient's nose and chin using a Sharpie extra fine point permanent marker (Fig. 12). Measure the distance between these marks with a Boley gauge (Fig. 13). The marks can be wiped off the patient's skin at the end of the appointment with alcohol after the verticentric record has been made.
3. Instruct the patient to lick their lips, swallow, relax their jaw and let their lips lightly touch. The mandibular elevator muscles should exhibit minimal contraction activity. Measure and record the distance between the reference points to determine the vertical dimension of rest.
4. Instruct the patient to repeat "mmm-mmm" or "Emma" several times, keeping their facial muscles relaxed and gently bringing their lips together. Measure and record the distance between the reference points again to determine the vertical dimension of rest.
5. Use phonetics to measure and record the distance between the reference points while the patient makes "S" sounds. Examples include counting from 60 to 70, saying six and seven when counting from one to 10, and saying "Mississippi" several times. The vertical dimension of speech measurements are usually less than the vertical dimension of rest measurements.
6. Measure and record the distance between the reference points while the patient is wearing the old dentures and is closing in maximum intercuspation. This is the VDO with the existing dentures.

Guide for determining VDO

The vertical dimension of rest is greater (more open) than the vertical dimension of speech, which is greater (more open) than the VDO (Fig. 5).

- Using the vertical dimension of speech measurement (phonetics): Close the vertical dimension of speech measurement by 3 mm at nose/chin measurement to determine VDO. This is the preferred method for determining VDO for an edentulous patient.
- Using vertical dimension of rest measurement: Close the vertical dimension of rest measurement by 3–5 mm at nose/chin measurement to determine VDO.
- Using VDO measurement with the existing dentures: Copy or adjust the VDO as appropriate.

The determined VDO should be verified at the wax try-in approval appointment before the dentures are processed.

Fig. 14: Gothic arch tracing device

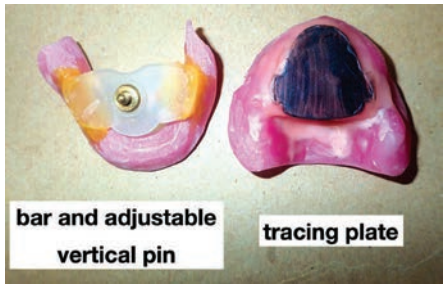


Fig. 15: Ink on tracing plate

Fig. 16: Gothic arch tracer in mouth

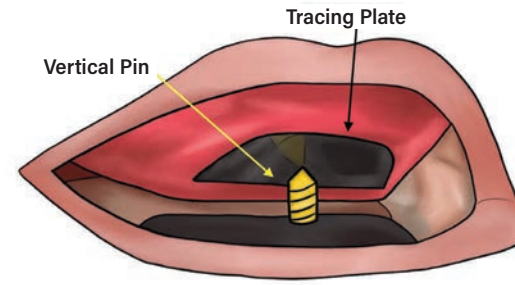


Fig. 17: Arrow tracing on tracing plate

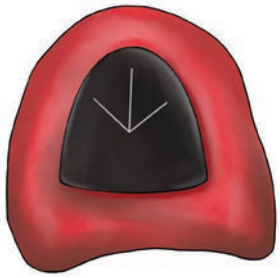


Fig. 18: Plastic disk on tracing plate

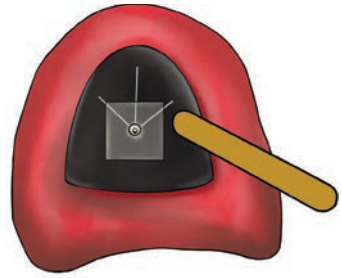


Fig. 19: Plastic disk luted with sticky wax

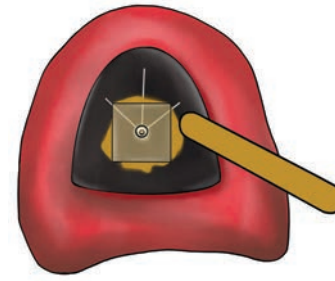


Fig. 20: Recording verticentric with PVS material

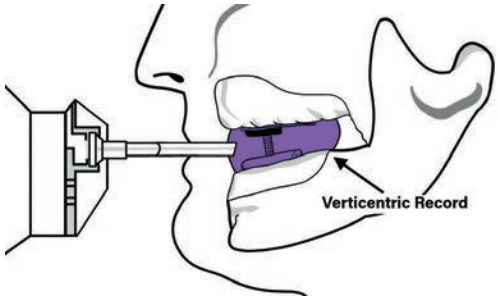


Fig. 21: Recording verticentric on a patient

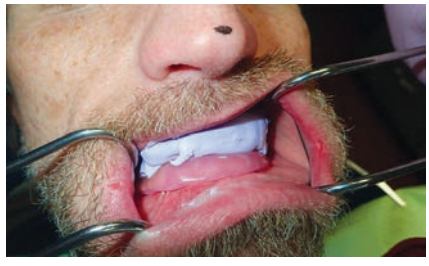
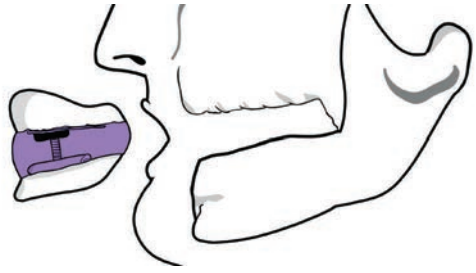


Fig. 22: Removal of verticentric from mouth



Using a gothic arch tracing device

Centric relation can be accurately located with a gothic arch tracer, provided the patient does not have temporomandibular disorder (TMD).

The gothic arch tracer setup includes:

- A horizontal tracing plate on an upper baseplate
- A bar with an adjustable vertical pin on a lower baseplate (Fig. 14).

Benefits of the gothic arch tracing device:

- Ease of recording CR and VDO.
- Precise location and accurate recording of CR. The tracing indicates the precise location of CR.
- Easy and accurate VDO adjustment using the pin to the patient's VDO.
- Stability. Vertical forces applied through the pin and tracing plate securely seat the upper and lower baseplates on the alveolar ridges during record-making (Fig. 11).

Components of the gothic arch tracing device for edentulous patients:

- Tracing plates
- Bars, vertical threaded pins, and nuts to secure the pins to the bars
- Clear (transparent) plastic disks that are centric relation stops

- An ink marking pen, such as a Marks-A-Lot permanent marker

Acquiring a gothic arch tracer kit:

- Dental laboratories often supply the kit to the dentist.
- Kits are available through leemarkdental.com
- Kits may be available for purchase online from Amazon or eBay.

Recording verticentric

1. **Set the vertical pin:** Adjust the vertical pin (raise or lower) to the patient's VDO (Fig. 11). This ensures the verticentric record will capture the determined VDO for the case.
2. **Ink the tracing plate:** Paint the upper tracing plate with black ink, such as a Marks-A-Lot permanent marker (Fig. 15).
3. **Record mandibular border movements:** With the tracing device in the patient's mouth, instruct the patient to move their mandible forward, backward and laterally several times. The clinician may gently guide these movements but should never force them.
4. **Record the tracing:** The pin traces the mandibular movements on the inked tracing plate, forming an arrow. The arrow's point indicates CR (Figs. 16–17).

Verticentric is the simultaneous recording of CR and VDO. With the gothic arch tracer, the mandible is in CR when the point of the vertical tracing pin is on the point of the arrow. The vertical pin is set to the patient's VDO. Verticentric will be accurately recorded in this position, and the record will be sent to the dental laboratory to mount the case on an articulator.

Making the verticentric record:

1. A small clear plastic disk with a center hole is placed on the tracing plate with the bevel around the hole facing out. The hole is precisely positioned over the point of the arrow, which represents CR, and the disk is attached to the tracing plate with sticky wax (Figs. 18–19).
2. The baseplates with the gothic arch tracing device are replaced in the patient's mouth with the clear plastic disk in place on the tracing plate.
3. The patient's mandible is guided until the vertical pin goes into the hole in the center of the disk. This assures the clinician the patient's mandible is in CR.
4. With the mandible in CR and the jaws at the patient's VDO, record the relationship of the baseplates using a firm bite registration material, such as Regisil Rigid Bite Registration Material (a polyvinyl siloxane [PVS] material) (Figs 18–22).

This systematic approach ensures the accurate recording of VDO and CR, facilitating the fabrication of successful complete dentures.

Conclusion

Key elements for denture predictability and success covered in this course are:

- Determining an acceptable VDO for edentulous restorations.
- Accurately locating CR for the edentulous patient.
- Using simplified procedures to accurately record VDO and CR for edentulous restorations. **DT**

Dr. Leif Stromberg, DDS, MAGD, FADI, FICD, practices general dentistry in Dallas, Texas.

Widely recognized for his expertise in restorative dentistry and complete denture fabrication, Stromberg was selected by his peers and named a Texas Super Dentist in *Texas Monthly* magazine 13 times from 2005 to 2017. In 2022, he was nominated for the Texas Academy of General Dentistry Dentist of the Year Award, and in 2023, he received a fellowship in the International College of Dentists.

Stromberg, a former clinical assistant professor at Texas A&M University College of Dentistry, is a sought-after speaker at dental conferences, where he shares techniques for achieving predictable success in complete denture fabrication. He has also authored a textbook on this topic.

In his free time, he enjoys hiking with friends in U.S. national parks and traveling with his wife, Linda.

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1. **What does vertical dimension of occlusion (VDO) refer to?**
   A. The vertical distance when the maxndible is fully open
   B. The distance between two facial points when the teeth are occluding in maximum intercuspation
   C. The vertical space measured during speech sounds
   D. The vertical distance that the mouth is open during rest

2. **The vertical dimension of speech measurement is typically:**
   A. Equal to the vertical dimension of occlusion
   B. Greater than the vertical dimension of rest
   C. Greater than the vertical dimension of occlusion
   D. Equal to the vertical dimension of rest

3. **Centric relation is defined as:**
   A. The position where the teeth are in maximum intercuspation
   B. A stable muscle-supported mandibular position
   C. The relationship of the maxilla to the mandible when the condyles are fully seated on the articular disks in the glenoid fossae
   D. The most closed position of the mandible during speech

4. **Why is centric relation important for complete dentures?**
   A. It ensures proper aesthetics
   B. It eliminates the need for wax rims
   C. It determines the vertical dimension of rest
   D. None of the above

5. **What is a major challenge when using the tongue-to-the-roof-of-the-mouth method for locating CR?**
   A. It often does not position the condyles in a fully seated position on the disks in the glenoid fossae
   B. It causes the teeth to contact during speech
   C. It is too complex for patients to perform
   D. It requires additional equipment

6. **What typically happens when the VDO is excessively opened?**
   A. The patient's face appears overclosed
   B. Stretching of the mandibular elevator muscles and stress on the stomatognathic system
   C. Reduced occlusal contact
   D. Enhanced balance of denture function

7. **The vertical dimension of rest is typically:**
   A. Equal to the vertical dimension of occlusion
   B. Greater than the vertical dimension of speech
   C. Less than the vertical dimension of occlusion
   D. Accurately recorded after the patient clenches their teeth for three minutes

8. **What measurement is typically taken to determine the vertical dimension of rest?**
   A. The distance between the incisal edges of the upper and lower teeth
   B. The distance between two marked points on the patient's face, one on the nose and one on the chin
   C. The distance between the condyles and the glenoid fossae
   D. The distance between the lingual cusp tips of the maxillary first molars

9. **When recording a gothic arch tracing, what does the point of the traced arrow represent?**
   A. Non-working interferences
   B. Centric relation
   C. Vertical dimension of rest
   D. Vertical dimension of speech

10. **Which is a key benefit of the gothic arch tracing device?**
    A. It centers the wax rims for the bite record
    B. It provides stability of the baseplates when recording VDO and CR
    C. It positions the posterior teeth for immediate occlusion
    D. It requires minimal patient cooperation

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9.	A	B	C	D
10.	A	B	C	D

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9.	Overall, I would rate this course (5 = Excellent to 1 = Poor):	5	4	3	2	1
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For questions, contact Director of Continuing Education Nareg Apelian at **nareg.apelian@farranmedia.com**.

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PURPOSE OF THE TOWNIE CHOICE AWARDS: To provide dental professionals with an impartial resource to assist them in their selection of dental products, equipment and services.

FEES TO PARTICIPATE: None.

METHODOLOGY: Categories of the most common dental products, equipment and services are developed with the aid of multiple industry resources and the Dentaltown online community. For each category, dental manufacturers can submit up to three products of their choice. Dentaltown does not attempt to make any recommendations on inclusion or exclusion of any products, equipment or services listed on the voting ballot. All entries are subject to review. Companies shall not offer incentives to any existing or future Townie for voting for a specific product; failure to comply will result in disqualification from the ballot.

VOTING PROCESS: Voting is done online. One ballot per licensed clinician.

RESULTS: Results will be electronically tabulated and the winning entries for each category will be published in the December 2025 issue of *Dentaltown* magazine. The results will be made available online at Dentaltown.com after the December issue is printed.

RESPONSIBILITY OF EACH PARTY:
DENTAL COMMUNITY:
- *Vote! Share your experience with fellow dental professionals.*
- Provide feedback to the process of the awards to help make this resource useful to dental professionals.

DENTAL COMPANIES:
- Participate in the Townie Choice Awards.
- Farran Media will send an email invite so products can be entered on a secure online ballot.
- Any questions, contact Marie Leland at marie.leland@farranmedia.com.

FARRAN MEDIA:
- Send the manufacturers an email invite to enter their products on the online ballot.
- Offer a nonbiased platform to dental companies to participate in the survey.
- Provide a nonbiased platform to dental professionals to benefit from the survey.
- Offer all dental companies an equal opportunity to list their products, equipment and services.
- List product choices in alphabetical order on the ballot.
- Announce winners in the December 2025 issue of *Dentaltown* magazine at no charge.
- Display the top Townie Choices in each category with voting details, including total votes and votes per product, on Dentaltown.com.
- Provide the Townie Choice Awards artwork/logo to winning companies to use on their marketing materials at no charge.
- Will not rent, sell or otherwise make available dental professionals' names and their corresponding choices.

2025 TIMELINE

MAY 12–JUNE 20	Companies enter products on the online ballot.
JULY 14–SEPT. 5	Townies vote online at Dentaltown.com.
LATE SEPTEMBER	Farran Media notifies 2025 winners.
OCT. 20	Deadline for winning companies to submit product images and descriptions.
DECEMBER	2025 winners announced in *Dentaltown* magazine.

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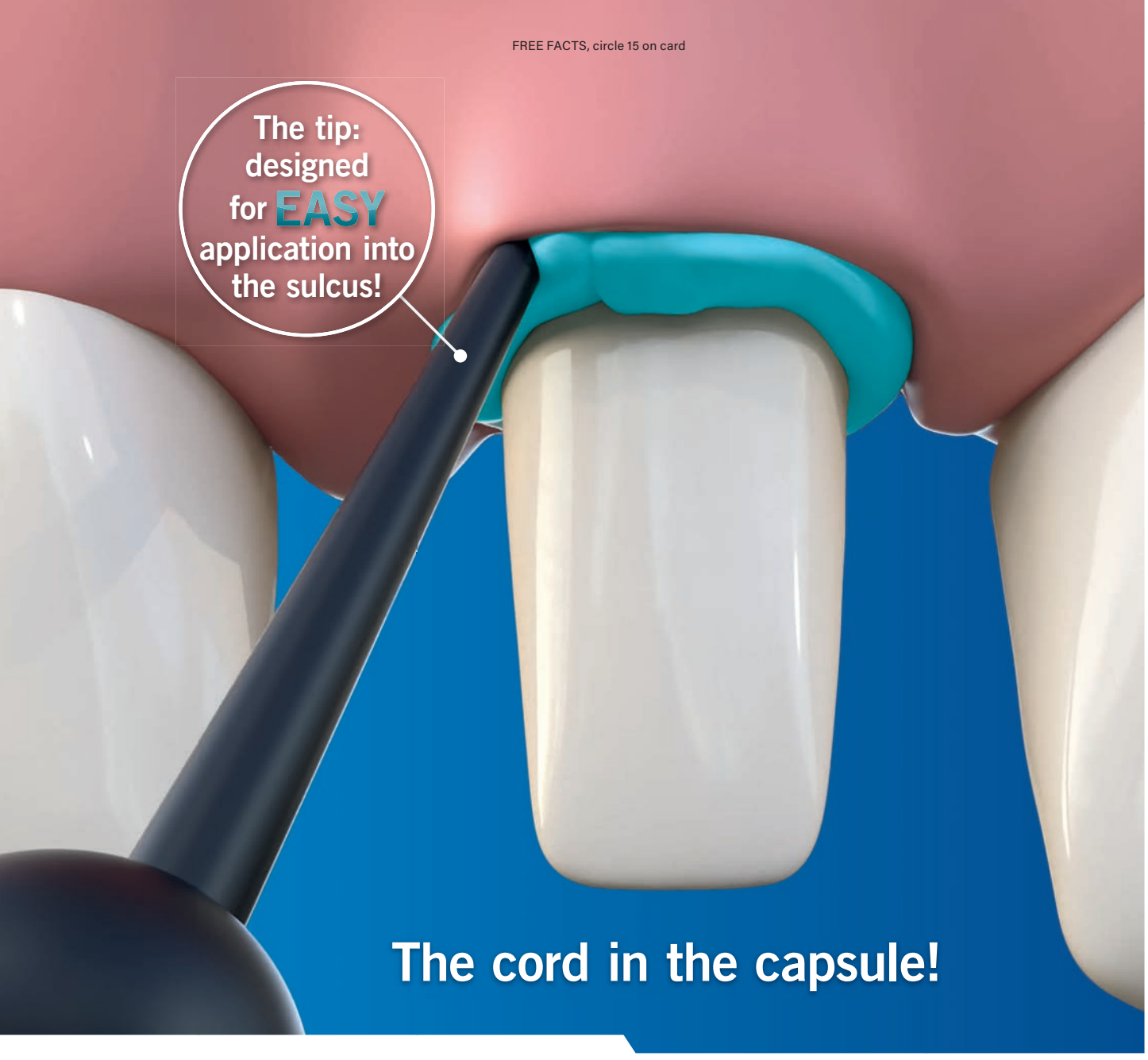

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- **Turquoise blue color** – contrasts well with the gingiva
- **Rinseable Removal** – for quick and stain-free clean-up
- **Up to 50% faster** – compared to just cord

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