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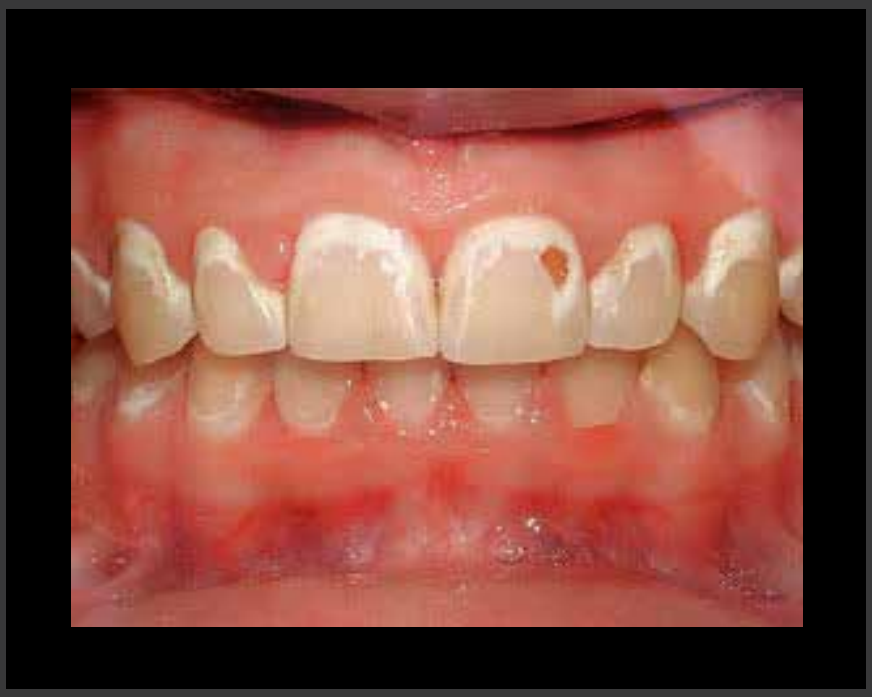

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American Academy of Clear Aligners

Editorial

If you are reading this Journal, you either are already a member of the American Academy of Clear Aligners, or are considering becoming a member.

One of the many advantages of membership is access to our website, at www.aacaligners.com.

On the website, you will find our popular "Case of the Month" feature, information about continuing education courses and upcoming lectures, copies of previous journals, current online webinars, and our "Need Help" forum.

Examples of recent posts in the "Need Help" forum are:

- **Keeping Aligners Clean**
  Over 1200 dentists have viewed the discussion of Margaret's question:
  "Many patients feel their breath is not fresh while undergoing aligner treatment. Has anyone tried this new product, EverSmile? It is supposed to clean the aligner, freshen breath and whiten the teeth. I have had many patients use retainer brite with great results. The solution I am looking for is to tackle the halitosis issue. Thanks."
- **Diastema Retention**
  Close to 3000 have followed the question posed by Carol:
  "Hi, I have a 45-year-old patient who has a diastema between her upper centrals. She is class III. I am planning on IPR on lower and retracting lower anteriors and closing upper spaces. What would you suggest for retention? Is it necessary to put a lingual bar or will Vivera be enough to keep the space closed? What are your thoughts?"

Haven't visited our website yet? Join the discussion!

Dr. Jeffrey Galler
Editor

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Case Reports

Using Invisalign and iTero to Plan and Treat a Comprehensive Orthodontic and Implant Case From Beginning to End

by Jeremy Kurtz, DDS

Dr. Jeremy Kurtz is a graduate of the University of Toronto School of Dentistry. He is a general dentist who maintains a unique private practice in Toronto that focuses exclusively on Invisalign and dental implant therapy. Dr. Kurtz is a guest lecturer at various Invisalign and implant study clubs in Toronto. He is a Top 1% Invisalign GP provider and enjoys making his patients smile with Clear Aligner Therapy.

Janice, a 28-year-old who worked in finance, came to our office seeking advice and treatment. She wanted to straighten her teeth, but didn't want traditional braces. She also had a retained primary canine (tooth #H) which was small and unsightly (**Figure 1**). Other dentists had told her that the permanent canine (tooth #11) was missing. Upon x-ray examination, however, we discovered that tooth #11 was not actually missing. Rather, it was in the wrong place! It was impacted between the roots of teeth #12 and #13 (**Figure 2**).

Now the problem was compounded. Placing an implant or tooth in the area occupied by retained tooth #H was not feasible. This was partially due to lack of coronal space and partially because the root of tooth #12 was divergent into the area where an implant would need to be placed.

We decided that the best solution was to remove the primary canine (#H) and then move the first bicuspid (#12) into the canine position. Visually, this is acceptable, as the bicuspid is canine shaped. As well, the mesial tipping movement of tooth #12 would leave a better root position for a potential implant distal to #12.

At that time, Janice was not convinced she wanted to proceed with a dental implant, since this would also involve removal

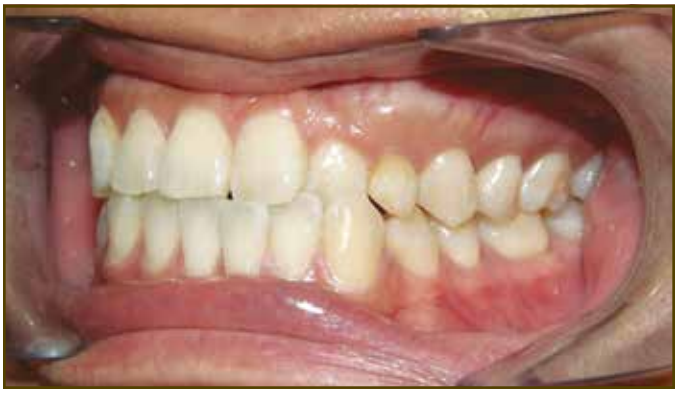


Figure 1: unsightly left primary canine.

of the impacted tooth #11 and then a bone graft. Initially, she thought that a small space distal to tooth #12 would be acceptable. Therefore, in the initial treatment plan, we kept that space to a minimum.

After the first stage of treatment, a 4mm space was left between teeth #12 and #13 (**Figure 3**). Janice now decided to proceed with a dental implant in this newly created space. Therefore, in the second phase of treatment, we extracted the impacted tooth #11 and grafted the bone in the area.

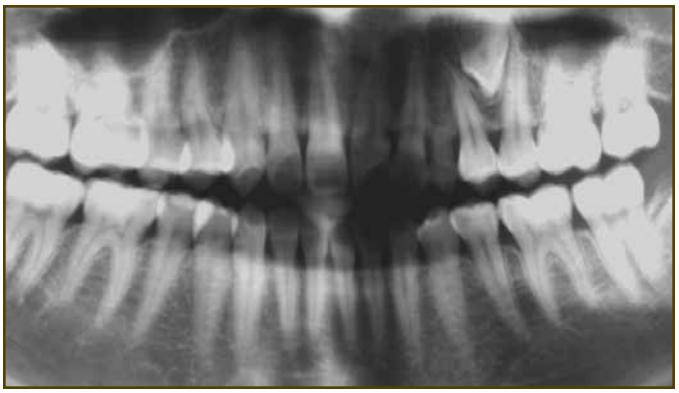


Figure 2: tooth #11 impacted between the roots of #12 and #13.

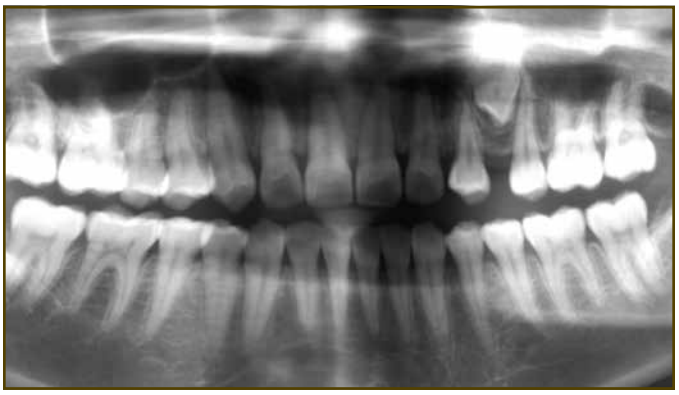


Figure 3: 4 mm space between #12 and #13 after first stage of treatment.

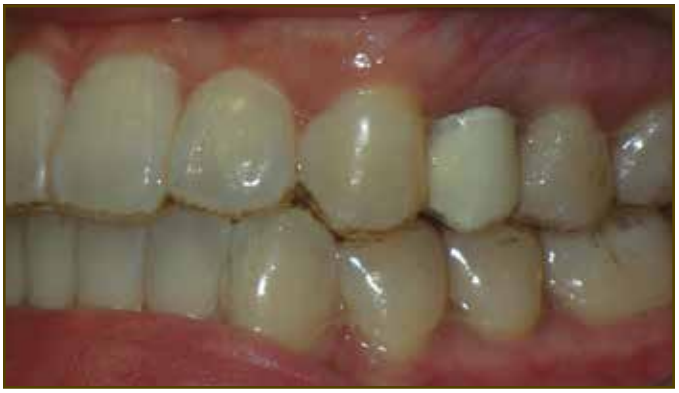


Figure 4: pontic in Invisalign tray.

While we waited for the extraction site to heal and the graft to take, the orthodontics continued to create more room coronally and between the roots. The maxillary molars in the upper left quadrant were distalized 2 mm; we also performed 1 mm of IPR in total to help create a 7 mm space between teeth #12 and #13 while still keeping a balanced occlusion. The Invisalign tray was used to house a painted pontic (**Figure 4**), to keep the esthetics acceptable to the patient in spite of the enlarged space. **Figure 5** shows how well the roots were moved by Invisalign therapy (who says CAT can't move roots?!).

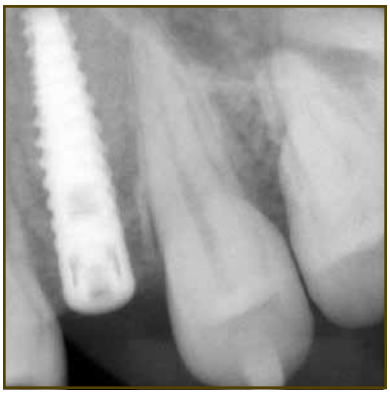
After the implant was placed, we allowed an appropriate time to lapse for full implant integration. In lieu of traditional impressions, we then performed a full scan using the iTero scanner, with the aid of a scan body (**Figure 6**).

(Scan bodies are metal abutment-like pieces, somewhat like impression copings, that are screwed into the implant. They are implant type and size specific. The implant is not visible intraorally because it is imbedded in the bone. The scan body, therefore, allows the iTero scanner to capture data intraorally which can then be translated to allow the lab to determine the exact position of the implant.)

This scan allowed for full digital integration and use of the iTero scanner from treatment start to finish. Also, the digitization of the tooth and the implant position facilitated the use of CAD/CAM technology in creating a custom abutment in the shape of a crown-prepped tooth (**Figure 7**). This allowed for better tissue morphology, healthier gums, and better esthetics around the implant crown.

Finally, we ordered Vivera retainers and issued them to the patient. Janice ended treatment with a healthy, happy smile and no missing teeth (**Figure 8**)! ■

(Figures continued on next page)



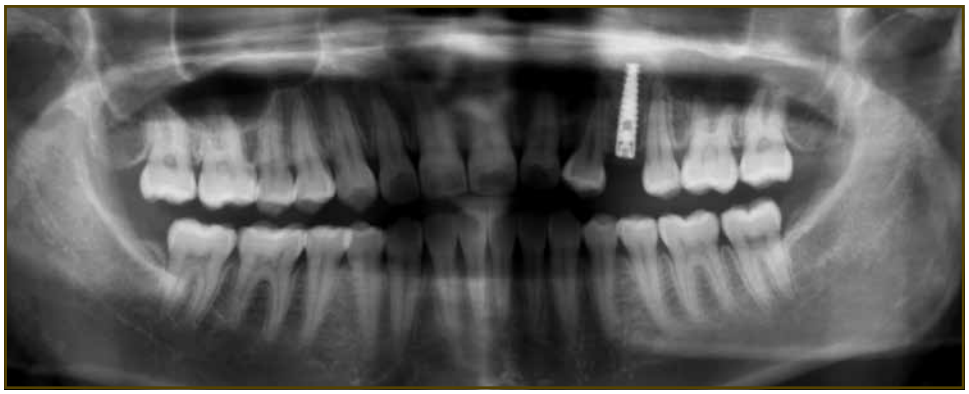


Figure 5: successful root movement and implant placement.

Figure 6: scan body.

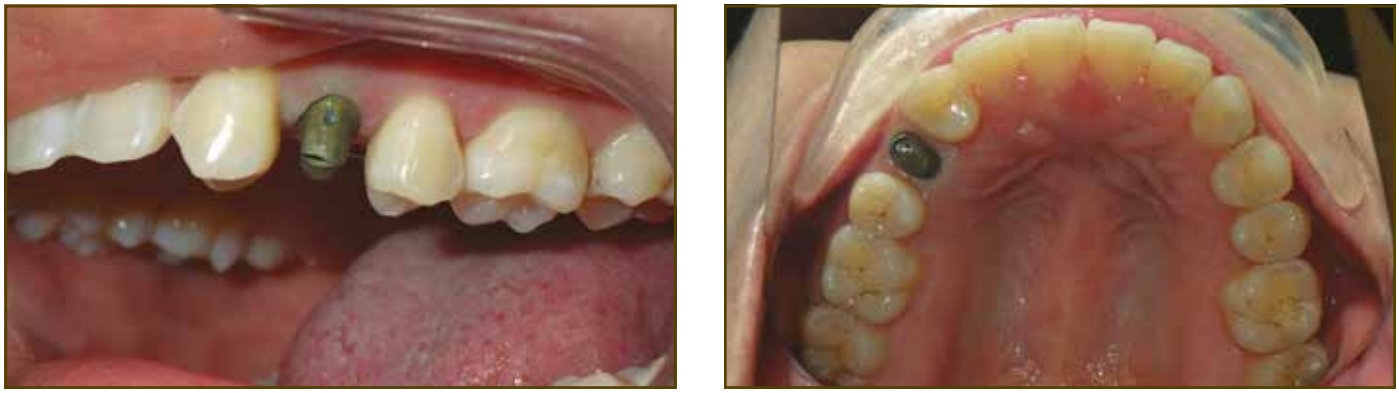


Figure 7: custom abutment in the shape of a crown-prepped tooth.

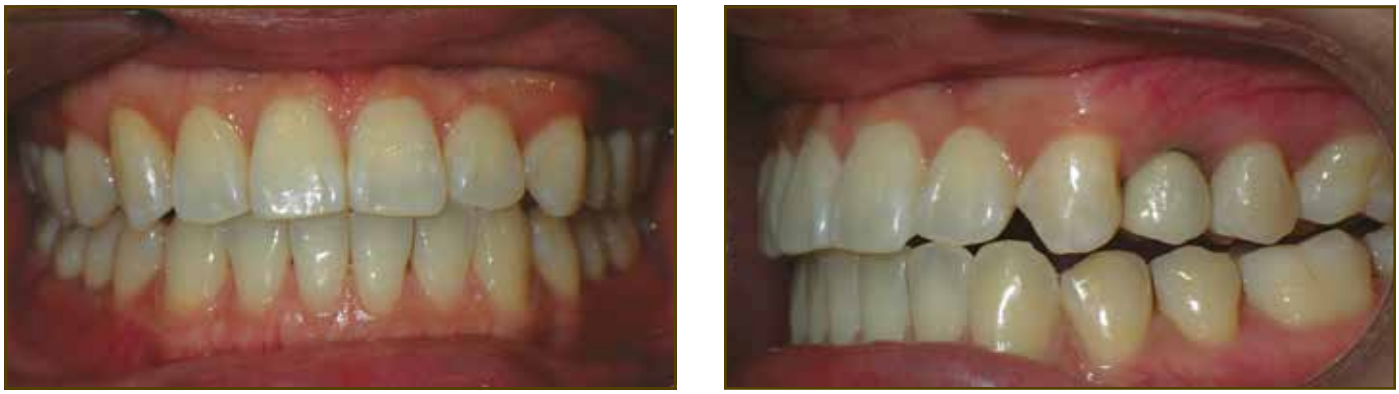


Figure 8: no more missing teeth!

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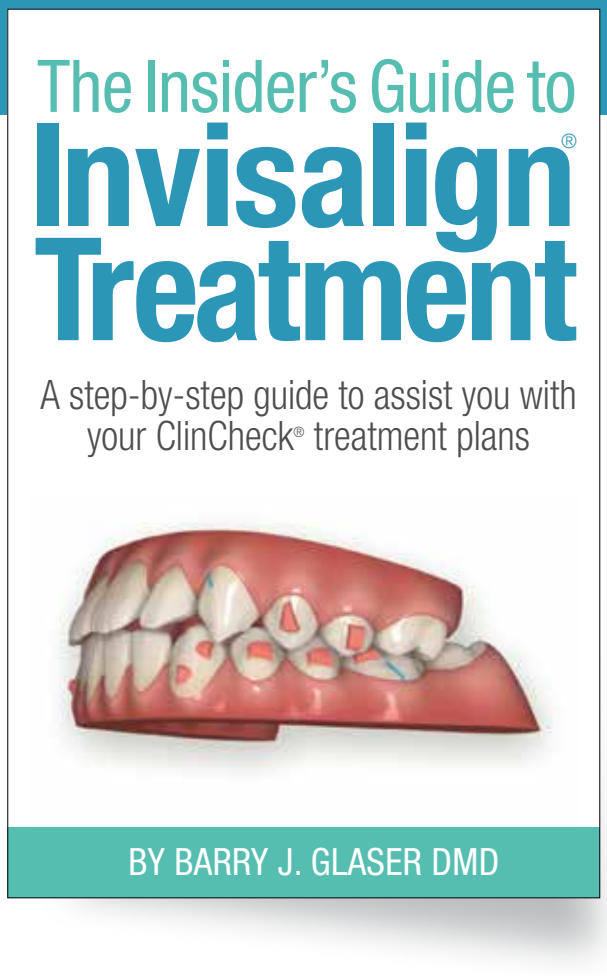

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Invisalign–Intrusion Made Possible

by Jeremy Kurtz, DDS

Denni, a 28-year-old woman, presented to my office, a little disheartened. She was unhappy with her smile and unhappy with her options. She had been to other dentists to deal with her dental issues, but was unable to find a satisfactory solution.

Her first issue was orthodontics. She had spacing on the mandibular arch (**Figure 1**) and some crowding in the maxillary arch, with a crossbite of tooth #10. Other dentists had told her they could resolve these issues with Invisalign, which was her preference.

The other issue was a restorative one. Teeth #30 and #31 had been extracted and, currently, it was impossible to properly replace the missing teeth. The significant overeruption of tooth #3 made the edentulous space nonrestorable. In fact, Denni had only 2 mm of occlusal space between tooth #3 and the mandibular gums at the site of tooth #30 (**Figures 2a-b**). One dentist had offered her the option to shave down tooth #3 and crown it; but the reduction of the tooth would be so significant as to necessitate root canal therapy. One orthodontist was willing to attempt intrusion on tooth #3, but only using traditional braces.

A challenge

After evaluation of the patient, I realized this was quite a challenging case. Tooth #3 was overerupted more than 3 mm. Although Invisalign is the best appliance for intrusion, there are physical limitations on the magnitude of the change it can make.

Generally speaking, anterior intrusion of more than 3 mm is challenging without the use of auxiliary appliances—and those teeth are single rooted. Posterior intrusion of a multi-rooted tooth is far more difficult. To make matters worse, this case presented with another challenge.

The conventional wisdom is that Invisalign, not braces, is the ideal appliance for intrusion, for three reasons:

1. Mechanics: Invisalign is a pushing appliance (as teeth are pushed by a plastic tray). To intrude teeth, we "push" them into the bone, so Invisalign creates the right force for the right movement. (By contrast, braces are a pulling appliance: teeth are pulled to the wire. It's very hard to pull teeth into bone.)
2. Coverage: The trays cover the entire occlusal surface and sides of teeth, affording more surface contact for the application of force, enabling the trays to intrude teeth better.
3. Biting Force: The fact that the patient is biting constantly on the surface of the trays creates additional force to intrude teeth. This seems to be the greatest factor contributing to Invisalign's success with intrusion.

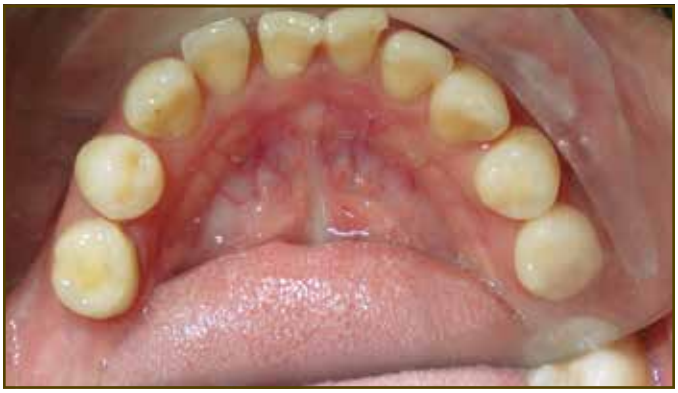

Figure 1: pre-treatment mandibular Occlusal View showing spacing and missing molars.

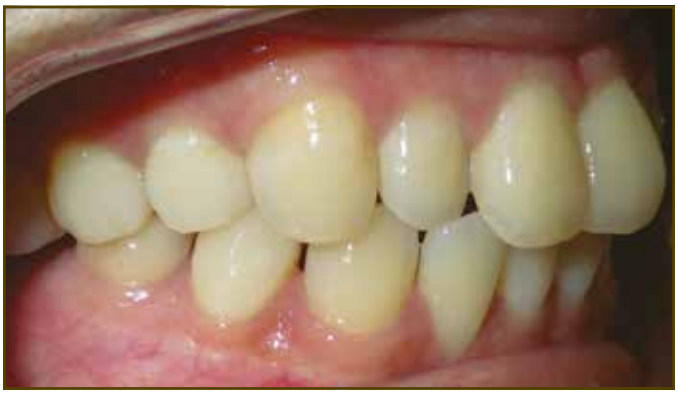

Figure 2a: pre-treatment right side view showing overerupted tooth #3.

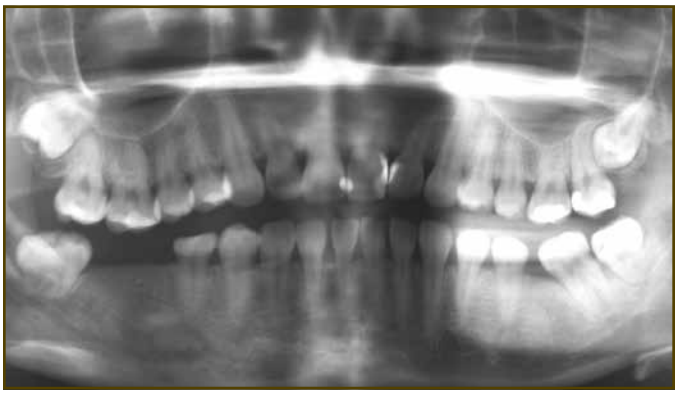

Figure 2b: pre-treatment panoramic radiograph showing overerupted tooth #3.

Unfortunately, in this case, there was no opposing occlusion on tooth #3, which needed the intrusion. Nonetheless, I was prepared to attempt this intrusion movement, relying on Invisalign's other two advantages for intrusion. I did feel that a temporary anchorage device (TAD) and elastic might be required to provide additional intrusive forces for tooth #3, and I advised Denni of this. We even programmed the initial ClinCheck with a precision cutout to be ready for this eventuality.

Figure 3: ClinCheck for refinement with pontics.

Figure 4: scan body in place.

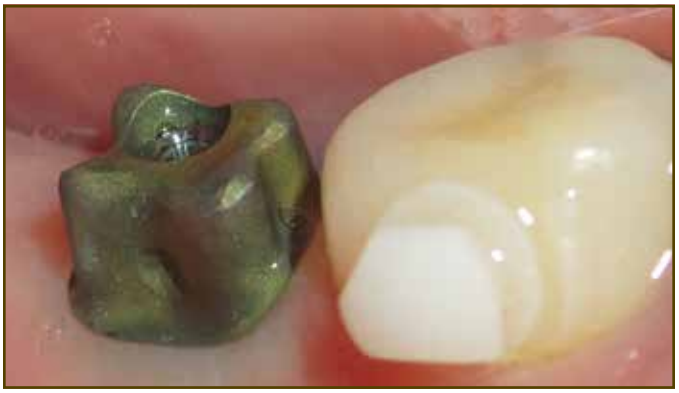

Figure 5a: custom abutment for tooth #30 implant.

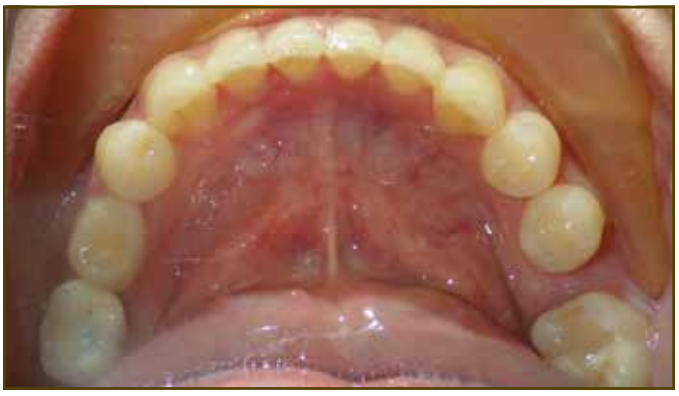

Figure 5b: implant for tooth #30.

Figure 6: elastic used to extrude premolars.

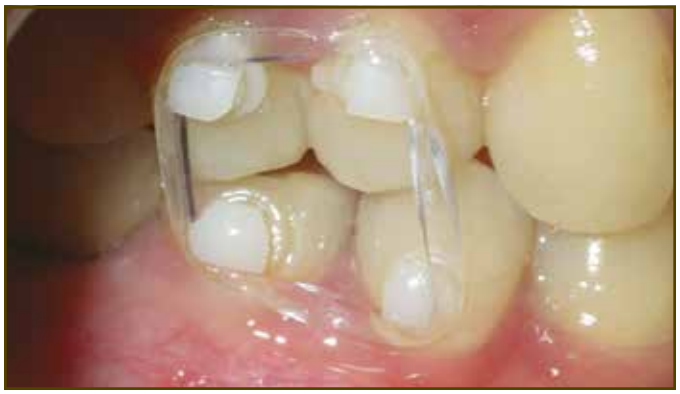

Figure 7: elastic used to extrude premolars.

Orthodontic treatment

The initial ClinCheck treatment plan called for 23 sets of trays. A large 4 mm horizontal rectangular attachment was used on tooth #4 to allow for anchorage against the intrusive force applied to tooth #3. We monitored the initial progress and were pleasantly surprised that no TADs or auxiliary forces were needed after all. In fact, the intrusive forces were so successful that intrusion occurred on teeth #4 and #5 as well.

Orthodontic plus restorative treatment

At this stage, enough intrusion had occurred that I felt comfortable beginning the restoration of tooth #30. Therefore, at this time, we placed an implant in the location of tooth #30. During the healing and integration phase of this implant, we ordered a new set of trays as a refinement, to further intrude tooth #3. This time, we included pontic teeth in the locations of teeth #30 and #31 to add the biting forces upon tooth #3 (**Figure 3**).

Using the iTero scanner with a scan body at location #30 (**Figure 4**) for complete digital workflow, we created digital models to design a custom milled abutment and zirconia crown for tooth #30 (**Figures 5a-b**). Once the #30 crown was inserted to stabilize Denni's bite, we created composite buttons using a Mini-Mold button bonder kit on teeth #5/#4 and #28/#29. An elastic was used in box formation (**Figures 6-7**) for 1 week without any trays in, to extrude and tighten occlusion in the premolar region.

Figures 8a-c show successful intrusion of #3 and placement of implant crown #30. Denni was thrilled to have achieved the smile she wanted with Invisalign only and with no need for TADs.

In conclusion

Invisalign was able to significantly intrude molars, even in the absence of opposing occlusion. This capability gives rise to ideal restorative options in otherwise difficult situations. Invisalign can intrude overerupted molars significantly and predictably, making it the appliance of choice for intrusion movements. Dental implants can be placed during Invisalign treatment to save time and coordinate final restoration with completion of orthodontics. ■

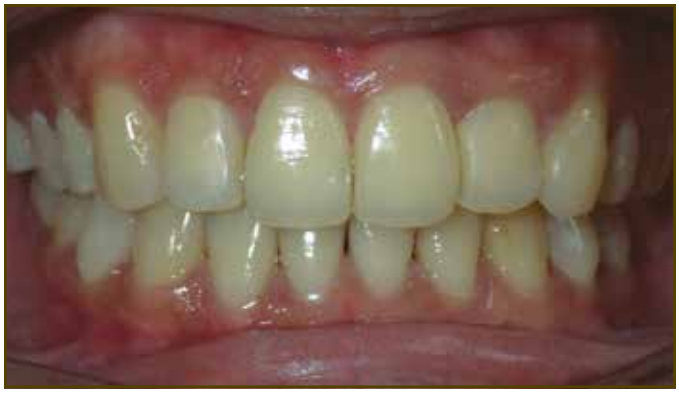

Figure 8a: final front view showing successful intrusion of #3 and placement of implant crown #30.

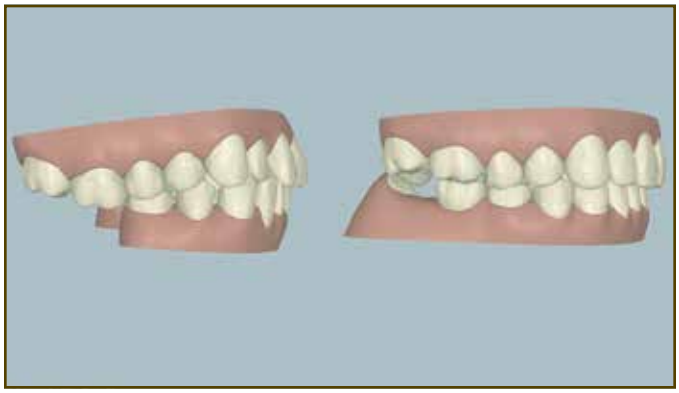

Figure 8b: ClinCheck images before and after intrusion of #3 and placement of implant crown #30.

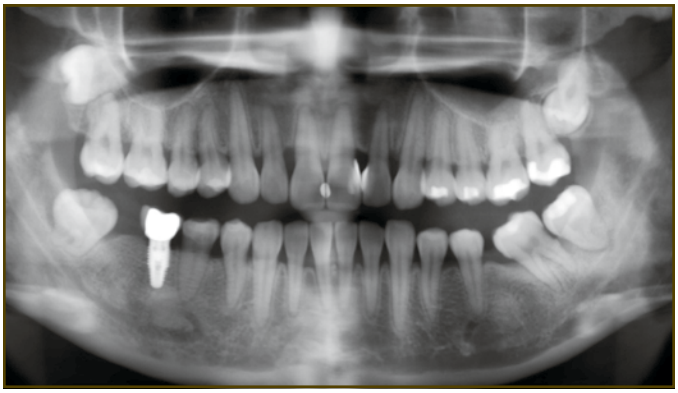

Figure 8c: post-treatment panoramic radiograph.

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Clinical Practice

Impressioning for Clear Aligner Orthodontics– Formulating an Impeccable Smile

by Geetha Damodaran, DDS

Dr. Geetha J. Damodaran obtained her BS from Emory University, and her DDS from the University of Minnesota School of Dentistry in 1995. Her dental practice, Birch Lake Dental in White Bear Lake, Minn., focuses on both comprehensive restorative and cosmetic dentistry. In the past, she has taught at her Minnesota alma mater, and she continues to participate in education courses to further her knowledge of dentistry. Additionally, she serves as President-elect of the St. Paul District Dental Society.

Impressioning can be done either digitally or traditionally. This article will discuss traditional impressioning, as it offers a profitable and precise way to move forward with your Invisalign cases.

The importance of impressions

When I initially became an Invisalign provider, my biggest obstacle was obtaining the perfect impression. An impression is a critical part of any treatment. Align Technologies, the maker of Invisalign clear aligners, is very selective about the impressions used for cases. If the impression is not perfect from the beginning of an Invisalign treatment, the resulting aligners can invalidate the entire procedure. Teeth will not move the way you planned, and the results can be unsatisfying.

Therefore, if the impression is slightly distorted or doesn't capture the entire tooth, it will be rejected. To call a patient and explain that he or she needs to reimpression is an inconvenience, and it prevents streamlining the process. This is very frustrating for dentists and patients alike.

Choosing the right impression material can have a huge impact on the quality of the impression, and hence on the final result of the case.

The options with impression materials

With traditional impressions, you have a choice among vast arrays of materials, with varying benefits. It is often difficult to choose the proper product for each situation. What I recommend you look for when selecting a material is which one will provide you with the greatest accuracy and predictable ease of use.

One of my go-to materials is Imprint 4 Penta Putty VPS Impression Material from 3M, which is what I selected for the clinical case outlined below. I go back to this product time and again for a number of reasons, one being its fast setting time of about 2.5 minutes in the patient's mouth.

Additionally, Penta Putty is a firmer substance than most impression materials, which I find easier to use and more comfortable for the patient. In the past when I've used products that are less viscous, they have spread much more out of the tray and spilled over into the patient's mouth. For full arch impressions, I prefer something that will be easier for me to handle and more tolerable for the patient.

Another way I ensure a great impression is by starting with a consistent and replicable product. I use the 3M Pentamix 3 Mixing Unit to mix the product and dispense the impression material onto my tray. This helps eliminate air bubbles and user error. With other impression material putties that I've worked with in the past, there is generally a two-step process that requires hand-mixing balls of putty into a workable substance. Not only is this much more time consuming, but it also opens the door for contamination and inaccuracies in the mixing process. With the machine handling the mixing, we are guaranteed a void-free and reliable material consistency every time.

Figure 1: select the impression tray.

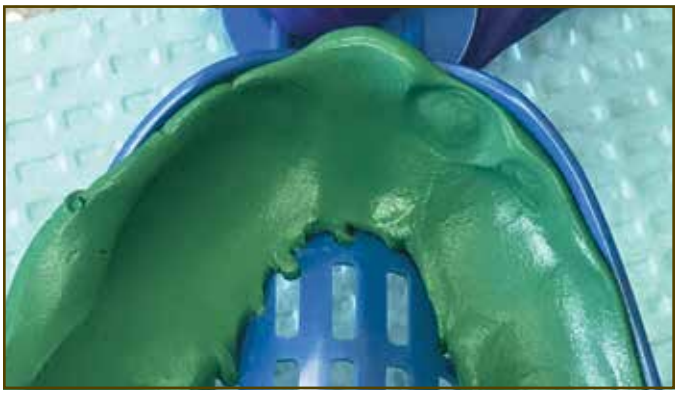

Figure 2: place 3M Penta Putty in the tray.

Figure 3: add wash material into the tray.

Figure 4: insert the impression tray with material into the patient's mouth.

Figure 5: obtain impression of the upper arch.

Figure 6: place 3M Penta Putty in appropriately sized tray.

Figure 7: add wash material into the tray.

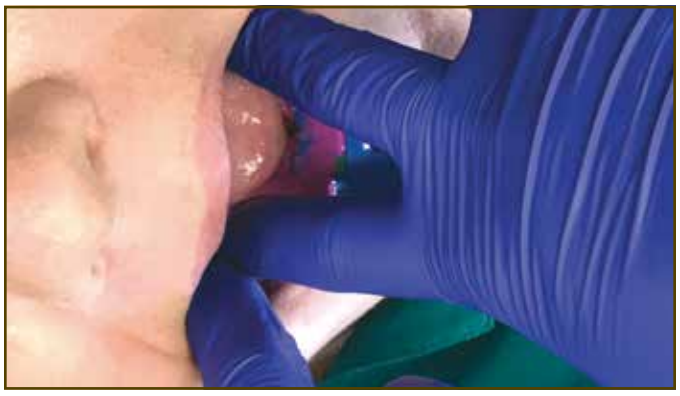

Figure 8: insert the impression tray with material into the patient's mouth.

I combine the putty with Imprint 4 Light VPS Impression Material, a wash from 3M. The less-viscous wash material on top spreads minimally against the putty, but not out of the tray. The product is reliable and results in a great impression and a more comfortable experience for the patient.

Impression tray

The impression tray that you choose plays a big role in the predictability of your impression. The tray must not be too large nor too small. Check the fit by placing an empty tray in the patient's mouth. It shouldn't touch or pinch the outer edges of the teeth. I typically use stock trays provided by Invisalign.

Case study and clinical considerations for success

A 37-year-old woman visited our office to investigate the possibility of Clear Aligner Treatment. She had had traditional orthodontics as a child. Since then, however, her teeth had shifted, despite the fact that she had fixed lingual retainers.

Ideally, I would have removed the lingual bars to get a clear impression, but because the patient was not certain she wanted to undergo the treatment, I chose to leave them in place. Her lower third molars were present; this would also make the impressioning a challenge.

We first selected an impression tray that would fit the patient's mouth (**Figure 1**). We then filled the tray with the designated impression material—3M's Imprint 4 Penta Putty (**Figure 2**). Once the impression material was evenly distributed in the tray, I carefully patted the material to create a well, and added 3M's Imprint 4 Light VPS as a wash material on top of the Penta Putty (**Figure 3**).

After the tray was prepped and ready for insertion, we dried off the patient's teeth to ensure a clean and accurate impression of the gingival sulci. We then placed the tray in the patient's mouth (**Figure 4**) and obtained an impression of the upper arch (**Figure 5**). I always firmly hold the impression for the whole setting time. If the tray moves, the impression will distort.

We repeated this process for the patient's lower arch. Again, we began by selecting the correct tray size and filling it with the Penta Putty (**Figure 6**). We added the wash (**Figure 7**), dried the patient's teeth, and inserted the tray into the patient's mouth (**Figure 8**). We were able to obtain an error-free impression of the patient's lower arch (**Figure 9**). The lingual bar (**Figure 10**) did present a challenge, but the impression proved acceptable.

Figure 9: obtain impression of the lower arch.

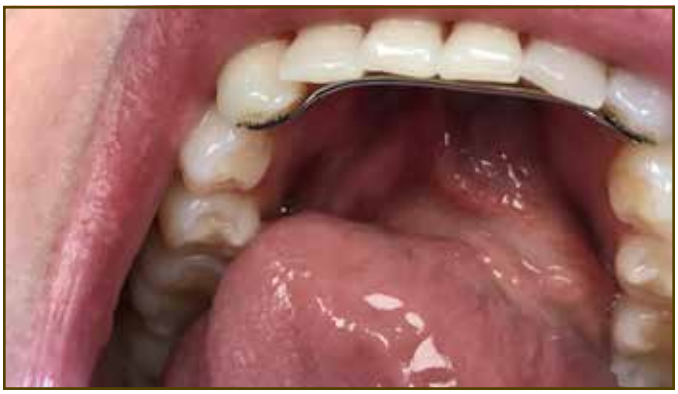

Figure 10: lower lingual retainer.

Conclusion

Taking an impression is not an easy task. In the case outlined above, I selected a traditional impression procedure, as I knew the material would provide me with a dependable and accurate impression that would in turn lead the rest of the Invisalign procedure down the right path. The choice of impression material can make or break your final product—your patient's smile. ■

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*HIPAA compliant: Brinker, S. (2015, January). HIPAA compliance and digital photography with personal mobile devices. Dental Products Report, 76-80.

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Compliance Corner

HIPAA: Ignore at Your Peril

by Michelle DeBarge and Jody Erdfarb

In the ever-changing landscape of health-care laws and regulations, it has become increasingly difficult for dental providers to keep pace with requirements. Our new column, "Compliance Corner," offers AACA members an opportunity to ask our legal counsel questions and learn from the questions of others.

Michelle DeBarge and Jody Erdfarb are attorneys at Wiggin and Dana LLP, the AACA's regulatory and compliance counsel. Wiggin and Dana's health-care compliance team regularly counsels clients on compliance with HIPAA and other federal and state statutes and regulations, as well as contractual, corporate, and transactional matters. Wiggin and Dana LLP is currently offering AACA members a discounted rate for model HIPAA policies and individual counseling sessions. Please contact Jody Erdfarb at JErdfarb@wiggin.com for more information.

Dear Compliance Corner,

Does our midsize dental practice really have to take HIPAA seriously? Maybe I am worrying about this too much when we have other priorities to attend to. What is the likelihood that we would ever be audited or investigated for failing to implement HIPAA's requirements?

From
A HIPAA-chondriac

Dear HIPAA-chondriac,

Unfortunately, HIPAA enforcement has been on the rise and has recently become more aggressive than ever. If you had asked this question 10 years ago, I might have joked that your "HIPAA-chondriac" pen name was justified because there was little to no enforcement activity.

However, all of that changed with the enactment of the Health Information Technology for Economic and Clinical Health (HITECH) Act in 2009, when the HIPAA enforcement authority of the federal and state government, and the fines for HIPAA violations, increased substantially.

Whereas enforcement used to be primarily complaint driven, the United States Department of Health and Human Services' Office for Civil Rights (OCR) now proactively investigates and audits compliance. While OCR traditionally resolved investigations by merely requiring corrective action, it now imposes significant monetary penalties. Even a technical HIPAA violation could result in millions of dollars in penalties, even if there was no bad intent and even if, exercising reasonable diligence, the entity could not have known about the violation.

2016 was a record-breaking year in federal HIPAA enforcement activity. OCR entered into 13 resolution agreements for HIPAA violations. In comparison, there were only 6 OCR enforcement actions in each of 2015 and 2014. Moreover, OCR collected about $23 million in fines in 2016; the previous annual record was $7.4 million in 2014. In 2016, OCR also imposed the largest penalty ever assessed for HIPAA noncompliance when Advocate Health Care System agreed to pay $5.5 million to settle the government's allegation that it violated HIPAA by failing to adequately safeguard patient information. Advocate had self-reported the theft of 5 laptop computers and a breach of its patients' information by the contractor that was providing Advocate with consulting and billing services.

There have already been 9 resolution agreements in 2017, including a settlement for $5.5 million with Florida's Memorial Healthcare System. It might still be too early to tell, but so far, those hoping that HIPAA enforcement would slow down significantly under the Trump administration have been sorely

"Those hoping that HIPAA enforcement would slow down significantly under the Trump administration have been sorely disappointed."

disappointed—the majority of the 2017 settlements were announced after the appointment of new OCR director Roger Severino in late March.

Size doesn't matter

In addition, when it comes to HIPAA enforcement, size does not matter. OCR has pursued small providers for HIPAA violations before and indicates that it will not hesitate to do so again. Prior OCR Director Leon Rodriguez explicitly stated that he intended to send "a strong message to the health care industry that, regardless of size, covered entities must take action and will be held accountable for safeguarding their patients' health information." While HIPAA's Security Rule allows entities of different sizes to tailor compliance based on their size, OCR will pursue violators of all sizes.

For example, in April of 2016, a midsize orthopedic clinic in North Carolina agreed to pay $750,000 to settle the government's allegation that it violated HIPAA by failing to execute a business associate agreement prior to turning over the x-rays and personal health information of patients to a vendor that was contracted to transfer the images to electronic media. Also for example, in February 2016, a physical therapy provider in California agreed to pay $25,000 to resolve the government's allegation that it violated HIPAA by posting patient testimonials, including full names and full-face photos, to its website without obtaining HIPAA-compliant authorizations.

Indeed, in 2016 OCR explicitly announced its initiative to "more widely" investigate breaches affecting fewer than 500 individuals. In an email message posted to the OCR Privacy list server, OCR explained that its regional offices at that time investigated all reported breaches involving the health information of 500 or more individuals, but only investigated reports of smaller breaches "as resources permit." OCR announced that it "has begun an initiative to more widely investigate the root causes of breaches affecting fewer than 500 individuals." Each regional office would retain discretion to prioritize which smaller breaches to investigate, but would increase efforts to obtain corrective action to address noncompliance. While there has not yet been an OCR HIPAA enforcement action involving a dental provider, there is no doubt that dental practices that have not implemented a robust HIPAA compliance program are putting themselves at grave risk.

A multi-pronged attack

Keep in mind that OCR is not the only sheriff in town. Each state attorney general has the authority to enforce HIPAA, and they have not been shy about doing so. Other federal agencies, such as the Federal Trade Commission (FTC), have also used their authority to investigate and impose penalties when there have been security breaches or other privacy violations.

Disgruntled employees are often the ones to file complaints with government agencies, instigating costly and aggravating investigations, but patients themselves have become more aware of their privacy rights and have been increasingly willing both to report suspected violations to the government and to file lawsuits directly as well, using alleged HIPAA violations as the basis for their state law claims.

If the answer to your question is not yet clear, let's be explicit: Yes, a midsize dental practice really must take HIPAA compliance seriously. While the HIPAA regulations may seem overwhelming, compliance is achievable, and a little effort goes a long way. Conducting a risk analysis, establishing HIPAA policies, training staff, and reviewing contractor relationships are simple steps that providers can take. Every practice prioritizes where to expend limited resources, but if you have relegated HIPAA to the bottom of your list, it may be time to reprioritize. ■

"Disgruntled employees are often the ones to file complaints with government agencies, instigating costly and aggravating investigations."

Pre-restorative Orthodontics

Restorative Challenge #1: Extensive Anterior Tooth Wear

by Richard Schmidt, BSc, DDS

In the previous issue of the Journal, *Dr. Richard Schmidt asserted that "Orthodontic treatment can enhance the long-term predictability of restorative dental treatment by positioning the teeth in their optimal location within the dental arches."*
In a poll of dentists, he identified the top 6 restorative challenges that dentists feel can be made easier with pre-restorative orthodontics.
This is the first of his 6-part series of articles, discussing these challenges.

Dr. Richard Schmidt practices general dentistry in Brampton, Ontario. He has been in practice with his wife, Dr. Tamara Sosath, for 29 years. He has always had an interest in orthodontics and recently introduced Clear Aligner Therapy (Invisalign) as a treatment option for his patients to establish a sound occlusion. In addition to treating teens with Invisalign, he is utilizing it to align teeth conservatively for rehabilitative restorative treatment.

Discussion

As the population of our patient base increases in age, the dental profession is witnessing a phenomenon never before seen: the severe wear of our patients' teeth. With increased life expectancy for adults (in 2015 in the U.S., it was 76.5 years for males and 81.2 years for females)[1] and improvements in oral hygiene protocols, today's adults are retaining their teeth longer than any previous generation. The teeth are exposed to many more years of function than ever before, and in the presence of destructive forces, extensive wear results (**Figure 1**).

In the opinion of the author, the level of stress that today's younger society is exposed to is a leading cause of extensive tooth wear among people under 45 years old (**Figure 2**).

Both the old and the young require dental intervention to preserve the health of their dentition.

As a result of the increase in life expectancy, and therefore the expectation of maintaining one's dentition, our approach to dental treatment must be modified. Put the handpiece down. Practice minimally invasive dentistry. Maintain tooth structure and, thereby, strength, and limit the iatrogenic removal of tooth material.

Enamel wear can result from physical causes, such as bruxism (tooth against tooth, **Figure 3**) and abrasion (toothpaste/toothbrush action, **Figure 4**); chemical causes, such as erosion due to caustic agents, intrinsic or extrinsic (**Figure 5**); or any combination thereof (**Figure 6**).

When sufficient enamel has been worn away, the softer, weaker dentin becomes exposed. Enamel has been shown to be approximately 7 times as hard as dentin,[2] and dentin wears 7 to 9 times as fast as enamel.[3] The etiology of the wear should be diagnosed in order to provide the best possible restorative treatment.

If the segmental wear is confined to the incisal edges of the incisors, one can assume that bruxism is responsible. Over a period of time, the incisal edges continue to wear and the clinical crowns become shorter; yet in most cases, the incisors remain in contact with the opposing arch. How can this be? The author uses a term, compensatory dentoalveolar extrusion (DAE), to describe a constant incisal migration to maintain incisal contact. The clinical evidence of compensatory DAE includes (**Figure 7**):

- the level of the gingival margins of the incisors relative to the mandibular premolars
- the incisal migration of the gingival apparatus

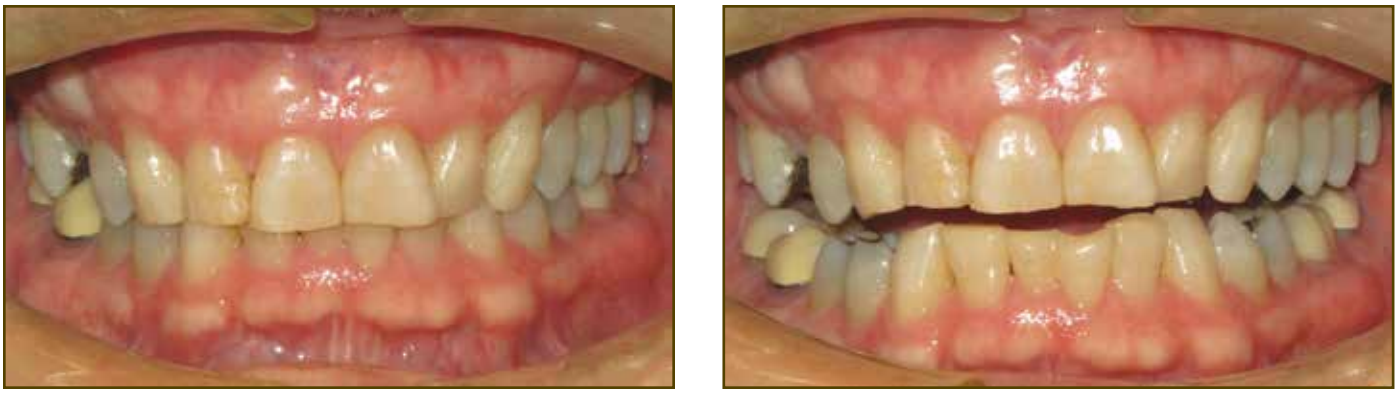

Figure 1: extensive anterior wear in a 64-year-old patient (case #1).

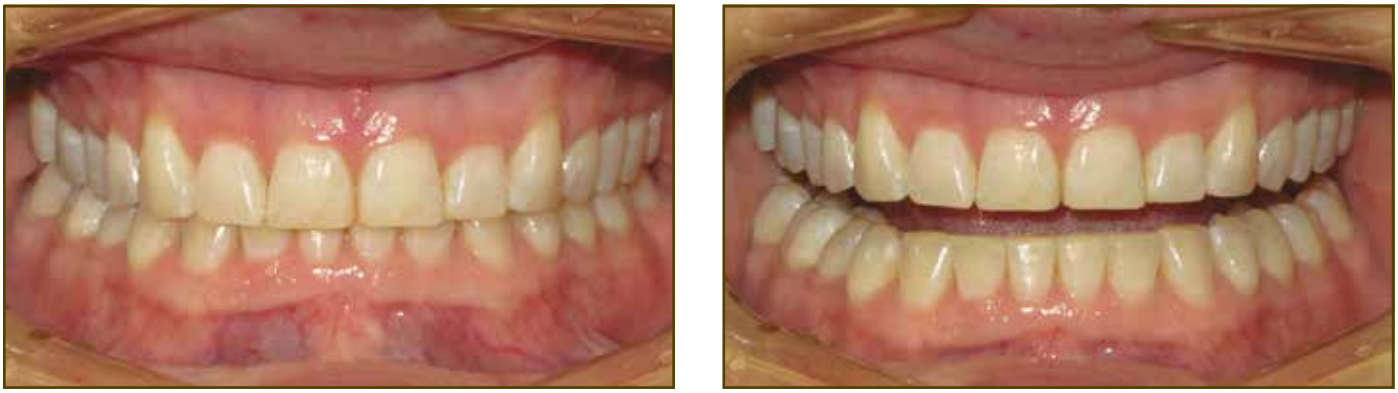

Figure 2: example of moderate anterior wear in a 42-year-old patient.

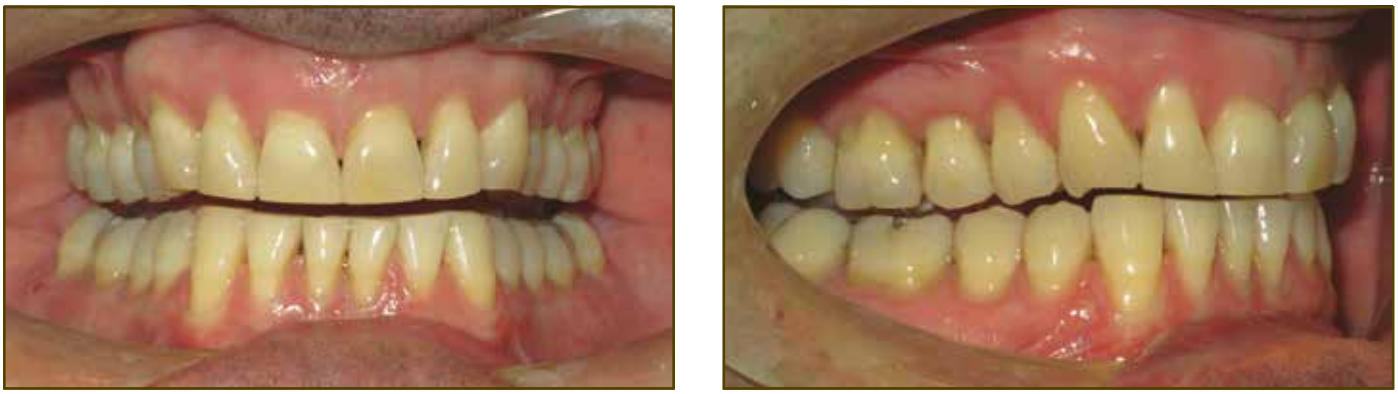

Figure 3: example of attrition due to tooth wear via bruxism.

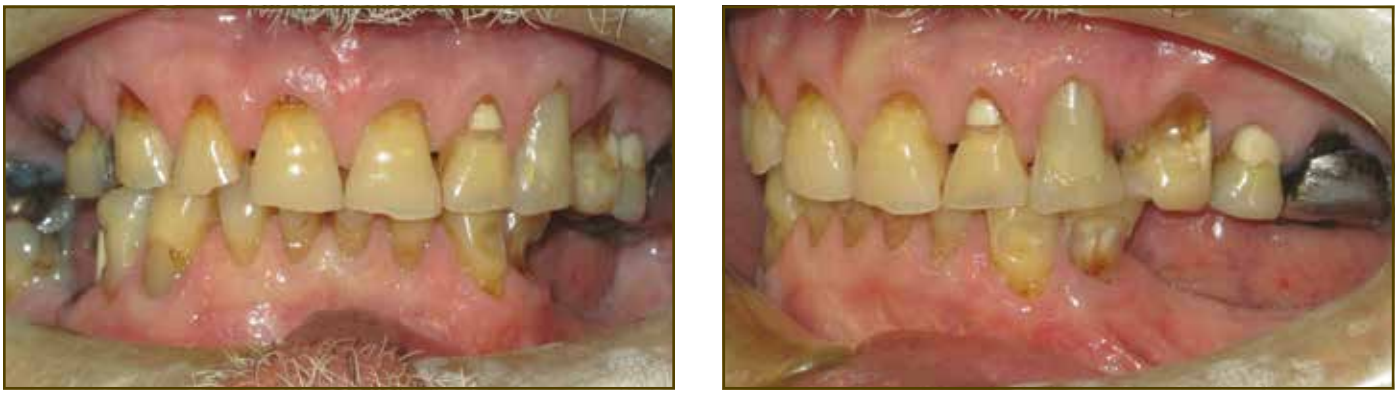

Figure 4: example of abrasion caused by prolonged, aggressive toothpaste/toothbrush action.

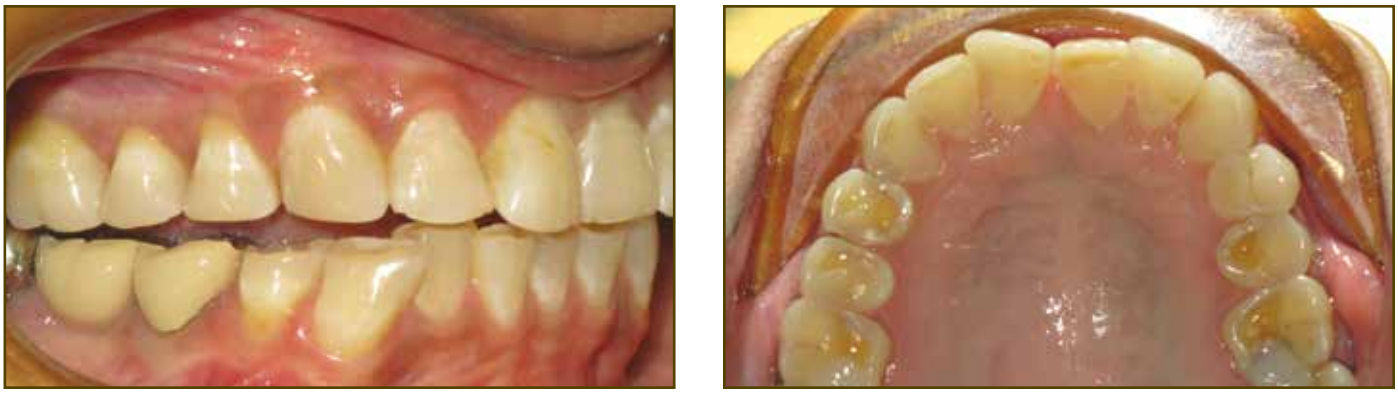

Figure 5: example of "cupped-out" appearance of chemically eroded tooth surfaces.

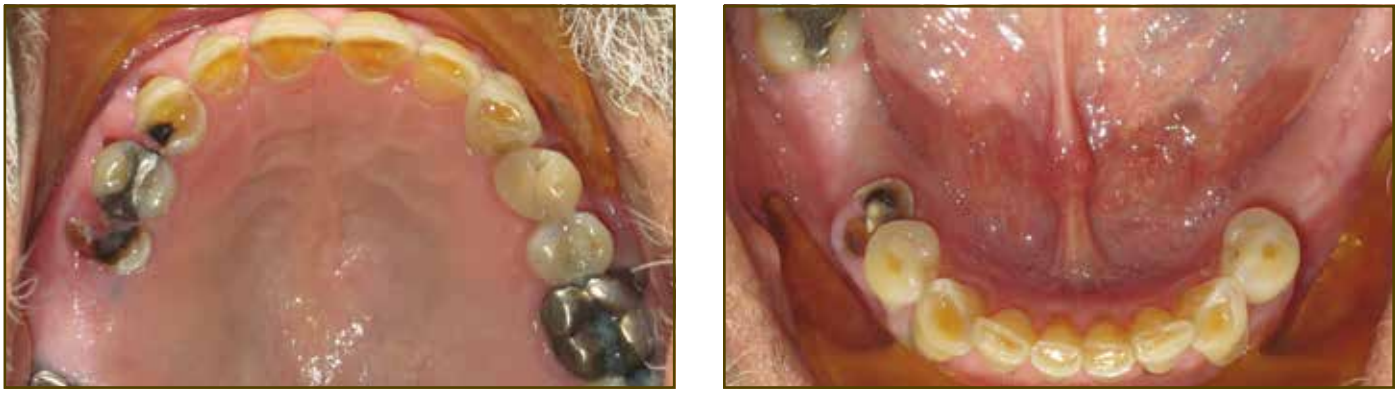

Figure 6: example of combination of erosion, attrition, and abrasion.

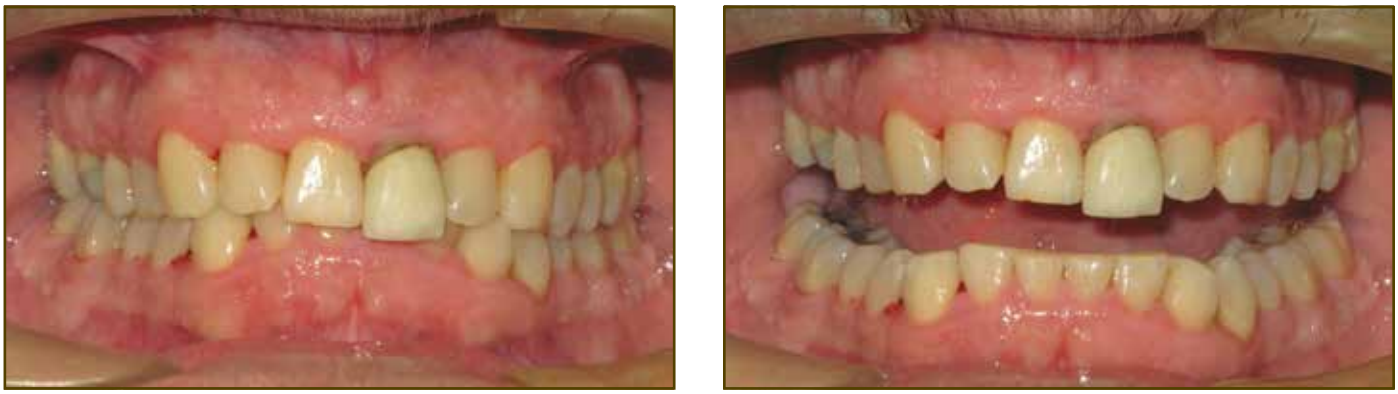

Figure 7: example of clinical evidence of DAE: mandibular incisor gingival margin levels, lack of exposed root surface, maintenance of gingival architecture.

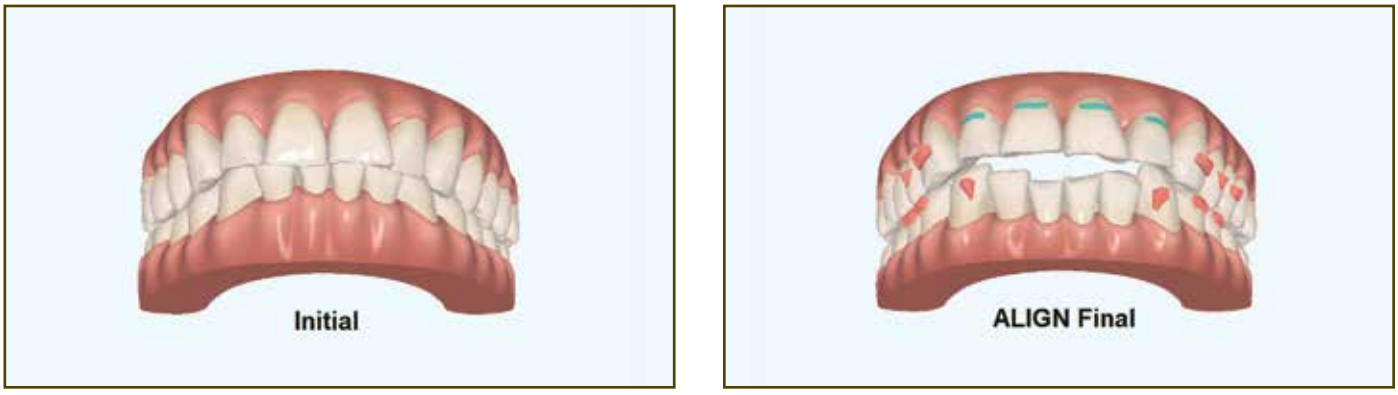

Figure 8: case #1: note the overtreatment of the anterior tooth movement.

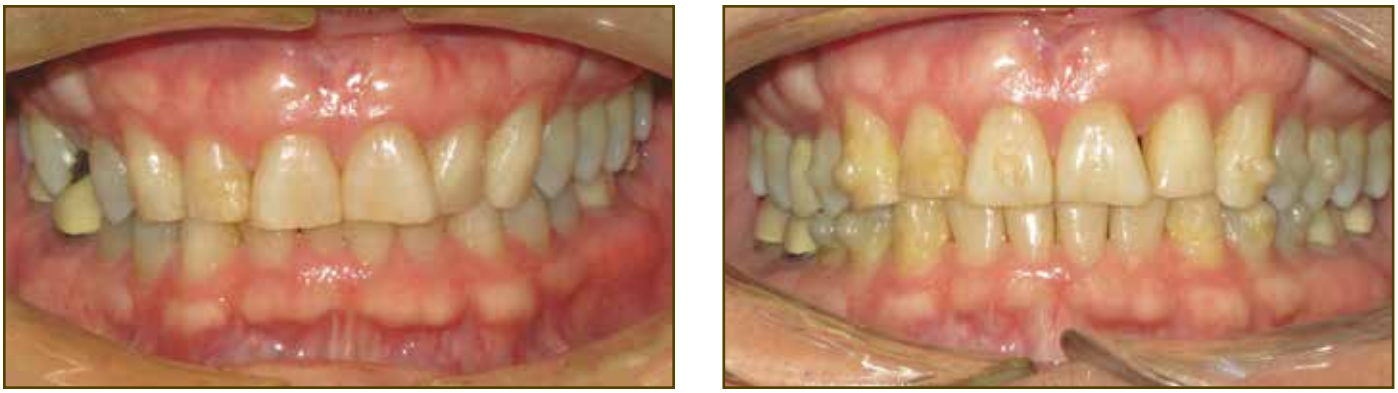

Figure 9: case #1: DAI has achieved our goals: gingival margins levelled, gingival architecture maintained, and OB/OJ relationship improved.

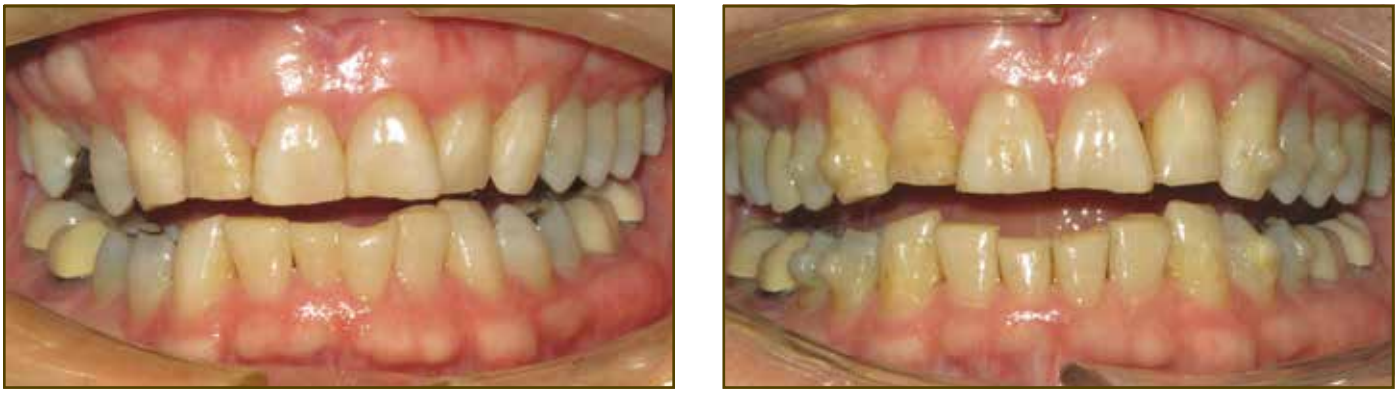

Figure 10: case #1: DAI has also provided space for restorative material.

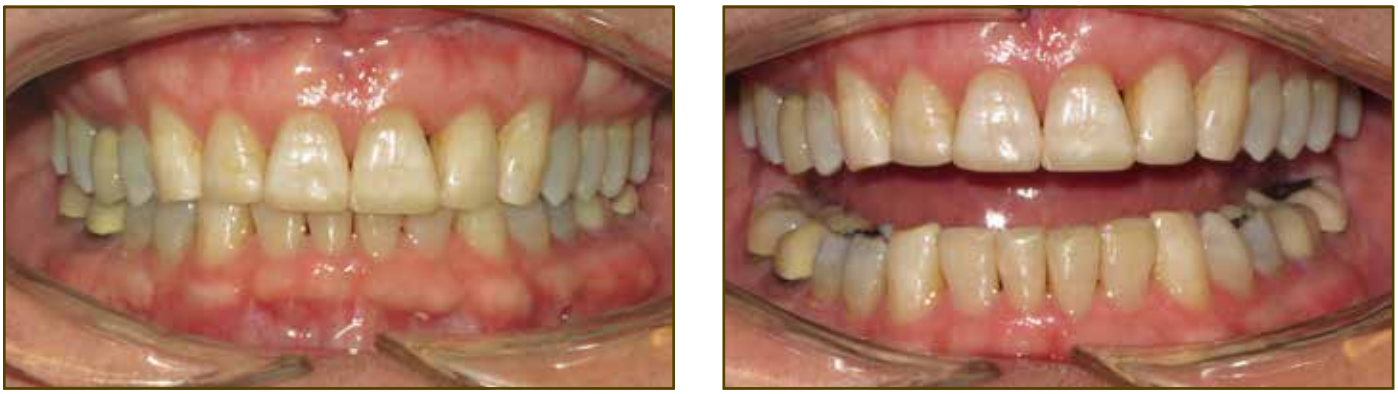

Figure 11: case #1: the completed treatment: restoration of the worn anterior teeth.

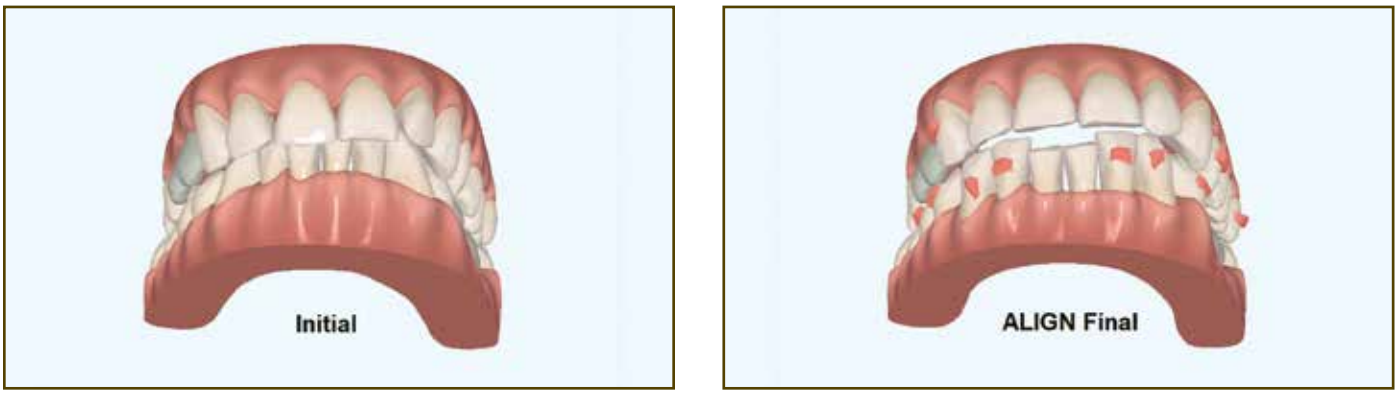

Figure 12: case #2: the planned overtreatment of DAI.

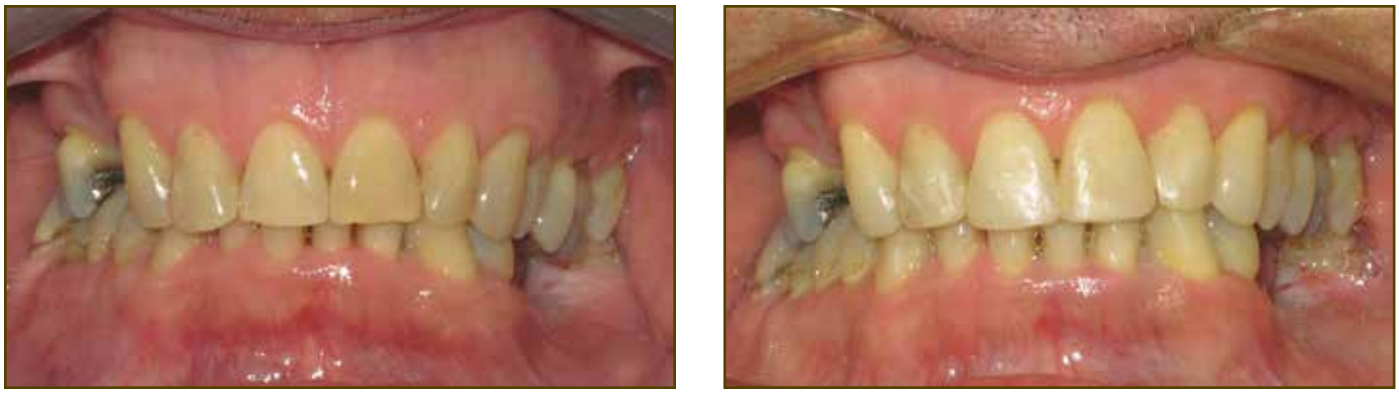

Figure 13: case #2: improved OB/OJ relationship.

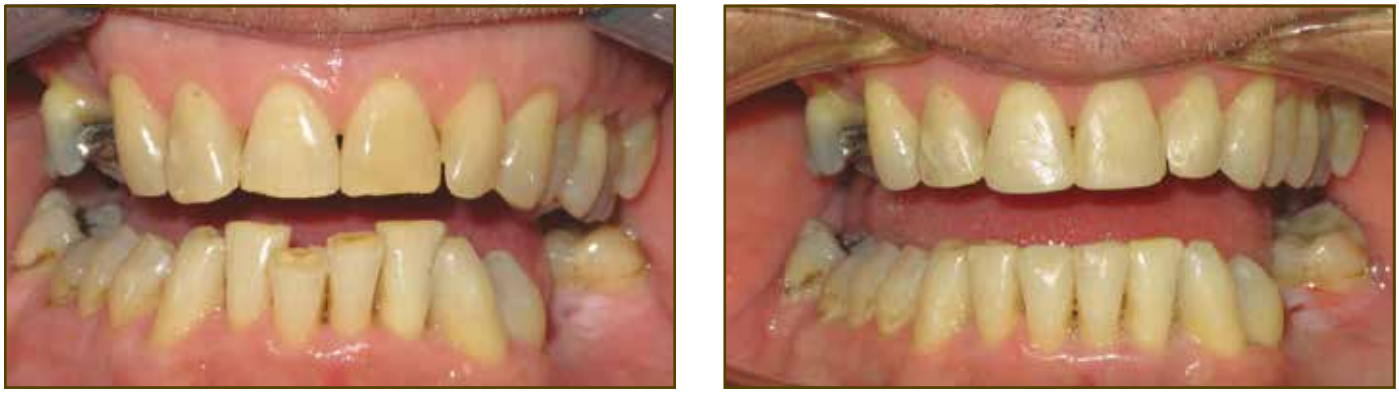

Figure 14: case #2: a very satisfying and aesthetically pleasing result.

- the lack of exposed cementoenamel junction/root surface
- the alveolar bone level compared to adjacent teeth

Historically, the most common dental treatment to increase the length of the clinical crown after compensatory DAE occurs has been periodontal crown lengthening surgery.[4] However, in many cases, the use of orthodontic treatment can facilitate the favourable prognosis of the restorative outcome, reducing or obviating the need for surgery. If the body can respond to tooth wear with compensatory DAE (in the absence of any orthodontic force), then it is worthwhile to investigate the reverse: dentoalveolar intrusion (DAI) in the presence of light, gentle orthodontic forces.[5,6]

When it is indicated, the advantages of DAI for the teeth being treated are:

- It permits minimally invasive tooth reduction to create space for restorative material.
- It minimizes the need for surgical crown lengthening, to increase clinical crown height to provide an aesthetically acceptable height/width ratio (assuming sufficient ferrule present).
- It maximizes the amount of available enamel to bond restoration (avoids cementum exposure).
- It maintains pre-treatment gingival embrasure size and shape.
- It maintains favourable gingival margin architecture.
- It achieves conservative levelling of gingival margins.
- It produces level gingival margins that will then provide the foundation to produce aesthetically pleasing adjacent clinical crowns of equal size (height and width).
- It maintains root form and width at the gingival margin, avoiding exposure of the narrower root.
- It maintains the amount of valuable root in bone.

In addition to the above, DAI provides benefits to the patient's dentition as a whole:

- It alleviates incisor crowding and improves oral health access.
- It positions teeth to improve anterior guidance with an improved interincisal angle, overbite (OB), and overjet (OJ).

The author has seen that Clear Aligner orthodontic treatment is well received by the adult patient. It has many advantages over conventional brackets/wires: in deep bite cases, the clinician can initiate maxillary and mandibular treatment simultaneously; CAT protects against additional tooth wear during treatment; and the CAT patient becomes accustomed to protective tooth coverage for the long term.

The balance of this article will discuss the benefits of orthodontic treatment when planning treatment of extensive anterior wear due to attrition.

Case #1

Over the past three years, the author has educated himself in diagnosing and treating the worn dentition. We had the opportunity to apply this knowledge to the treatment of Dan.

Dan is 64 years old and has been receiving dental care in our practice for more than 10 years. During this time, we observed and noted the anterior wear but did not develop a definitive treatment plan. His Invisalign treatment involved 29 active aligners for the maxilla, and 22 active plus 7 passive aligners for the mandible. We repositioned the anterior teeth using DAI and IPR. The ClinCheck image (**Figure 8**) demonstrates the overtreatment of the tooth movement; we specified this because not all of the desired force system is fully expressed and delivered to the teeth.

By examining **Figures 9** and **10**, one can see that the goals of tooth positioning have been achieved. The gingival margins have been levelled, gingival embrasure and architecture have been maintained, and space has been developed for restorative material.

The orthodontic tooth movement created enough space to complete the resin restorative phase (**Figure 11**). The patient received treatment with the most favourable and predictable long-term prognosis in a minimally invasive manner.

Case #2

Mike was 51 years old at the onset of treatment. The Invisalign orthodontic treatment consisted of an initial phase with 25 aligners each for the maxilla and mandible, followed by a refinement of 15 aligners. The treatment planning protocol and result were similar to those in case #1, as seen in **Figures 12-14**. The teeth were restored very conservatively using resin restorations.

Conclusion

Orthodontic treatment must be considered when planning treatment of a worn dentition due to attrition. The teeth can be repositioned to a more favourable location to facilitate the conservative restorative treatment of the worn surfaces and to optimize periodontal health. By implementing pre-treatment orthodontics, the clinician's vision can be realized. ■

In the next issue of the Journal, Dr. Schmidt will discuss using Clear Aligner Therapy pre-restoratively in patients with reduced vertical dimension.

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Pension Planning

The Dormant Legal Liability Lurking in Your Practice

by Tom Zgainer

Tom Zgainer is the founder and CEO of America's Best 401k. According to his website (www.americasbest401k.com), "He has helped over 4000 businesses obtain a new or improved retirement plan over the past 15 years with a focus on strategic plan design to help achieve individual and corporate objectives."

Is your 401(k) plan a ticking time bomb of personal and professional liability?

Clinicians may be overlooking a significant source of liability in their practices: their 401(k) plans.

Class-action lawyers seeking plaintiffs are reaching out to employees in businesses of all kinds, with opportunistic letters that highlight how they have been harmed by excessive fees in their 401(k) plans. These letters encourage plan participants to join lawsuits against their employers for breach of their fiduciary obligation to provide a retirement plan that is set up for the sole benefit of the employees.

While you are busy running your practice and offering a 401(k) as a benefit for your team, a recent ruling by the Supreme Court has officially started the clock on this ticking time bomb. Larger employers in a variety of industries are already under attack, and many others have paid to settle such suits. Smaller companies (under 100 employees), where excessive fees are most prevalent, are now also in litigation. Employee Benefit Advisor, an industry trade publication, recently prophesied that an "onset of 401(k) lawsuits should prompt rigorous plan evaluations."

The 401(k) is a great piece of tax code, but the problem lies in the method by which 401(k) plans are sold—and the surprising number of hands in the retirement plan pie.

Over the past three decades, 401(k) plan providers have been making big money through hidden or opaque fee arrangements. In fact, it took a full 30 years before the players in the industry were required to disclose just how much they make on your plan! Only since 2012 are they now required to produce a fee disclosure document (known as a 408(b)(2)). Plan sponsors are required to review these documents, and articulate and take action if necessary, yet the actual fees are often buried in fine print.

This is why over 60 percent of Americans think they pay no 401(k) fees, when nothing could be further from the truth. So just how do plan providers make their money? Primarily by taking a cut of the fees charged by the mutual funds offered in the 401(k) plans they sell. And if that's not enough to wet their beaks, they layer on additional fees such as "asset management charges" or "contact asset charges."

And so we have a business model in which nearly all the major plan providers are conflicted. They choose funds for your plan that charge hefty fees so that there is plenty to go around (or worse, they just sell you their own name-brand funds, which are more profitable for them). Did you think the funds were chosen because they were the best performing? Think again. They were probably chosen because the fund company will "pay to play"—which is why superior-performing, low-cost index funds tend to be a rarity in 401(k) plans.

But it doesn't stop there. The broker who sold the plan wants his cut. So he too will receive commissions from the funds, or simply layer on additional fees. And let's not forget the third-party administrators. They typically charge a fee directly to the employer, but many will also accept a portion of the mutual fund fees. This often buys their loyalty to specific providers.

The net result is an industry with layers upon layers of incestuous relationships which funnel excessive fees from your plan and put numerous conflicts of interest in play—hence the lawsuits.

Do fees really matter?

Although the fees your plan charges might sound like small percentages, they have a massive impact over time. Fees subtract directly from your returns. John Bogle, founder of Vanguard, says that costs can cut returns by 66 percent over the course of our saving years. Said another way, simply controlling costs could double the size of your future nest egg.

The Department of Labor (DOL) says that hidden fees and backdoor payments in retirement plans are costing Americans over $17 billion annually. Secretary of Labor Tom Perez rightly stated, "The corrosive power of fine print and buried fees can eat away like a chronic illness at a person's savings."

It's your problem

At first glance, you might be thinking that these issues and conflicts should be the responsibility of the providers. After all, they sold you the plan. But ERISA rules make you, the employer, the fiduciary to the plan and to your employees. As the plan sponsor, it's your job to make sure the plan is set up for the sole benefit of the employees. Hence, it's your job to review and periodically benchmark your plan against other options. For many employers, this is alarming news, as running a business is already challenging enough.

So where do you go from here? There are five key steps we advise all plan sponsors to take:

1. Benchmark your plan to determine how it compares to alternatives. A periodic benchmark is required by the DOL anyway, so it's an exercise that can reap great rewards while also taking care of your duty as a plan sponsor. Beware: if you use a broker to do this, you'll typically be shown other similar plan options that will also earn the broker big commissions. As Warren Buffett says, "never ask a barber if you need a haircut."
2. Eliminate layers of fees wherever possible. The first and easiest way is to eliminate the use of a broker who is paid by commission. Brokers typically add little ongoing value, beyond bringing donuts to your office twice a year to keep everyone happy. Many employers were sold their plans by brokers who were also personal friends. Breaking up is hard to do, but a personal relationship is not a defensible position with the Department of Labor.
3. Remove conflicts of interest. If you are using a plan whose provider is being paid by the mutual funds in the plan, the provider has an inherent bias to select more expensive funds or sell you its own name-brand proprietary funds. This is nearly always the case with plans offered by insurance companies, payroll companies or mutual fund companies. You can simply ask your provider if it is "revenue sharing" with the mutual funds it offers.
4. Install a third-party fiduciary on your behalf. This is known as a 3(38) fiduciary, who will take over nearly all of the responsibilities and much of the liability of the plan sponsor. The fiduciary's job is to make sure that the plan is continually operated in the best interests of the plan participants. This is a best practice adopted at many Fortune 500 companies, but is rarely seen in small-to-midsize plans.
5. Lastly, look for a plan that has access to the lowest-cost index funds. Index funds consistently outperform nearly all actively managed mutual funds over the long term. One note of caution: many providers don't make money off these funds because of their rock-bottom fees, so they sometimes charge additional layers of fees, or they will say your plan isn't big enough to qualify. Nonsense! Every 401(k) participant in America should have access to the same low-cost funds regardless of the balance in the company's 401(k) plan.

The 401(k) is an amazing retirement solution when there is alignment between the provider and the saver. It's time that Americans wake up and take back their retirement plans from the providers that have been milking them for every dime they can get. It's time for business owners to feel proud of the plans they offer, knowing that they will give themselves and their employees the absolute best chance at a successful retirement. ■

Financial Management

Protect and Grow Your Family Financial Security

by Ralph Adorno

Chartered Life Underwriter Ralph S. Adorno is an independent financial professional with more than 46 years of experience in financial services. He serves clients whose net worths range from $250,000 to $1.5 billion. Using his proprietary Income-Legacy Planning method, he works with clients to create, preserve, and maximize their wealth.

Mr. Adorno holds insurance licenses in 12 states and is a member of the Estate Planning Council and the National Association of Insurance and Financial Advisors. For more information about him, his firm, and the services they offer, visit: rsaretirement.com.

Helping children and grandchildren

Many people want to help their children and grandchildren achieve their own financial security and dreams. Life insurance can give them a head start toward those goals by providing a guaranteed amount of insurance to help teach the value of protection and savings. Permanent life insurance can be a smart addition to any financial plan for investors who want more ways to protect their family, minimize taxes, and grow their money over time.

Permanent life insurance helps children and grandchildren live more for today by protecting them and their future family against life's unknowns while providing ongoing access to money when they need it the most for any reason, including:

- A child's college tuition and expenses
- Self-financing a car or equipment
- Real estate down payment or mortgage
- Starting a new business
- A more comfortable retirement income

So whether your heirs want to protect their own family, minimize taxes, or take a low-risk approach to saving for college or retirement, they can use this money in the way that best suits them at each stage of their lives.

Never too young to start

Life insurance payments are primarily based on age and health. As your children and grandchildren grow older, or if their health changes, they may no longer be able to qualify for or afford life insurance. Gifts used to purchase life insurance now help guarantee their future insurability. They will never be younger or healthier than they are today!

Guaranteed purchase options of additional life insurance

As time goes on, your children or grandchildren may want to protect their families with more life insurance. Many policies have an option that allows the purchase of more coverage at certain life events, as needed. You can guarantee that they can add up to $1 million of life insurance, regardless of their future health.

A gift that they can't outgrow and keeps on giving

Children and grandchildren eventually outgrow clothes, toys and other gifts you give them. But they can never outgrow a gift of paid-up life insurance that keeps on giving. Here are some ideas on how your legacy gift of permanent life insurance will protect their own financial security and future family:

- A gift of insurance requires no supervision or investment management.
- It can start them on an estate program of their own.
- Unlike with term insurance, your permanent life policy cash can grow over time like equity in a home. And the money you save grows faster over time than in taxable accounts.
- Life insurance can self-complete if they become sick or disabled.
- They have instant access, use, and control of the money, without penalties.

- It reduces or eliminates dependence on financial institutions.
- Life insurance provides financial security, grows tax free, can be accessed tax free, pays tax-free income and creates a tax-free legacy.
- Einstein said that "compound interest is the eighth wonder of the world." Never, never, break the compounding of money, so that it can build safely and more quickly.

Permanent life insurance can be a smart addition to any financial plan for investors who want more ways to protect their family, minimize taxes, and grow their money. ■

Panning for Gold

by Ralph Adorno

I recently did a seminar and received a call from Dr. Doug. He was intrigued about what he had heard, and wanted to find out more.

We did the usual small talk, and then he asked, "What do you do and how can you help me?"

I said, "I pan for gold."

"Oh, that must be interesting. You must travel a lot and visit a lot of interesting places."

"No," I responded. "The gold I dig for isn't the same gold as the gold found in streams during gold rushes. However, I do follow the same rules as the traditional gold diggers."

Doug was intrigued and said, "I'm not sure I understand."

"I'm a modern-day gold digger. I dig for gold in clients' finances. Clients come to me wanting to increase their income and wealth, or to make sure their money lasts as long as they do. Most of them are seeking the nuggets that produce the highest rates of return. Several clients prior to meeting with me had gone from advisor to advisor, like stream to stream, looking for the magical nuggets.

"The first steps in successful gold digging are to know what to look for and how to locate the gold," I continued. "The goal is not to find the magical nugget that produces the highest rate of return. There's much more to be gained by avoiding losses than by picking apparent winners. And to find the gold, you must look where others aren't looking. If you want to attain uncommon results, you need to look in uncommon places!"

Doug said, "Your approach sounds interesting. Would you expand on that for me?"

I replied, "Maybe what you don't know might be more important to you than what you do know. We are in an instant-data society. The financial press bombards us daily with financial comments that may not be a good strategy for everyone. 'Pay off mortgages as fast as you can. Maximize contributions to 401(k)s and IRAs. Pay cash for your car. Buy term life insurance. Use 529 plans and loans for education. Taxes are mandatory.' All of these statements should be examined for their validity.

"There are two sides to every coin. Oftentimes the financial press and advisors tell you what is on one side of the coin without looking at the other side. My job is to help you understand what's on both sides, and not to think like everyone else: to 'think outside the box' while separating fact from opinion. It's important to make an informed decision based on all information. I convey the truth as supported by documentation, not merely opinion."

> "If what you thought to be true about money turned out NOT to be TRUE, when would you want to know?"
>
> —Donald L. Blanton

For a complimentary consultation on how Ralph can help you and your business, please contact us at RalphAdorno@optonline.net or (800) 258-7608

Book Review

The Insider's Guide to Invisalign Treatment

The Insider's Guide to Invisalign Treatment: A step-by-step guide to assist your ClinCheck treatment plan.

by Barry J. Glaser, DMD—Reviewed by Martin Jefferies, DMD

Have you ever wondered, "Why can't I just submit my case, push the 'Accept' button on my ClinCheck plan, and have everything track perfectly on every patient?"

Dr. Glaser's short answer to that question is: "Because that's not how orthodontics works." To produce predictably excellent results, a dentist must be proficient in monitoring, adjusting, and adapting his procedures for each patient's individual needs.

The author explains that, in his lectures to dentists and on his educational website (AlignerInsider.com), he has found that dentists oftentimes don't understand either how to interpret what they see on a ClinCheck treatment plan, or how to effectively communicate their treatment goals to their technician.

Because of these common deficiencies, he developed his unique 10-step method for Invisalign treatment planning, and incorporated this "ClinCheck list" into a very comprehensive and understandable book.

Although clearly geared for orthodontists, the book is an extremely valuable tool for all practitioners who treat their patients with Clear Aligners. It is an indispensable guide for dentists who wish to enhance their orthodontic outcomes and learn how to treat patients successfully and efficiently.

The author's journey

Dr. Glaser, a classically trained, traditional orthodontist, recounts that "Just 10 years ago, the thought of predictably correcting moderate to severe malocclusions with clear aligners would have seemed far-fetched" to him. However, as Align Technology continued to evolve ever more sound, scientific methods for achieving predicable outcomes, he also evolved in his thinking. He explains that after successfully treating a patient with an extremely complex Class I malocclusion and severe upper and lower overcrowding, he realized that by thinking of Invisalign as a "force system" and not as a "tooth moving system," he was able to produce consistently excellent results for his patients.

Further, he explains, he initially was reluctant to treat teenagers via removable appliances for fear of noncompliance and extra parental costs associated with replacing lost or broken appliances; however, now that Invisalign Teen offers color-changing compliance indicators and free aligner replacements (within reason!), he happily offers Invisalign to his teenage patients.

As well, he adds that his orthodontic practice is now able to treat a large segment of adults, who would otherwise have never agreed to wear traditional, unesthetic metal fixtures.

Step-by-step principles

Dr. Glaser's book is well organized, and features a very great number of case studies that clearly illustrate each of his teachings. He starts by discussing and explaining some important fundamental principles, such as how aligner forces can push teeth more successfully than pull them; how clear aligners can apply multiple forces at the same time; how anchorage is required for efficient movement; how overengineering ClinCheck is highly advisable; and how teeth require space to move.

He explains how the ability to perform multiple movements simultaneously is one of the huge benefits of using the Invisalign system. It allows practitioners to torque, rotate, and align teeth concurrently.

The ClinCheck list

Dr. Glaser devised a systematic approach to ClinCheck design and treatment planning that "allows for individual customization of each ClinCheck plan, tailored to the specific needs of each patient as well as the individual treatment philosophy of each doctor."

His 10 critical parameters to guide dentists in customizing treatment plans are: crowding, spacing, vertical, sagittal,

transverse, attachments, IPR, staging, overtreatment, and overcorrection.

He teaches that it is not sufficient to merely instruct the technician to "level, align, and de-rotate all teeth," because technicians "are not doctors and do not have the training and experience that you have."

Organized chapters

In easy-to-follow chapters, Dr. Glaser covers many areas.

In Chapter 3, he discusses crowding, and how we are faced with a limited number of options. We can plan for expansion, proclination, Interproximal Reduction, or extractions.

He analyzes the indications and contraindications for each choice, while considering periodontal, esthetic, and functional issues, along with the prospects of long-term stability.

Chapter 4 features a discussion about spacing, and how there are only two ways of treating spacing: tipping movements and bodily movements. While tipping movements are relatively simple (the author calls them an "Invisalign free ride"), bodily movements are more challenging.

In achieving bodily movements, he discusses attachments, familiar to most practitioners; but he also discusses "Virtual Gable Bends," a subject that might be familiar to orthodontists, but is probably an entirely new idea for novice general practitioners. Instructions to the technicians, such as "Please add a 30-degree Virtual Gable Bend UR1 UL1," are certainly very new to me.

This chapter also contains a very valuable analysis of tooth-size discrepancies (Bolton discrepancies), along with a detailed, step-by-step guide on handling these problems in the ClinCheck treatment plan.

In Chapter 5, Dr. Glaser discusses treating deep bites with anterior intrusion, posterior intrusion, or a combination of both; and treating open bites by extruding the anterior teeth, intruding the posterior teeth, or a combination of the two.

There is a very important and illuminating section on when to prescribe precision bite ramps, and when not to use them.

Delving deeper

In more complex discussions, Chapter 6 analyzes the treatment of Class II and Class III malocclusions, and Chapter 7 guides readers on treating the transverse dimension of orthodontic cases.

Dr. Glaser cautions dentists that skeletal crossbites are a "big red flag, particularly in adults—they are unpredictable to treat non-surgically," and notes that unilateral crossbites can also be extremely challenging and might require the use of cross elastics.

Chapter 8 discusses attachments and how Optimized Attachments are automatically placed by the SmartForce software in ClinCheck. These attachments are utilized for rotation, extrusion, root control, multiplane (for simultaneous root movement and extrusion), and support.

Conventional attachments, which are ovoid or rectangular, beveled or nonbeveled, and oriented horizontally or vertically, are used for aligner retention and anchorage, to support ntrusion, extrusion, or root control.

I especially appreciated his instructions for using ClinCheck Pro for the design and placement of conventional attachments and how they can be customized. Also very valuable was a discussion on rules of thumb for deciding which attachments to use.

In Chapter 9, Dr. Glaser discusses Interproximal Reduction and the five reasons for employing this technique: to alleviate crowding, adjust Bolton discrepancies, reduce overjet or overbite, reduce heavy anterior occlusal contact, and avoid and manage the appearance of the dreaded "dark triangles."

The final chapters

Overtreatment and overcorrection, and how to engineer our treatment plans for them, are topics handled in Chapter 10, where the author discusses their indications and the differences between the two.

In Chapter 11, Dr. Glaser discusses commonly encountered treatment problems, such as a residual posterior open bite, and how to handle these difficulties.

Conclusion

I would have preferred if the book featured lavish, color photos, but the author's black-and-white photos are nevertheless extremely valuable and clearly illustrate the author's points.

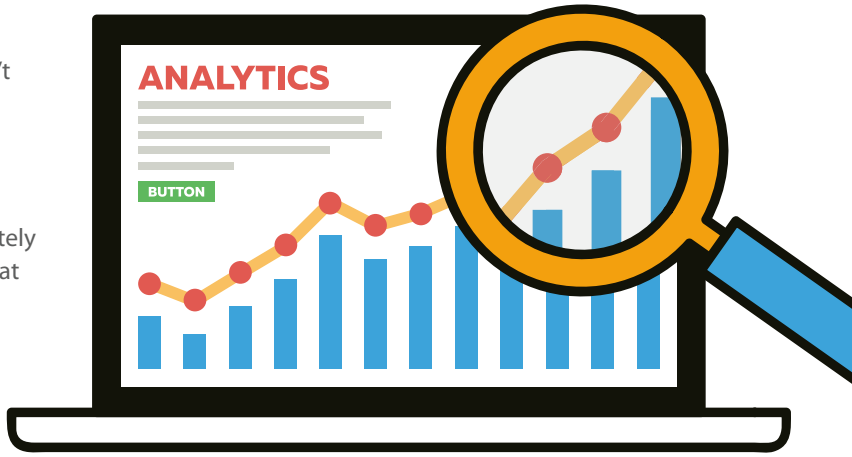
This book belongs in a permanent, prominent location, not in a library, but alongside the computer of every dentist who designs treatment plans. Pity the hapless dental assistant who tries to move this handbook from its permanent spot on my desk!

Practitioners providing Clear Aligner Treatment will find the book indispensable for learning the fine points of treatment planning, and for enhancing their ability to provide high-quality dentistry efficiently, predictably, and profitably. ■

Social Media & Technology

Your Crash Course in Website Stats

by Melody Gandy-Bohr



Building a sleek and engaging website for your practice won't mean anything if you don't pay attention to its performance. The only way to determine if your online marketing strategy is paying off is to look at your performance data. From there, you can build up what's working well and change what's not working at all. Here's everything you need to know to accurately interpret your practice website's stats, and to understand what site visitors want from your practice.

Page views vs. unique page views

A higher volume of site visitors increases your chances of gaining new patients. However, don't confuse a high number of page views with unique site visitors.

Page views are counted every time a user loads a page on your website. A unique page view is only counted when a new user loads a page, regardless of how many times the user loads the page. While unique page views give you insight into the number of site visitors you receive, the overall page view statistic shows in broad strokes which pages on your site are most popular with users.

Why your bounce rate isn't a big deal

Your practice website's bounce rate is the percentage of visitors who land on your website and leave without looking at any other pages. While a high bounce rate can mean that users are not finding what they need, it may also mean that users are finding what they need, and leaving satisfied. If a user lands on your homepage looking for your phone number, finds it, and then immediately leaves without browsing to other pages, this is a good thing. Depending on your website goals, your bounce rate shouldn't be a big concern.

Regularly viewing your practice website's stats provides useful information that can help you engage users, improve conversions, and focus on popular pages. Once you understand your website stats, you can provide a better online experience that converts users into patients. ■

For further information, see this website: http://bit.ly/2nrUVSi.

Officite, in operation since 2002, is now (per its website) the leading Web presence provider in the dental industry, incorporating websites, search engine marketing (SEO & PPC), reputation tracking, social media, and patient education. Visit Officite.com/dental or call 877-312-9596 to speak with a Web presence advisor.

Visit our "Case of the Month" section on the AACA website. Post your comments and read what your peers have to say about each case – www.aacaligners.com

Reingage course

invisalign®

PART II – ADVANCED TRAINING DAY PROGRAM

FEATURING:

1) BERIK ACCELERATION METHOD WITH PROPEL
2) CLASS II MOTION 3D CARRIERE DISTALIZER
3) ADVANCED INVISALIGN CONSULT TECHNIQUES

Dr. David Galler is a graduate of the University of Pennsylvania School of Dental Medicine and became Invisalign trained in 2003. He practices in NYC and is a top 1% Super Elite Premier Provider. Dr Galler has treated more than 2,000 patients with Invisalign and is the Leader of the Re-ingage Invisalign training program. He is known as the Wolf of Invisalign.

Dr. R. Bruce McFarlane
University of Western Ontario, 1992: Master of Clinical Dentistry in Orthodontics
Fellow of the Royal College of Dentists of Canada
Diplomate: American Board of Orthodontics
Invisalign Alpha Group. Invisalign Pioneer and Educator: 2000-2006
Invisalign Top 1% Provider: 2017

Dr. Anna Berik, owner of Newton Dental Associates, Diamond Smile Design, and Greater Boston Invisible Braces, is one of Boston's Premier Cosmetic Dentists. She has been creating captivating smiles for over 20 years and is a regularly featured dentist in the Boston media.
Dr. Berik is an Invisalign Elite Premier Provider.

Course Details

Date/Time
Thursday February 8th, 2018
9:00 am – 8:00 pm

Location
Westin Waltham Boston
70 3rd Avenue
Waltham, MA 02451

Sponsored: American Academy of Clear Aligners

PACE ACADEMY of GENERAL DENTISTRY PROGRAM APPROVAL FOR CONTINUING EDUCATION

American Academy of Clear Aligners is designated as an Approved PACE Program Provider by the Academy of General Dentistry. The formal continuing education - programs of this program provider are accepted by AGD for Fellowship/Mastership and membership maintenance credit. Approval does not imply acceptance by a state or provincial board of dentistry or AGD endorsement. The current term of approval extends from 10/01/2017 to 09/30/2020. Provider ID#350507.

Registration Information

Phone: Michelle at 516-232-1295 or
Fax: completed form to Michelle at 516-342-4430 or
Email: completed form to aacortho1@gmail.com

Fees: $395 for non-members of AACA
$295 for members of AACA

Refund & Cancellation Policy:
All cancellations must be 30 days prior to course (Jan 8h) for full refund.

Reingage course COURSE SCHEDULE

7:00 am–8:00 am: Registration

9:00 am–12:00 pm: **Berik Acceleration Method With Propel by Dr. Anna Berik**

- Science Behind Propel Micro-osteoperforation Technique
- Technique
- Comparing Acceleration Methods
- BAM—Berik Acceleration Method
- Case Review and Integration
- Review of the Go Tier System

12:00 pm–1:00 pm: Lunch

1:00 pm–5:00 pm: **Class II Motion 3D Carriere Distalizer by Dr. Bruce McFarlane**

Class II malocclusions represent one of the most frequent scenarios in which treatment with aligners can become challenging related to both number of trays required and patient compliance. The Sagittal First philosophy represents a powerful solution to these challenges. By creating a Class I platform at the beginning of treatment, before starting aligner therapy, treatment becomes more efficient and total number of trays needed is reduced significantly. The development of Motion 3D CLEAR™ appliances for adults and Motion 3D COLORS™ appliances for teens has increased patient acceptance even more. Dr. McFarlane will share his exceptional clinical results when combining Motion 3D appliances with Clear Aligner Therapy.

5:00 pm–6:00 pm: Dinner

6:00 pm–8:00 pm: **Advanced Invisalign Closing Techniques With Dr. David Galler**

- How to Talk to Patients About Invisalign
- Body Language Techniques
- Scripting
- Rainbow Move
- Closing Like a Pro

Reingage course REGISTRATION FORM

$195 for AACA members (to join AACA please visit www.aacaligners.com); $295 for AACA non-members.
February 8, 2018—Westin Waltham Boston

Name: _____

Credit Card #: _____ Expiration Date: _____ Security Code: _____

Billing Address: _____

City: _____ State: ____ Zip Code: _____

Phone #: _____ Email: _____

Fax completed form to Michelle at 516-342-4430, or email completed form to aacortho1@gmail.com.

Post Invisalign Treatment of BlackTriangles Using the Bioclear Method

During
(injection overmolding
with the Bioclear Method to treat black triangles)

Presented by:
Dr. David Galler, DDS,
Dr. David Clark, DDS,
and
Dr. Jihyon Kim, DDS

2018 Dates:
Feb 1, Apr 19,
Aug 16, Nov 15

BIOCLEAR

Bioclear Learning Center
Tacoma, Washington

Course Description:

For patients, having black triangles after finishing invisalign can be a disappointing outcome. Treatment of these cases can be simple and predictable when using modern matrices and the Bioclear Method.

Join Dr. Galler and the Bioclear Learning Center faculty at the state of the art Bioclear Learning Center in Tacoma, Washington for an introduction to the Bioclear Method and the injection molding technique to treat the dreaded black triangle.

Facility:

The Bioclear Learning Center provides a new pathway for dentists and their practice to transition from traditional anterior dentistry to the extraordinary world of modern composite dentistry.

Delivering consistent, high-quality results, the Bioclear Method for composite dentistry, created by Dr. David Clark, offers unparalleled innovations in both practice and patient comfort.

PREMIER DENTAL ASSOCIATES of Lower Manhattan

Dr. Galler is the leading Invisalign® general dentist in lower Manhattan. He is ranked among the top Invisalign® dentists across the country.

BIOCLEAR LEARNING CENTER

Dr. David Clark is the founder and inventor of the Bioclear Method and products.

BIOCLEAR LEARNING CENTER

Dr. Jihyon Kim is the Director of the Bioclear Learning Center.

TO REGISTER: Contact Tanya Copeman at tanya@bioclearmatrix.com or 253.249.1182

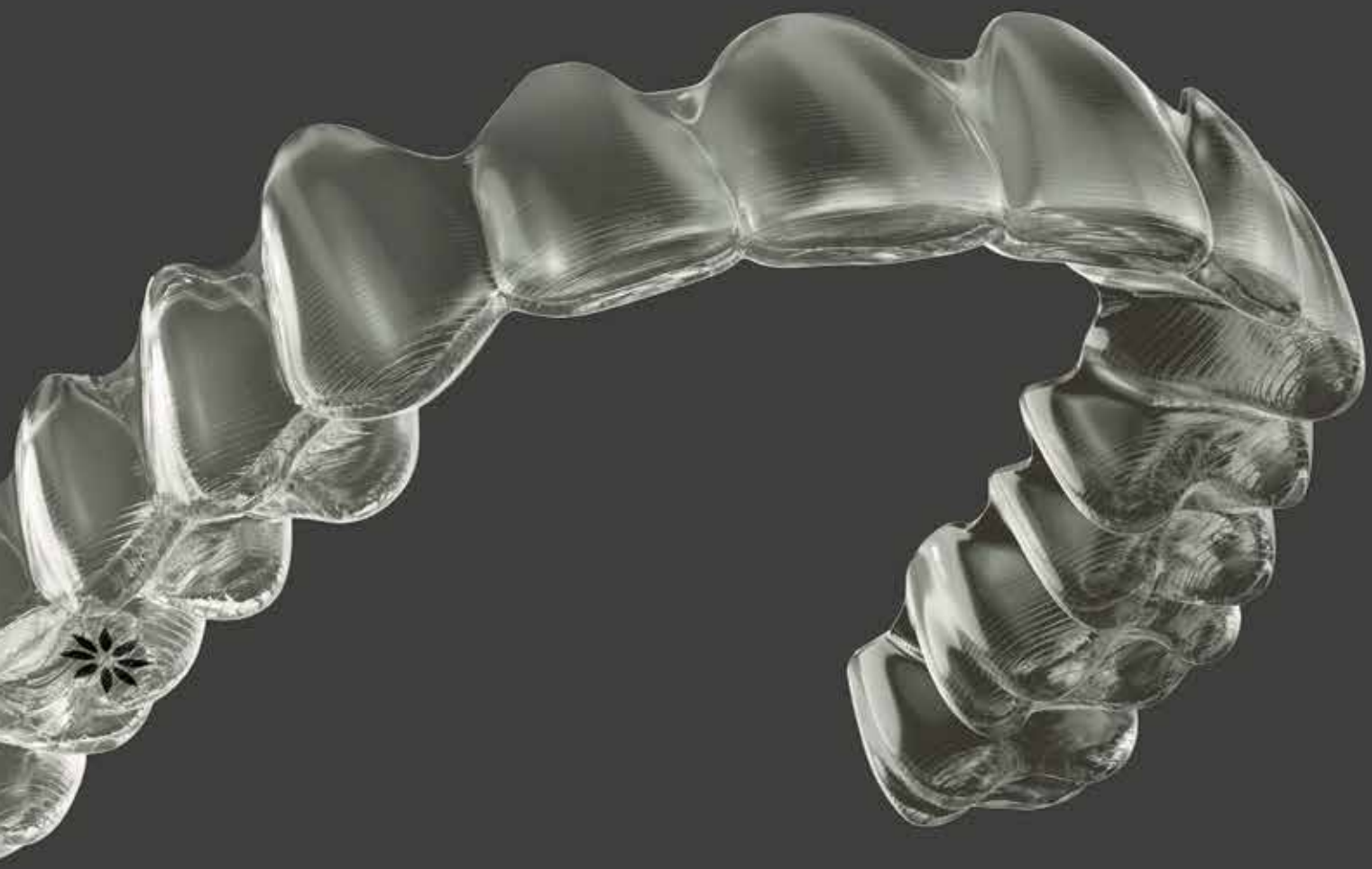
Introducing Invisalign® Lite

The new cost effective treatment option with the versatility you want for mild to moderate cases.

14 stages for $1,199

One FREE refinement is included in price of treatment

Learn More at invisalign.com/lite



invisalign® | made to move