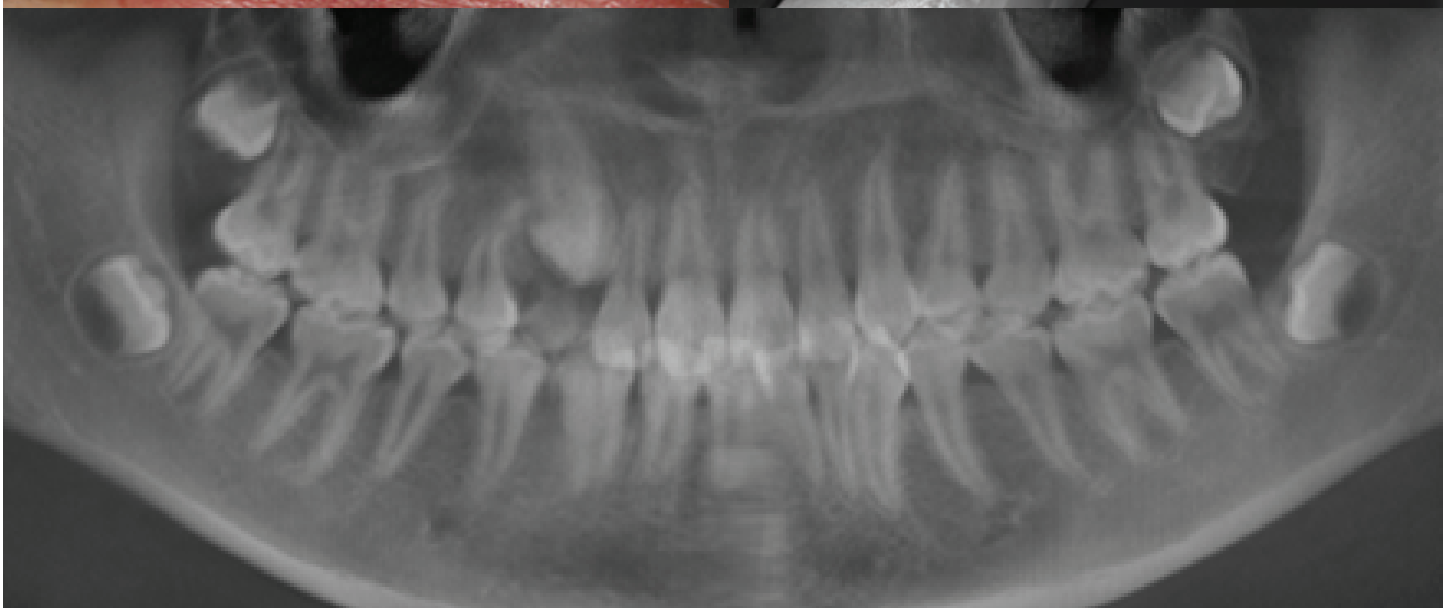
Issue 3

THE PROTOCOL™



Active Early Concepts

Soft Tissue Diagnosis and "SAP" Bracket Positioning

Consumer 2.0

CONTRIBUTORS

Dr. Thomas Pitts D.D.S., M.Sc.D.
Ortho Country Orthodontics

Dr. Pitts is a world renowned lecturer and clinician. He is highly recognized for his continued teaching of orthodontic finishing and clinical excellence. Dr. Pitts is an associate clinical professor at the University of the Pacific and founder of the well-respected Pitts Progressive Study Club.

Dr. Pitts has been published in multiple journals and clinical publications. He has been actively teaching the orthodontic community in a variety of settings both nationally and internationally since 1986.

Dr. Duncan Brown B.Sc., D.D.S., D. Ortho
Smile Zone Orthodontics

Dr. Duncan Brown is a highly regarded international speaker and educator in passive ligation bracket systems. Dr. Brown teaches regularly at the University of Alberta and University of Manitoba and is also a Kodak/Carestream Dental speaker and consultant.

Dr. Brown has made large contributions to the orthodontic community from creating effective hygiene programs for patients, to the G&H Pre-Torqued Archwire series and much more!

Dr. Nimet Guiga D.D.S., M.Sc.
Guiga Orthodontics

Dr. Nimet Guiga is a Portuguese-Canadian with a worldwide living and studying experience.

In addition to her authenticity, Dr.Guiga's highly specialized training and clinical experience enables her to diagnose and treat quickly and effectively even the most complex orthodontic situations. She has patients from all around the world who especially come to Cascais to seek her for orthodontic treatment.

Debbie Brown
Smile Zone Orthodontics Office Manager

Debbie Brown is trained as a Chartered Accountant, and has managed SmileZone Orthodontics for over 25 years. Debbie will share the office experience with OrthoVend as a simple way to manage inventory and save money.

Eric Ackerman
Ortho Classic Graphic Design Manager

Eric Ackerman has worked with Ortho Classic for more than 10 years developing and nurturing their brand perception and awareness. He has helped invigorate their marketing campaigns and has been key in the development of the Ortho Classic, OrthoAMP, Ortho University, and Ortho Country brands within their target markets. He has developed many tangible elements that create an emotional connection between the companies' products and their target audience using a variety of avenues for focused brand communication.

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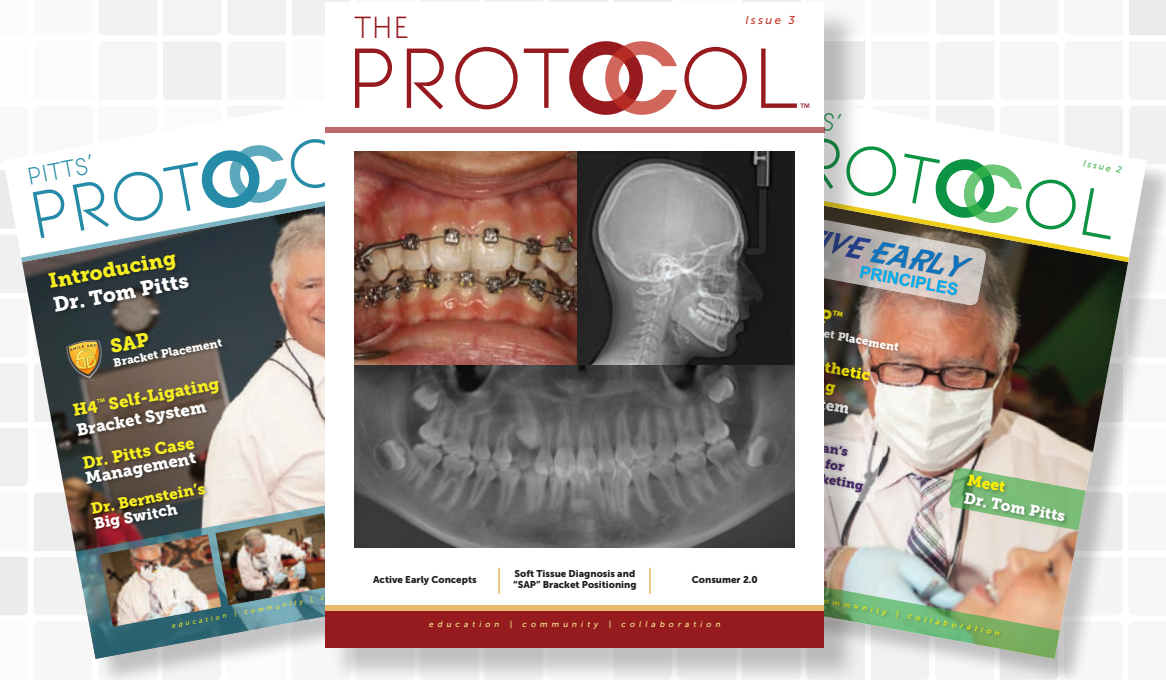

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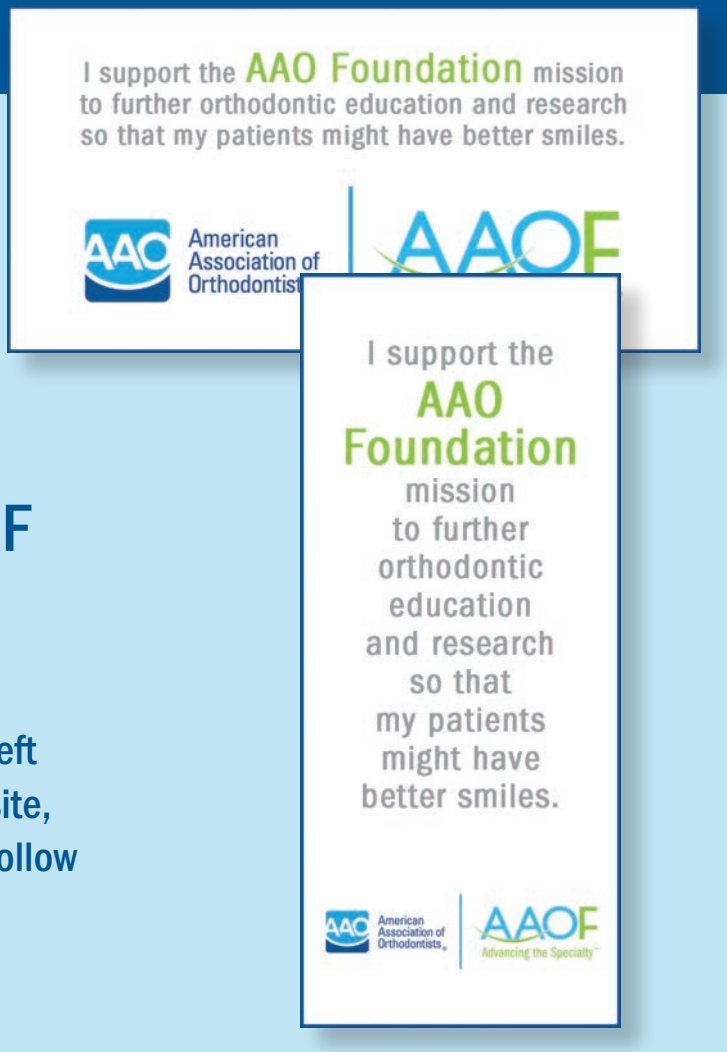

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ACTIVE EARLY CONCEPTS

FLIPPING AND FLOCKING

"We cannot solve our problems with the same thought processes we used when we created them"

-Albert Einstein

Introduction

We live in a challenging time. Orthodontic clinical procedures and esthetic preferences continue to evolve, so that the clinical approaches that we rely on today are different than those that earlier generations of Orthodontists used frequently[1].

Esthetic declines that were quite common with treatment[2] (including flat incisal plane and excesive retraction of incisors) are no longer acceptable to the majority of patients. Where "straight teeth" were once a primary goal, today's parents/patients frequently seek orthodontic treatment for esthetic improvement[3], in addition to health benefits. Contemporary research supports the human social benefits that accrue with improved esthetics such as: more friendly, more intelligent, more interesting, more likely gain better employment, more self confidence, more socially competent[4].

Fortunately, diagnostic appreciations have kept pace with these trends, with the increasing appreciation of predominance of the upper incisor position in 3 planes of space to esthetic outcomes[5], while planning for age related esthetic changes. I subscribe fully to this approach.

Virtually every Orthodontist that practices today uses some variant of the "straight wire appliance", a concept that has dominated our profession since Larry Andrews' breakthrough article led to its development in the 1970's. Today I use the **H4 bracket**, a precision "straight wire" appliance that incorporates a number of unique features at a great price point. Over the years, I have developed a case management strategy that is called "Active Early", which leverages the features of the H4 appliance (Figure 1), while overcoming many of the misconceptions imposed by rigid adherence to "straight wire theory" for anterior torque and anxial inclination.

Today I would like to further expound on the dual roles of case management strategy and appliance selection to address some of the limitations in traditional application of straight wire in a PSL setting in controlling anterior inclination.

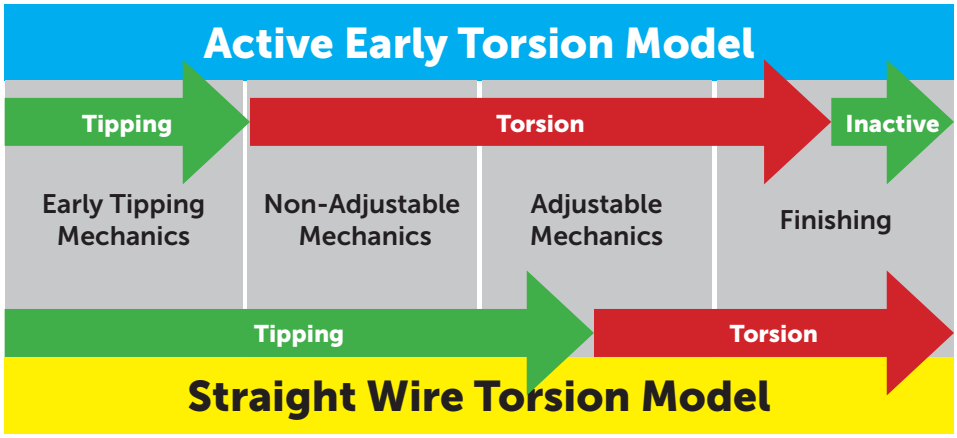


Figure 1: Pitts "Active Early" approach to case management uses lighter forces, applied for longer duration, earlier in the treatment cycle to improve control of both axial inclination and transverse arch development

.028 Slot

10 Weeks - .014

10 Weeks - .018

10 Weeks - .014 x .025

Change to H4 with .026 Slot

2 Weeks - .014 x .025

Challenges of Torque Expression in a "Straight Wire" Context:

Orthodontics lost one of our great thinkers this year with the untimely passing of Charles Burstone. Dr. Burstone clarified the distinction between axial inclination (the buccal lingual inclination of the teeth), bracket slot (labio-lingual) angulation (incorrectly termed torque), torsion (the forces resulting from a couple within the system), and torque expression (the result of torsion). Clinicians, being primarily concerned with torque expression, must be mindful of ***four things***:

1. Contemporary fixed orthodontic treatment is usually completed in wire sizes that are less than full dimension[7] for the designed bracket slot. The consequence of this incompletely filled bracket lumen is torsional play that decreases engagement of the contact between the arch wire and the bracket[8]. While decreasing friction, a potential benefit during early leveling, aligning, and sliding mechanics, torsional play reduces control of axial inclination necessary for ideal esthetics. In clinical practice then, ***incremental increases in arch wires size is NOT an effective means of controlling axial inclination when the slot isn't filled***[9].

2. Torque expression is a complex process dependent upon[10]: magnitude of torsion, wire stiffness or resilience, bracket design, engagement angle, mode of ligation, wire dimension corner radius, angulation of the bracket slot, deformation of the bracket or wire under torsion, manufacturing tolerances in the bracket and the wire, initial tooth inclination, bracket position, and the measurement technique used to evaluate torsion. Fortunately, to the clinician, ***it matters solely when/ if torsion is developed within the slot during commonly used arch wire progressions.***

3. Today's treatment targets for incisor position in 3 planes of space are based on esthetics[11,5], so that reliance on "treatment built" into the appliance through ***anterior slot "torque" angulation to the occlusal plane is not a practical way to ensure esthetically superior results.*** In the "Active Early" approach, individualized bracket positions based on esthetics[9] (SAP) is combined with other initial planning considerations, to gain control of axial inclination earlier in the treatment cycle than has been possible before.

4. The hardest torquing mechanics today for many orthodontists is lingual crown torque with occlusal plane variable. Because of this variability, we like to relate the anterior inclination to FH and not the occlusal plane, so that the labial surface of the maxillary incisor is perpendicular to corrected FH.

.014 x .025

Final

Rotational control problems resolved and improved control of axial inclination with H4 bracket and 026 depth slot - Courtesy Daniela Storino 2014

"Active Early" Case Management Protocols and the H4 Precision Bracket

In "Active Early" protocols the appliance is activated as early as possible, using the SAP[12] bracket position to adjust vertical position of the incisors, inverting groups of brackets where necessary. We have developed protocols to address torsion in the appliance, selecting arch wire progressions that control axial inclination early in treatment, arch forms that develop the posterior segments of the arches sooner, ELSE (Early Light Short Elastics) to control forces and moments, and appropriate disarticulation to encourage early "wanted" tooth movements[9], both A/PE vertical.

Working with Ortho Classic® and their precision manufacturing, we have been able, to introduce meaningful innovations that make an impact on the Orthodontists ability to both control and predict how the PSL appliance will respond. Where commonly used PSL brackets have manufacturing inconsistencies that become clinically significant[13], OC has manufacturing tolerances that are much tighter for more predictable performance. Secondly, we have reduced the slot depth to .026, which results in two benefits: improving rotational control, and reducing the engagement angle for torsional control early in the treatment cycle, when using familiar wire progressions (Figure 2) when the bracket is upright.

My goal in clinical teaching has been to simplify complex concepts in contemporary case management strategies that can provide significant advantages in the treatment of most orthodontic cases. This distinction is very apparent in the "Active Early" approach to appropriate torque selection.

"Active Early" Approach Removes the Need for "Variable Torques"

The concept of variable torque is not new. Andrews was the first to suggest "variable torque" Rx's to customize the appliance Rx to specific clinical situations (generally extractions). The current approach of "high, normal, and low" torques[14] is not practical and overly complicated in my view.

With the worldwide tendency to treat more cases without extractions, the control of proclination of the upper anterior teeth has become a greater challenge. Correction of pre-existing crowding and proclination, proclination associated with relief of crowding during traditional round wire mechanics, or incisor proclination associated class III (in the upper arch) elastics is particularly problematic. The challenge for many non-extraction cases has been in getting enough lingual crown torsion without having to resort to complex wire bending to attain esthetic results.

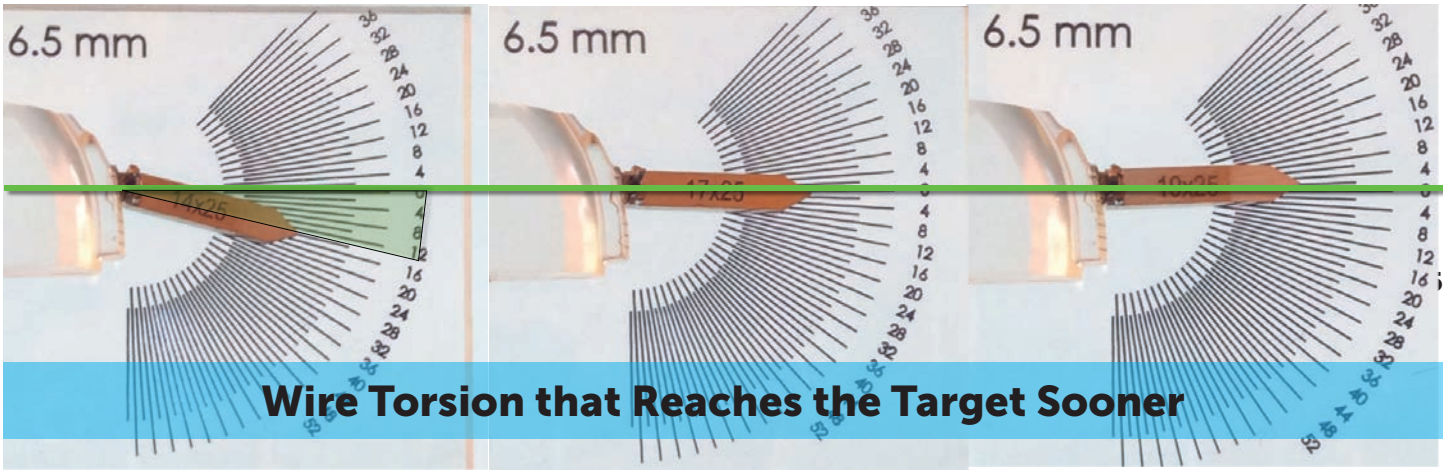


Figure 2: Combining Pitts SAP bracket position and reduced engagement angle of the H4 bracket system (.026 depth slot) enable development of torsion within the slot earlier in the treatment cycle when the bracket is upright using familiar wire progressions.

Present PSL "Low Torque" Brackets with More Lingual Crown Torque on the Lateral than Central Rx's do not Simplify Management Significantly

While variable torques has been touted to improve this situation, popular brand brackets with more lingual crown torque on the lateral than central Rx's endorsed by some PSL bracket producers increase case management complexity for me[15] in many ways:

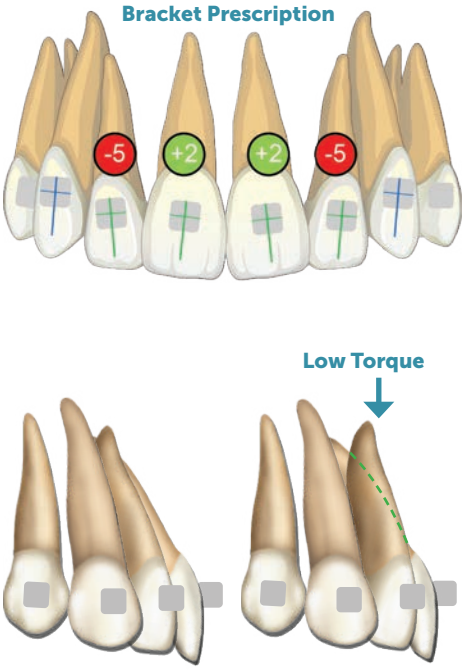


Figure 3: Complication imposed by the use of "Low Torque" brackets where the Rx has greater lingual crown torque on the lateral incisor than the central incisor when uprighting teeth with uniformly spun wires.

- Once in treatment, it is difficult to determine if an individual bracket has the potential to create clinically effective torsion because the slides all open in the same direction. This is very confusing, especially when bracket torques decisions are made on a tooth by tooth basis.
- Low torque brackets with more lingual crown torque on the lateral than central Rx's are not sufficiently low enough in the maxillary centrals to overcome both mechanical inefficiency inherent in the appliance, and biological resistance to movement associated with uprighting proclined teeth. At the clinical level, it is difficult to know what "torque expression" can be reasonably expected. Wire bending is almost immediate.
- When thse low torque variable torque brackets are employed, on individual teeth for localized concerns, the bracket must be repositioned, or the wire adjusted in order to finish well[16].
- When upper incisors with "low torque" brackets with more lingual crown torque on the lateral than central need to be activated further for esthetics, it is impossible to do so with a uniformly spun wire due excessive lingual crown angulation placed in the lateral bracket (figure 3), making either bracket replacement or complex wire bending a necessity.

Simply put, for the most part, use of "variable torques" is confusing and very inefficient.

Torque Selection to Simplify Control of Axial Inclination - "Flipping and Flocking"

To avoid these complications, I have inverted standard torque anterior brackets for years to control axial inclination. Inverting the upper anterior brackets has the effect of building negative crown torsion into the appliance while using a flat wire (Figure 5). The H4 appliance Rx is perfect is this regard, predictable when upright, and appropriate when flipped providing greater lingual crown torque to the central when uprighting of the upper anteriors is required. The single H4 Rx, then provides torque combinations suiting the majority of cases (figure 6) with a minimum of wire adjustments.

My teaching partner in crime, Duncan Brown, coined the terms "flipping and flocking" as a memorable way of describing inverting groups of brackets to control changes in axial inclination as a result of pre-existing conditions, relief of dental crowding, or responses to mechanics. To our delight, many Orthodontists around the world now are "flipping/flocking" regularly.....I can't believe that is now in print.

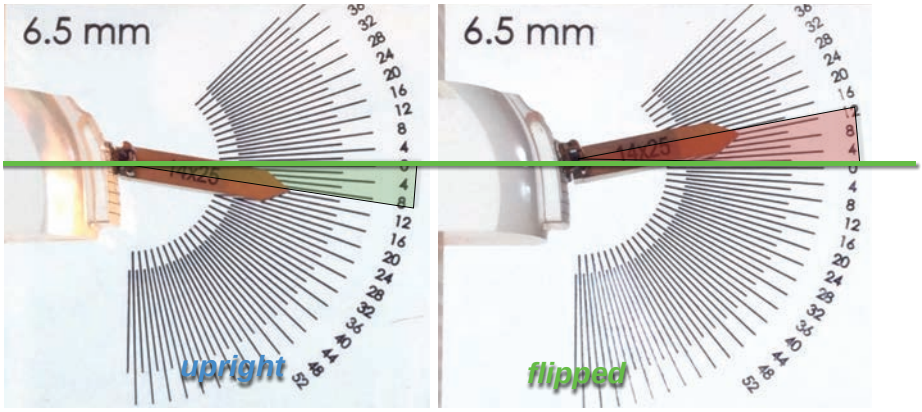


Figure 5 - Effect of "flipping" an anterior bracket is to place an effective degree of lingual crown torsion in the appliance

"Flipping" places lingual crown torsion in the appliance

Figure 6: Wide range of torques available in the H4 bracket system attaining simply by inverting ("flipping") brackets with an appropriate Rx

Torque	U1	U2	U3	U4	U5
Normal	+12	+8	+7	-11	-11
Low	-12	-8	-7		

Torque	L1	L2	L3	L4	L5
High	+6	+6			
Normal	-6	-6	+7	-12	-17
Low			-7		

Here are some highlights and benefits of using the technique:

- Choose bracket torques in groups, rather than on individual teeth. This greatly simplifies bracket selection and case management when using adjustable wires, and avoids having to replace brackets later in the treatment cycle, and simplifies wire bending.
- Choosing to "flip" upper incisor brackets in cases with mild crowding and proclination, "flock" upper cuspid brackets where significant crowding is present in the upper arch, and "flip" lower incisor brackets when class III mechanics are anticipated. It is immediately apparent, which upper anteriors brackets will have active lingual crown torsion, as those brackets with slides opening to the gingival are "active" when "flipped". The Orthodontist knows immediately if active torsion is present within the slot or not (Figure 7).
- Standard wire progressions with "flipped/flocked" brackets will produce effective levels of lingual crown torsion with commonly used wire sequences. As you would expect, uprighting of the upper anteriors requires space, gained through arch development, slenderizing, or use of skeletal anchorage (TAD's). The use of Pitts' Broad arch forms are particularly helpful, in supporting arch development early in treatment (Figure 8).
- When using "flipped/flocked" appliances, incremental increases in arch wire size actually produces incremental increases in effective torsion. This is the way "straight wire" appliances were designed to function.
- The inclusion of .020X.020 Thermal Activate Nickel Titanium and Beta Titanium arch wires in the Pitts' Broad arch forms allows active and effective lingual crown torsion to be placed very early in the treatment cycle in either the second or third arch wire (Figure 8). I am finding that many cases finish very nicely in .020X.020 wire dimensions, with .025 wire progressions being best suited for cases where large degree of rotational control is required.
- When using "flipped" anterior brackets, we encourage the patient to be seen every 6-7 weeks when Beta Titanium arch wires are in place, to assess progress and palpate the upper anterior alveolus.
- Once ideal axial inclination is attained, the appliance can be "deactivated" simply by reducing the AW dimension or adjusting 3rd order wire bending in Beta T arch wires. Of course it's important to use alloy/wire profiles no larger than Beta Titanium .019x.025 when using "flipped" appliances.
- We very rarely resort to stainless steel wires in the "Active Early" technique, although it is available for those who wish it.

Using these principles Orthodontists can achieve surprising benefits for our patients with great efficiency (Figures 9 to 21).

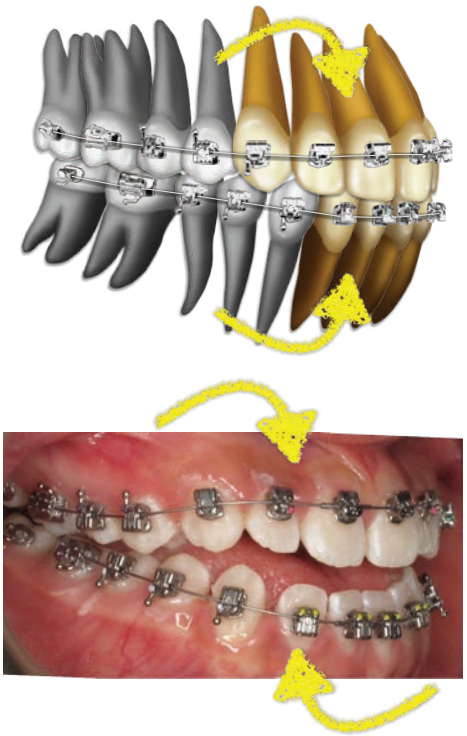


Figure 7: "flipped and flocked" upper appliance, "flipped" lower anteriors in a class III AOB patient

Summary and Case Management Considerations

In an earlier Pitts Protocol, we introduced the "Active Early" Case Management strategy[12]. By combining the SAP bracket position to adjust vertical position of the incisors, selecting arch wire progressions that control axial inclination early in treatment, using arch forms that develop the posterior segments of the arches sooner, and relying on ELSE and disarticulation to encourage "wanted" tooth movements, great things are possible. The decision to "flip/flock" anterior brackets as a part of the "Active Early" approach, in combination with the precision and dependable Rx of the H4 appliance makes a quantum leap for our non-extraction and class 3 treatments in the areas that Orthodontists have traditionally struggled with other PSL appliances.

In the "Active Early" approach, lighter forces, applied earlier, for longer duration are accomplishing many things more efficiently for the Orthodontist, and more gently for the patient than has ever been possible before. Our work in improving the lives of our patients, and the ease with which Orthodontist can deliver esthetically superior results efficiently is just beginning. With Ortho Classic, we are continuing to refine the appliance, as the "Active Early" protocols continue to evolve.

Look for us to introduce more meaningful innovations in the coming months, and thanks for joining us on the journey. It's going to be a fun ride! Until next time.....

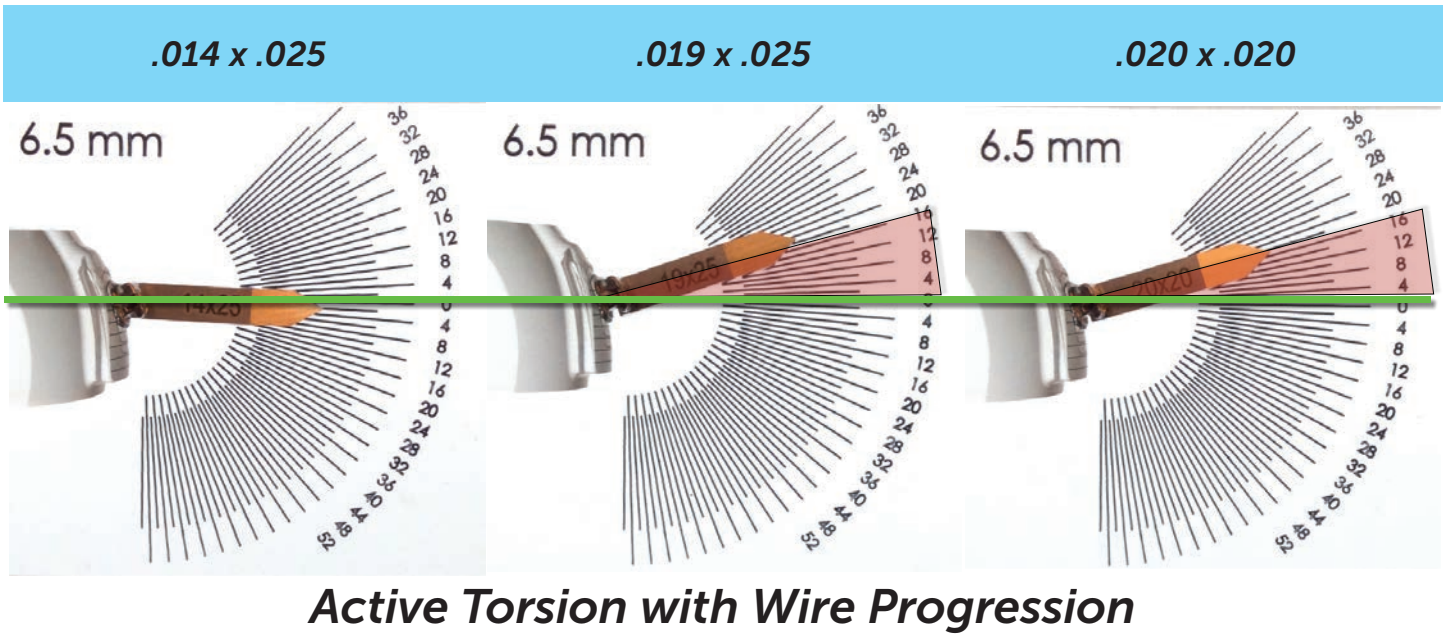


Figure 8: "flipped" upper appliance demonstrating effective levels of torsion, increases with incremental AW progressions. Note that 020x020 AW provides almost the same degree of torsion as 019x025

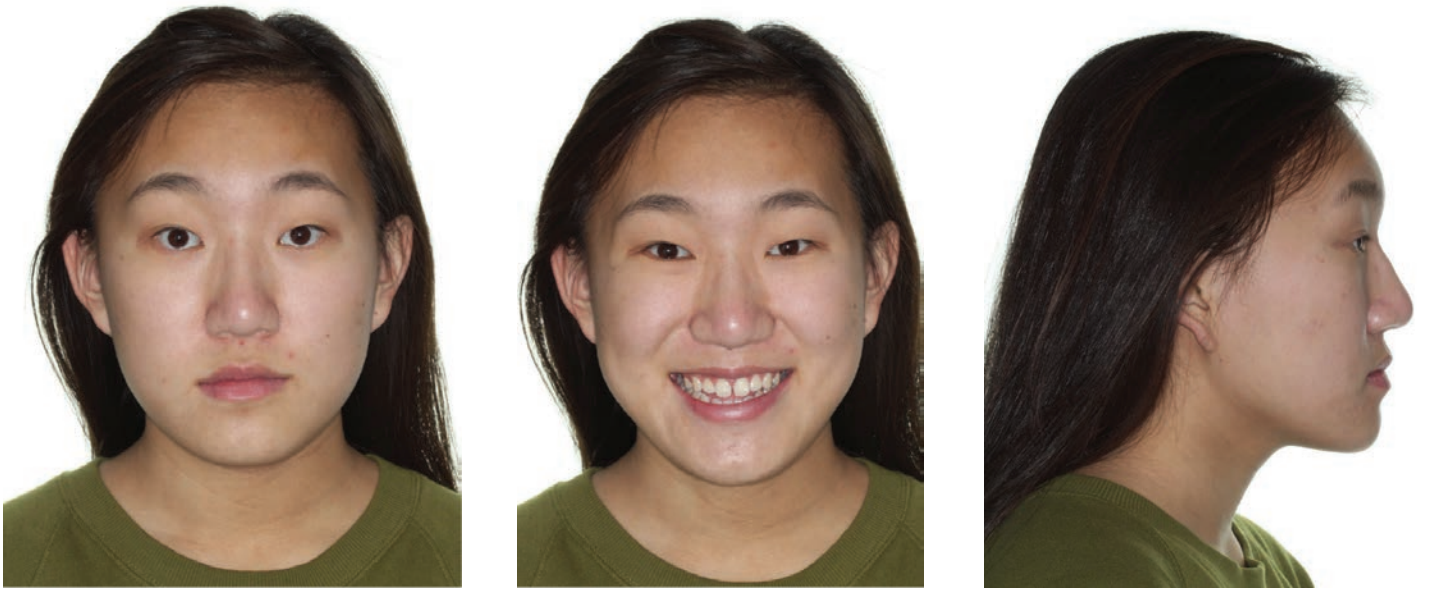


Figure 9: Pre-Treatment Extra-Oral Photographs

Figure 10: Pre-Treatment Intra-Oral Photographs demonstrating class III, AOB, with proclined upper incisors

Figure 11: "Active Early" Stage I Mechanics: SAP bracket position, "flipped and flocked" upper H4 appliance, posterior disarticulation, ELSE (TTB short class III elastics FT, anterior reverse rainbow PM)

PRACM - 7 Months, 4 Appointments

Very Nice Control Early in Treatment

Figure 12: PRACM appointment (7 months, 4 appointments): Smile Arc is developing and excellent control of axial inclination with tipping and early torsion mechanics

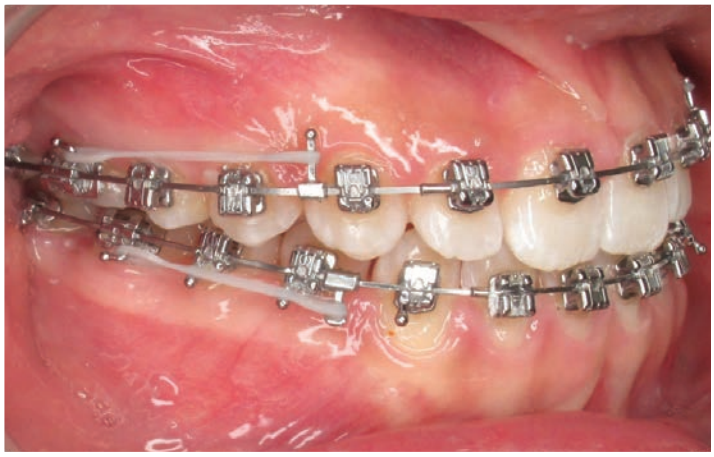


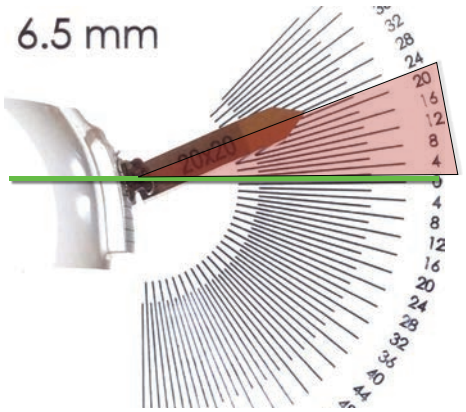
Figure 13: PRACM appointment: good control of axial inclination, and improvement in occlusion with very simple mechanics

Flipped and Flocked Appliance

.020 x .020 TA

Figure 14: PRACM appointment: "Flipped and Flocked" upper appliance delivers effective lingual crown torsion to prevent increased proclination of the upper incisor with class III mechanics in the upper arch. Flipping the lower anterior brackets prevents retroclination of the lower anteriors with class III mechanics.

Flipped Appliance



Debond - 16 months, 10 Appointments

Figure 15: Debond Records: very nice esthetic changes, improved smile arc, uprighting of upper incisors, improved incisor display

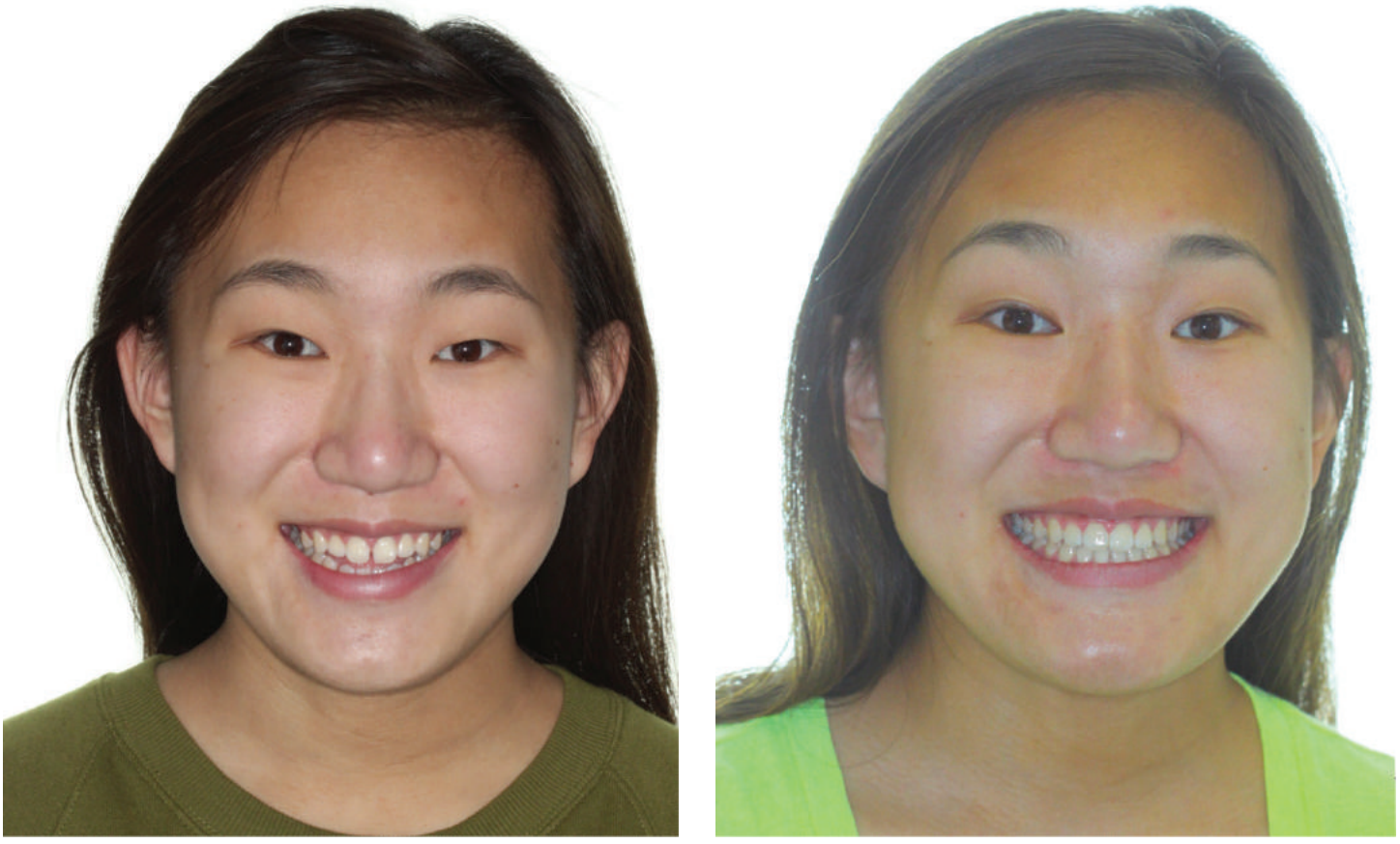


Figure 16: Debond Records: very nice esthetic change

Debond - 16 months, 10 Appointments

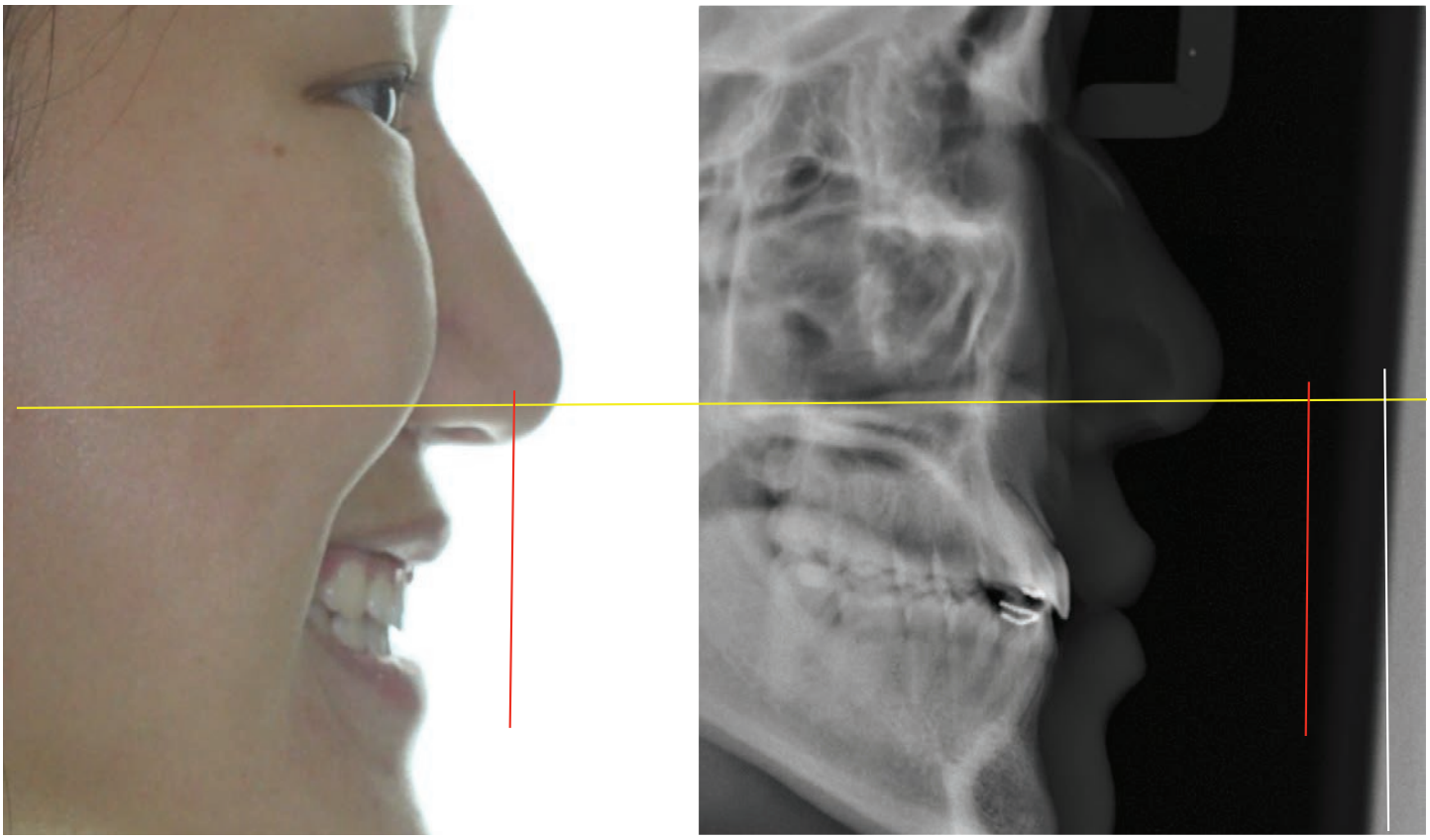


Figure 17: Debond Records: uprighted upper incisor, lower incisor has not retroclined excessively with light class III mechanics

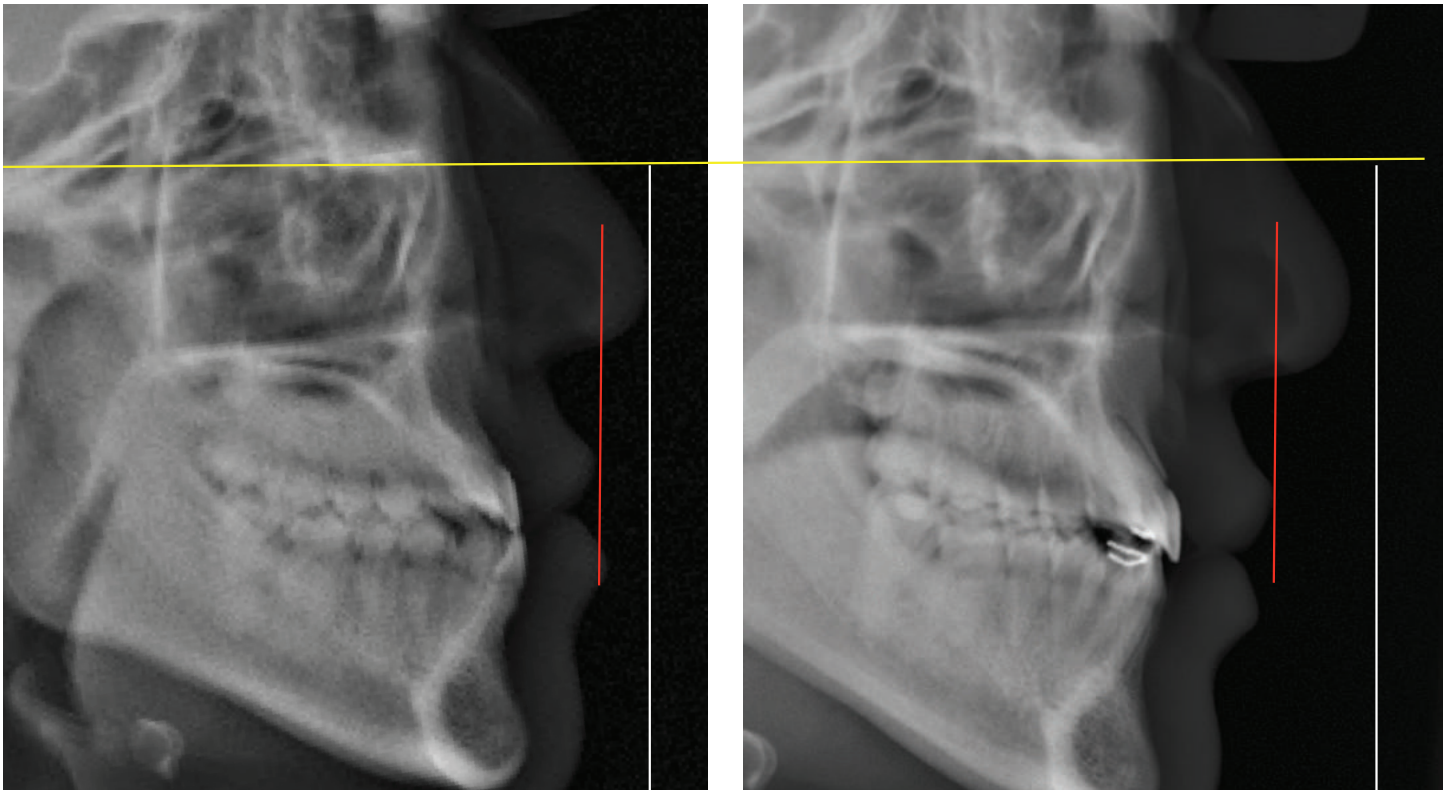


Figure 17: Debond Records: upper incisor inclination has improved, lower incisor inclination has not deteriorated

Debond - 16 months, 10 Appointments

Figure 18: Debond Records: very nice occlusal change with very simple mechanics, great control of axial inclination

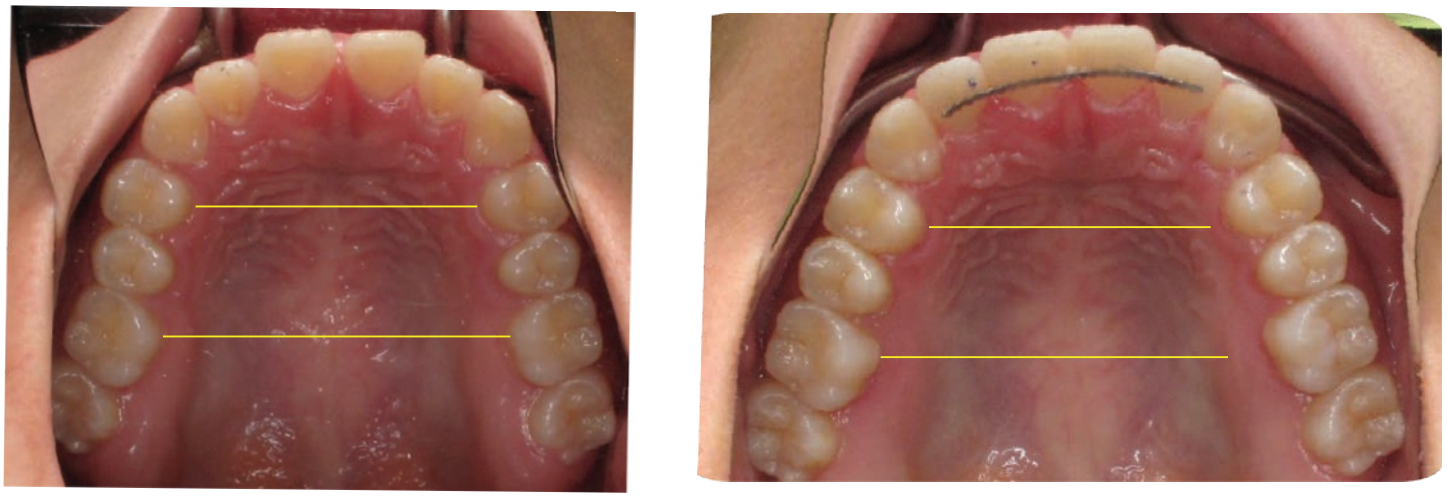


Figure 19: Debond Records: very nice arch development with Pitts Broad arch form

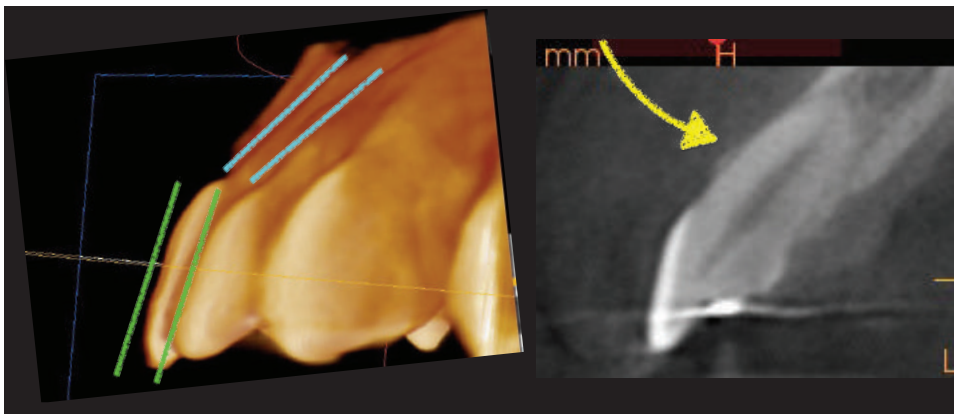


Figure 20: Debond Records: very nice control of axial inclination, the CBCT demonstrates the presence buccal plate

Author's Comments

Dr. Tom Pitts

Dr. Duncan Brown

"Our goal in teaching continues to be to improve esthetic and functional outcomes, while simplifying treatment mechanics and improving predictability, and efficiency. In Active Early case management strategies, "flipping and flocking" the anterior brackets provides activation of torsion within the appliance without bending wires. The H4 precision appliance is perfect in this regards."

[1]Janson, G. Frequency evaluation of different extraction protocols during 35 years: Progress in Orthodontics 2014, 15:51
[2]Ackerman J, Ackerman MB, Brensinger CM, Landis JR. A morphometric analysis of the posed smile: Clin Orthod Res 1998;1:2-11.
[3]Samsonyanova, L. A Systematic Review of Individual Motivational Factors in Orthodontic Treatment: Facial Attractiveness as the Main Motivational Factor in Orthodontic Treatment: International Journal of Dentistry , Vol 2014
[4]Jung, M. Evaluation of effects of orthodontic treatment on self esteem, AJODO, vol 138, 160-166, 2010
[5]Sarver, D. The importance of incisor positioning in the esthetic smile: the smile arc, AJODO 2001: 120; 96 to 111
[6]Andrews, L. The six keys of normal occlusion: AJO, 1972; 62: 269-309
[7]Badawi, H - Torque Expression in Self Ligating Brackets. a systematic review: Am J Orthod Dentofacial Orthop 2008 May; 133(5): 721-728
[8]Meling, T - On mechanical properties of square and rectangualr stainless steel wires tested in torsion: Am J Dentofacial Orthop 1977 March; 111(3); 310-320
[9]Pitts, T - Active early Principles - Pitts Protocols Issue 2, 2015; 8 to 14
[10]Archambault A - A comparision of torque expression between stainless steel, TMA, and CuNiti in metal self ligating brackets: Angle Orthod 2010 Sept 80(5); 884-889
[11]Cao, L - Effect of incisor labial lingual inclination and anterior posterior position on smiling esthetics: Angle Orthod 2011; 81: 121-129
[12]Pitts, T. Begin with the end in mind and finish with beauty: SIDO Published online: 29/05/2014,
39-46
[13]Thorstenson G - Comparison of resistance to sliding between SL brackets with second order angulation in the dry and saliva states: Am J Orthod Dentofacial Orthop 2002; 121:472-82
[14]Lacarbonara, M - Variable Torque Prescription: State of the Art , Open Dentistry Journal; 2015 (9), 60-64
[15]Pitts, T - OrthoClassic, a leading authority in orthodontics, OrthoTown November 2014
[16]Johnson, E - Selecting custom torque prescriptions for the straight wire appliance, Am J Orthod Dentofacial Orthop 2013;143:161-167

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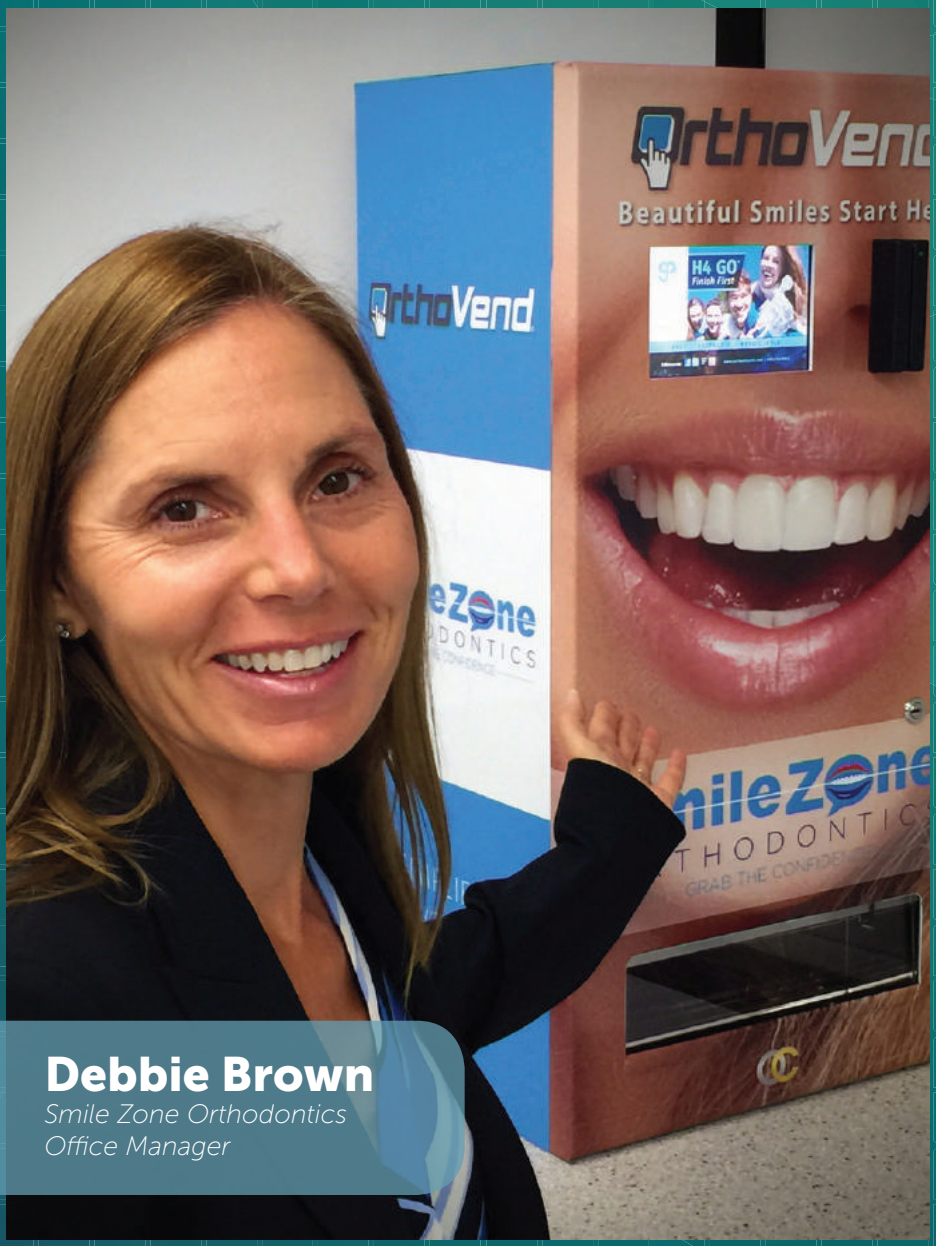
"Do we REALLY need a "vending machine" in our office?" I remember saying.



Debbie Brown
Smile Zone Orthodontics
Office Manager

SmileZone ORTHODONTICS
GRAB THE CONFIDENCE

6 months prior to our adventure with the "vending machine", we had transitioned the office from using another popular self-ligating bracket, to Ortho Classic's H4 self-ligating bracket system. We had so much success with the H4, my husband Dr. Duncan Brown (I only call him Doctor when he makes me mad) decided to give the OrthoVend "vending machine" a shot. It made sense to try, due to the fact that we could receive such amazing pricing on the H4 bracket, but having managed the administration of our office for the last 25 years, I was still pretty skeptical! Our office had been on the cutting edge of technology before, and I had seen the hype consistently fail to meet outcomes, with us investing far too much money on good ideas that just didn't work in practice.

www.smilezone.ca

Before the OrthoVend Simplified Inventory Management System I had become used to a lot of things:

- Carrying tens of thousands of dollars of inventory (we used to make an appointment to buy a hundred thousand dollars' worth of brackets – REALLY!)
- Carrying inventory of several different brackets with different torque options (ever notice you only run out of the ones you need)
- Buying in large quantities (to get better discounts), then having to store them (and then find them when it was time to re-stock the clinic)
- "Re-balancing" the inventory a couple of times a year because we had not calculated the number of brackets we would go through correctly (that was a chance for our Rep. to sell even more brackets to "top-off" the ones we were using)
- Having to do an "inventory count" every year of loose brackets for year-end purposes
- Hearing Duncan complain, "We are out" of some particular bracket a couple of months after we had re-balanced the inventory
- Trying to get the supplier to re-stock brackets that we had not used (I loved re-stocking charges, and REALLY loved it when the company wouldn't re-stock them because the manufacturing dates were too old, or the bracket pattern had changed)
- Cut the "monthly check" for the even distribution of the years bracket order, every month (I hated coming back from holidays knowing that the suppliers check was due, even when we hadn't bonded any patients)

And my personal favorite

- Making a HUGE donation to the graduate program at the local University of brackets that we had already paid for and not used, when Duncan decided to switch brackets or a new bracket pattern was introduced.

Notice I said "become used to", and didn't say I liked it. Many of you are doing the same thing we were doing, year after year, an endless black hole.

Enter OrthoVend and the light started to shine! Now we:

- Top off the machine when Ortho Classic sends us brackets

REALLY that's about it, no more bullet points (Are you amazed? Because I was!). Ortho Classic owns the inventory in the machine, and we only pay for what we use, with a credit card at the time of purchase. Brackets don't get lost, and we always have enough in the machine to meet our needs because Ortho Classic keeps the count, not the office.

I am REALLY GETTING USED TO no hassle, no inventory, and no questions about whether we can handle our patient demand or not. It's really that simple. Using Ortho Classic's H4 bracket and OrthoVend simplified inventory system we have minimized costs, controlled inventory, and there is no check to write for the monthly bracket order if we are not bonding patients!

So if you've ever wished you had an employee or piece of technology that **costs you nothing, saves you money, makes doing your job easier, and never forgets where something is**...OrthoVend is it! I only wish it held everything we used in the office. (Editor's note; we're working on it.)

Soft Tissue Diagnosis and "SAP" Bracket Positioning

My Journey Towards "Orthodontic Excellence"

Part 1 of 2

Figure 1: Extra-Oral Photographs for esthetic assessment: profile rest, profile smile, 45 degree smile, animated smile

"In Contemporary Orthodontics we must strive for clinical goals of excellence in both esthetics and occlusion.[1]"

-Dr. Tom Pitts

This is the first of two articles that Dr. Guiga has been kind enough to provide for publication in The Protocol, and will concentrate on the role of diagnosis, and SAP bracket positioning in attaining esthetically superior results.

INTRODUCTION

I graduated as a dentist in 1992 from the University of Coimbra Medical School, Portugal, and practiced for 6 years as a general dentist, specializing in Implantology and Oral Surgery. In 2007, I decided to become an Orthodontist to be more involved in smile esthetics. Professor Jacques Faure directed a wonderful Ortho Program at the University Paul Sabatier in Toulouse, France. Professor Faure taught me the discipline of clinical orthodontics, excellence in photography, models, and quality of x-rays to fully document cases. Taking pictures every visit and managing case mechanics with efficiency was of utmost importance to him, and I am forever grateful for his mentorship.

In my early years in practice, I strived achingly to achieve cephalometric results dictated by the Tweed, Steiner, and Root analysis for all my patients. I studied the lateral head x-ray and plaster models, did tracings on each patient, and planned towards "evening out" the Steiner "box" (almost always with pre-molar extractions). The questions that immediately came to mind were, almost always, "Which teeth are you going to sacrifice in order to get your lower incisor in the proper position? What mechanics do you need to get lower incisors right on the spot?" My belief structure was that lower incisors properly placed and canines in Class I occlusion, would deliver a patient that looked good and treatment results that would be stable. I believed that failure to achieve these goals would banish me to rot in "Ortho-Hell" where visions of crowded lower arches would haunt me constantly.

There was just one problem...**I disliked the way my patients looked after their orthodontic treatment**. Nasolabial angles were more obtuse, lip fullness was reduced, and vermilion displays lessened. Posed smiles had reduced enamel display, flatter smile arcs, less gingival display, and large buccal corridors. I was singlehandedly aging my patients 10 years in just 2 years of treatment! Treating to cephalometric profiles, consistently extracting bicuspid teeth "close to the problem", and intruding and retracting upper incisors to fit cephalometric ideal lower incisor positions was not working for me or my patients.

I had to find a better way, and would like to share with you what I have learned in my journey towards "excellence", in the hope that it might help you towards a "safe haven" in orthodontics, and support the passion that we share for our profession.

Lips Closed

Lips Parted

Posed Smile

Animated Smile

Figure 2: Series of EO frontal photographs showing: lips closed, lips parted, posed smile, animated smile

DIAGNOSIS BASED ON SOFT TISSUE AND THE IMPORTANCE OF UPPER INCISOR POSITION:

"Begin with the end in mind[2]" is a phrase used by Dr. Tom Pitts[1,3] to describe the clinical habit of planning orthodontic treatment mechanics based on the desired esthetic outcomes at all levels. The concept of finishing excellence starting before the appliance is placed based both on soft tissue diagnosis and micro-esthetic considerations is one I have found particularly useful.

Cephalometric standards can only serve as a general guideline, to compliment esthetic based considerations, as good facial harmony can exist within a wide range of cephalometric values. Even well treated orthodontic cases that meet every criteria of the ABO guidelines for successful treatment outcomes, may not produce an esthetic smile[5].

Today's patients want beautiful, faces, beautiful smiles, and beautiful teeth, so soft tissue based diagnosis includes a complete smile analysis in terms of tooth shape and proportions, gingival esthetic characteristics and esthetic tooth and gingival relationships[6,7]. As esthetic considerations are paramount, an artistic sense needs to be trained and cultivated, and rigid rules cannot be applied to the process.

SARVER'S MACRO, MINI, AND MICRO ESTHETIC CONSIDERATIONS AND "ANTI-AGING " ORTHODONTICS

Dr. Pitts supports David Sarver's concept of macro, mini, and micro esthetic considerations[3], focusing on systematically evaluating the esthetic needs of each particular patient with concentration on clinical examination of the patient both at rest and during smile animation in all 3 dimensions of space.

The 4th dimension - time - is also considered. Patients want to look great not only after treatment but also 20, 30 and 40 years from now. The anticipation of the aging effects brought upon the face and peri-oral tissues have to be taken into account in our treatment planning, especially if one of the goals of treatment is to slow or reverse the effects of aging on the face[8]. One discipline that Dr. Pitts suggests, that I have been using for years, is the assembly of photographic diagnostic materials with the patient standing in NHP (Figure 1, 2). Taking this series of photographs at critical milestones in treatment allows me to focus on esthetic needs aside from the stresses of the clinical schedule, and is a wonderful practice distinguisher for patients.

Today, I will focus solely on some the mini-esthetic aspects of esthetics that we can control orthodontically. Dr. Pitts has invited me to contribute another article on micro-esthetic refinement of "the white and pink" tissues, so look for that in the next issue of The Protocol.

PITTS' ACTIVE EARLY TREATMENT APPROACH AND THE ROLE OF "SAP" BRACKET PLACEMENT

If you have not been happy with the esthetic outcomes of your cases you are not alone. Esthetic declines have been quite common with treatment[9], but are no longer acceptable to the majority of patients. Where "straight teeth" were once a primary goal, today's parents/patients frequently seek orthodontic treatment for esthetic improvement[10], in addition to health benefits.

When I saw Dr. Pitts' article where he discussed "smile arc protection/enhancement[1]", it was a milestone moment for me. Having read Sarver[11], I understood the value of a "consonant" smile arc (incisal edges of the upper teeth parallel to the lower lip in posted smile), but was really at a loss on how to create it. In fact, my customary bracket position commonly resulted in smile arcs that were worse after treatment than before (Figure 3).

Dr. Pitts' diagram[3] is a wonderful representation of the need to place brackets apical to FA in the majority of cases (Figure 4). This has come to be called SAP (Smile Arc Protection) approach to bracket placement.

In SAP, the slot divergence created in the bonding progression from posterior to anterior improves display of the upper anteriors and consonance with the curve of the lower lip on smiling, without increasing the overbite. By enhancing the smile arc and enamel display, esthetics is improved and harmony of the smile is created (Figure 5).

"Smile arc bracket positioning, is a case management strategy that allows the orthodontist to protect or to create a more curved smile arc and enhance upper incisor and gingival display towards a more youthful and attractive smile, thus, improving esthetic and occlusal end results."

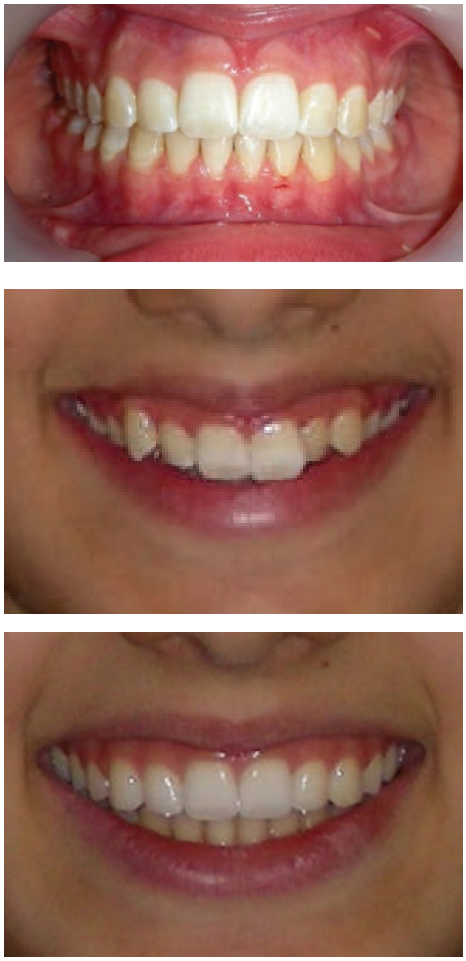


Figure 3: Flattening of the smile arch associated with bracket positions incisor to FA. The teeth are straight, buccal corridors are filled, but the smile arc is flat

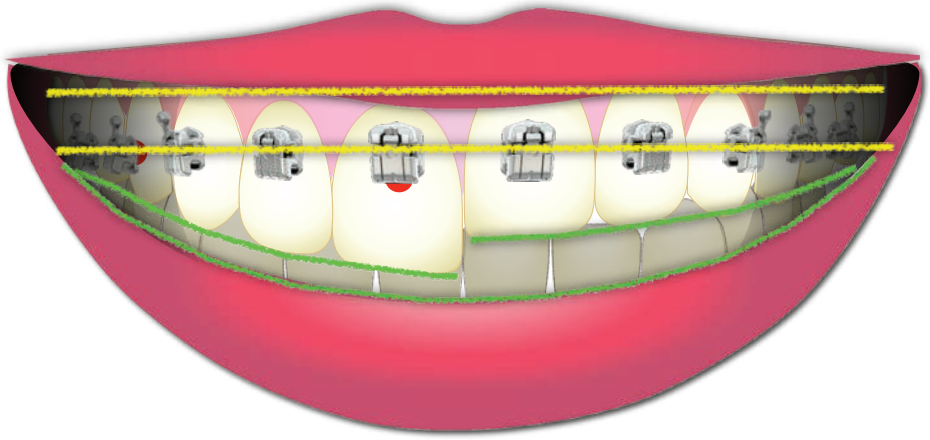


Figure 4: SAP versus Traditional Bracket Placement; for smile arc protection, the wire plane should be parallel to the upper lip in posed smile (yellow line), the incisor plane parallel to the lower lip

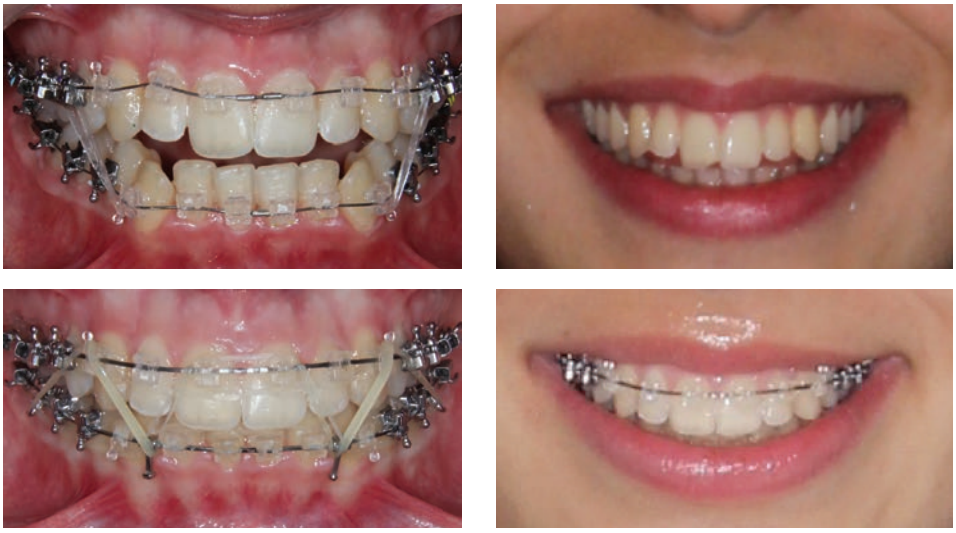


Figure 5 Above: SAP Bracket Position: Smile arc has been enhanced by SAP bracket position and good case management. The overbite has not deepened beyond that desired to close the AOB tendency

The technique involved in SAP bracket placement has been published a few times now[1,3,12] so rather than repeat it, here are highlights I have found to be most useful:

- The vertical positions of the upper central, lateral, and cuspid are adjusted relative to the upper posteriors depending on the steepness of the upper occlusal plane
- Lower posterior brackets are more gingival to avoid the occlusion
- Lower anterior brackets are more incisal to provide relative intrusion of the anterior teeth and optimize overbite
- The contact points are aligned, and as the contacts points progress apically in the upper arch towards the anterior, the slot plane follows the same progression

The degree of bracket progression is dependent on the desired position of the upper incisor in an animated smile, so bracket position is individualized to optimize esthetics (Figure 6).

Figure 6 Below: An Example of SAP bracket placement, designed to enhance the existing smile arc: note the bracket progression in the upper arch from posterior to anterior. Due a tendency to openbite, and lower anterior brackets are placed more gingivally to close the AOB. Bracket placement for H4 GO is the same as H4 steel

MY EXPERIENCE USING AN SAP BRACKET POSITION

Having seen Dr. Pitts' cases and desperately wishing to improve esthetic results for my patients, I decided I had to learn more, and essentially became a "Tom Pitts stalker", travelling broadly in both Europe and North America to hear him. I attended some in-office courses, but it was really the "Pitts Masters in Finishing" course that cemented the concept for me. It is always harder to "unlearn" bad habits than it is to learn new good habits. Along with my colleagues and good friends in the Master's program, I learned some new wonderful habits , the first was SAP bracket placement, and secondly was the discipline to assess bracket position at PRACM[13] and adjust it to respond to esthetic progress in treatment. Where SAP bracket placement looked "odd" to me initially, it is now one of my "orthodontic truths", and I can't imagine placing brackets any other way.

I'll try to explain why these concepts have made such a difference in my practice and use a case taken from my practice to illustrate the concepts:

Figure 7: This young lady had a beautiful smile arc prior to treatment with traditional bracket placement positions

IN THE VERTICAL DIMENSION

As the vertical position of the upper incisor in NHP is a prime diagnostic criteria in developing superior esthetics in orthodontics[4,6,11,14], with full enamel display and 2 mm of gingival display considered as most esthetic in a posed smile. In adolescents, more display is desirable, especially in women, as aging changes in the lips decreases display.

Based on my training, traditional bracket positions, and case management strategies designed to reduce overbite by upper incisor intrusion were common (Figure 7,8). In an SAP approach placing upper anterior brackets more gingivally than the bicuspids improves enamel and gingival display by adjusting the vertical position of the upper incisors and cuspids relative to the upper posteriors[3,11] (Figure 9).

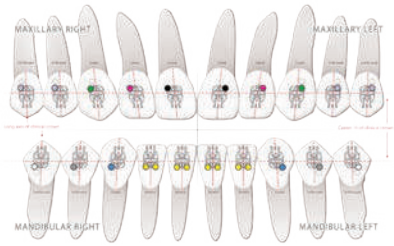


Figure 8: Traditional bracket placement with slot level at or incisal to FA. This wire plane will result in relative intrusion of the upper incisor and flatten the smile arc

As the smile arc develops from bicuspid to bicuspid, assessing patients based on NHP (which has been shown to be stable in both the short and longer term), Orthodontists can more accurately diagnose and treatment for esthetic outcomes[15].

As smile arcs are highly dependent on the occlusal plane, assessment of patients standing, engaged in natural conversation, and generating unposed smiles, allows the Orthodontist to make patient specific decisions on bracket placement: larger progressions where more display is required (flat occlusal planes), moderate progressions to protect the existing smile arc (normal occlusal planes), or modest progressions in cases with mildly excessive displays (steep occlusal planes) where transverse arch development will flatten the upper incisor curvature[1].

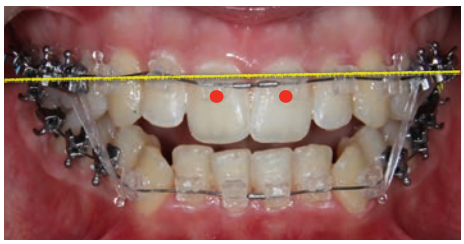


Figure 9: SAP bracket placement with slot level gingival to FA. This wire plane will protect or enhance the smile arc, with relative extrusion of the incisors.

Figure 10: PRACM appointment - teeth are aligned, but the smile arc has been flattened due to brackets position. An adjustment of bracket position and case management is required

IN THE SAGITTAL DIMENSION

There is a worldwide tendency towards treating more cases non-extraction[16], and with that the need to control the axial inclination of the upper incisor becomes more challenging[3] as axial inclination of the upper incisor has a dramatic effect on smile arc. As patients are more sensitive to changes in axial inclination than to changes in A/P position[17], anything that mitigates against incisor proclination frequently associated with non extraction is a good thing.

I have found SAP bracket positions to be more effective in controlling axial inclination in both the tipping and torsional phases of treatment:

- Early in treatment, relative incisor extrusion creates a retroclining moment that helps control proclination as crowding unravels, when supported by early light short elastics (ELSE) and proper disarticulation buttons[18]
- In the torquing phase of treatment, SAP makes the effective bracket Rx slightly more negative, which helps recover from non-extraction proclination later in treatment[19]

When combining SAP positioning with Dr. Pitts' case management strategies in keeping the upper incisor forwards in the face, protecting both the nasolabial angle and fullness in the upper lip, wonderful esthetic changes are possible.

I agree completely with Dr. Pitts when he says that, "SAP bracket placement is most effective when combined with other "Active Early" principles of ELSE, and disarticulation[3]".

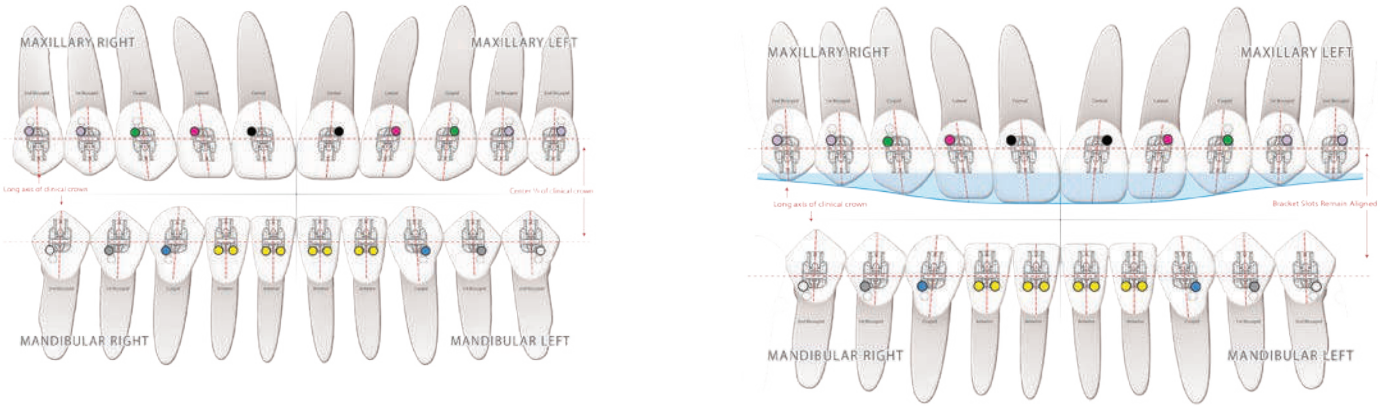


Figure 11: Recovery of smile arc after repositioning brackets to SAP and adjusting case management

IN THE TRANSVERSE DIMENSION

Broader arch width, especially in the molars is more attractive, with smaller buccal corridors being preferred in both men and women[4,6,20].

The alignment and broadening of maxillary and mandibular dental arches to reduce buccal corridors and producing "10" or "12 " tooth smiles result, in a reduction of curvature of the upper incisors with respect to the inferior lip curvature (flattening of the smile arc).

One of the biggest impacts on transverse arch dimension in the molars, and arch form in general, has been the adoption of "Pitts' Broad" arch forms in both non-adjustable, and adjustable wire profiles. This arch form improves the "flow" of mini-esthetics, making attaining a "12 tooth" smile much easier.

By using a moderate progression SAP bracket placement, the Orthodontist can broaden the arches and still maintain a beautiful smile arc.

THE PRACM APPOINTMENT AS A CRITICAL PITTS' CASE MANAGEMENT MILESTONE

Dr. Pitts adopted the term suggested by Dr. Jim Moorish of "PRACM" (Pan/Repo Adjust Case Management) to apply to the clinical milestone where occlusal and esthetic progress is assessed and case management adjusted if needs be (Figure 10,11). This is a truly wonderful concept in esthetic driven treatment, and greatly improves the prospects of attaining superior occlusal and esthetic results (Figure 12,13).

Figure 12: Beautiful occlusion and esthetics after SAP bracket position and adjusted case management

Figure 13: Beautiful occlusion and esthetics after SAP bracket position and adjusted case management

SUMMARY

My journey towards excellence is just beginning. As Dr. Pitts develops better treatment protocols, and Ortho Classic continues to refine their H4 appliance, I hope to follow along closely. Given the wonderful changes that I have seen in my practice in only the first few years of using SAP bracket placement, and an "Active Early" case management approach, I am really excited for the future. I left general practice to make wonderful esthetic changes for patients, and using the SAP bracket position is vital part of that.

Dr. Pitts has asked me to describe how micro-esthetic changes in the "white and pink" tissues contribute to better bracket placement and to overall esthetic outcomes, and I am delighted to do that. See you in the next The Protocol!

SAP BRACKET PLACEMENT IN AN "ANTI-AGING" PARADIGM

One of Dr. Pitts esthetic goals in treatment is to slow, or even reverse the effects of facial aging on esthetics; an approach he describes as "anti-aging". Facial aging is frequently accompanied by:

- Lengthening of philtrum and commissure heights
- Reduced fleshiness in the upper lip, with reduced upper lip thickness
- Reduced incisor display at rest
- Reduced incisor and gingival display on smile.

This esthetic treatment strategy involves increasing dental mass over skeletal volume (usually without extractions), positioning anterior teeth prominently in the smile forward in the face, and positioned vertically for full enamel display, in anticipation of aging. All are strategies facilitated by SAP bracket placement.

AUTHOR'S COMMENTS

DR. NIMET GUIGA

My dream is to make every patient that walks through my door leave with a beautiful smile for life. I care about the position of your teeth and your occlusion as an orthodontist but I also care about the shape of your teeth, the color, the way the light reflects on your teeth when you smile, the brighteness, the proportions, the way your smile looks from every angle, the way it looks when you laugh, when you talk, when you are happy, when you are sad, when you are at work or school or when you say "I love you". I even think about how it will look when you age, when the position of your lips change.

[1]Pitts, T - Begin with the end in mind, bracket placement and early elastics protocols for smile arc protection, Clin Impressions 2009: 17:1
[2]Covey,S - The Seven Habits of Highly Successful People, Simon and Schuster, 1989
[3]Pitts,T - Begin with the end in mind and finish with beauty, SIDO Published on line, 29/05/2014, 39-46
[4]Brandao, RCB - Finishing procedures in orthodontics: dental dimensions and porportions (microesthetics), Dental Press J Ortho. 2013, Sept-October; 18(5);147-174
[5]Schabel BJ - The Relationship between Post-Treatment Smile Esthetics and the ABO Grading System, Angle Ortho, 2008 78(4): 579-84
[6]Sarver, DM - Dynamic smile visualization and quantification and it's impact on orthodontic diagnosis, The Art of Smile, Chicago, Quintessence; 2005; 99-139
[7]Sarver, DM - Principles of cosmetic dentistry: Part 1. Shape and porportionality of anterior teeth, Am J Orthod Dentofacial Orthop 2004; 126(6): 749-53
[8]Term courtesy Tom Pitts
[9]Ackerman J, Ackerman MB, Brensinger CM, Landis JR. A morphometric analysis of the posed smile: Clin Orthod Res 1998;1:2-11.
[10]Samsonyanova, L. A Systematic Review of Individual Motivational Factors in Orthodontic Treatment: Facial Attractiveness as the Main Motivational Factor in Orthodontic Treatment: International Journal of Dentistry , Vol 2014
[11]Sarver DM. The importance of incisor positioning in the esthetic smile: the smile arc. Am J Orthod Dentofacial Orthop. 2001;120(2):98-111
[12]Pitts,T - The secrets of excellent finishing. News and Trends in Orthodontics, April 2009
[13]Term courtesy Jim Moorish - Pan/Repo/Adjust Cace Management
[14]Camera CALP -Esthetica en Ortodonia: seis linhas hortzontais do sorriso. Dental Press Journal Orthod. 2010(15):118-131
[15]White, L - The value of true horizontal in diagnosis and treatment planning - orthopracticeus.com, September 6, 2014
[16]Janson, G. Frequency evaluation of different extraction protocols during 35 years: Progress in Orthodontics 2014, 15:51
[17]Cao et al - Effect of incisor labiolingual inclination and anteroposterior position on smiling profile aesthetics, Angle Orthod 20;81; 121-129
[18]Michael Major - personal communication
[19]Pitts, T - Active Early Principles, Pitts Protocols 2015(2):8-14
[20]Machado, AW - 10 Commandments of smile esthetics, Dental Press J Orthod, [online]. 2014, vol.19, n.4 [cited 2015-05-10], pp. 136-157

CONSUMER 2.0

MARKETING TO TODAY'S CONSUMER

by Eric Ackerman Graphic Design Manager

The Consumer 2.0 Connection

There has been a lot of discussion about Web 2.0, Marketing 2.0 and Networking 2.0, but the real key to your future marketing success will rely on Consumer 2.0. The average consumer these days is no longer "average." They have unlimited access to information, opinions and education for just about any product, service or business.

Here's a perfect example: I recently got my kids a puppy (Pembroke Welsh Corgi) for Christmas. I personally haven't had a dog since I was a small child, and had no idea what type of vaccines he would require, what groomer I should use (or even if he needed to be groomed), what type of food was best for his breed, and many other questions. With a simple internet connection and ten minutes, I was practically an expert on Pembroke Welsh Corgis. I knew their dietary restrictions, their grooming needs (they only need their nails clipped, and they shed a lot) and what set of shots he would need. I located the best veterinarian in town based on customer reviews, found that Costco had the puppy chow he required at the lowest price and located a natural health pet supply store that had an owner who actually owned Pembroke Welsh Corgis.

As you can see, the information I needed came quickly and easily and because this information was all new to me, and I relied on the opinions of others across the web to make my choices. This type of scenario is no different than that of a potential patient who has decided they would like straighter teeth. There is an abundance of information floating across the internet for them to digest. They can search "straighten teeth" and view thousands of pages comparing braces to aligners. They could go to YouTube and watch hundreds of personnel testimonials of actual patients. They could seek out friends and peers on Facebook, Twitter, Instagram, Google+ and other social networking sites. Then once they've made up their mind of what kind of appliance they want, they can search for local orthodontists in their area. They will see Google results with maps to offices, comparison pages with patient reviews, and actual websites to the doctors in their area specializing in exactly what they are looking for.

This is the point where your practice can really shine and your e-marketing and social networking can dominate your local landscape to make their choice an easy one. This is the point where your name and your practice's name can fill the entire first page of their search results. And with proper social marketing this is the point where they realize that they've already heard about you and your

practice from their friends, acquaintances and peers. This is the Consumer 2.0 connection.

Let's take a moment and back up and examine the roadmap to the Consumer 2.0 connection. How can you get there? How do you create a positive web presence, and how do you bring in more patients? In its simplest terms, the solution is fairly straight forward; do what you've always done and focus on word of mouth. The internet and its social networks are simply amplified word of mouth consumers. Instead of little Johnny (or little Johnny's mom) telling their personal friends, family members, or neighbors about your practice, you now have them telling the world, and what they say is up to you.

Staying ahead of the message is the real key to successful consumer 2.0 marketing. They can tell everyone how great you are, or, just as quickly, how much they disliked you. Controlling the message is really the key component to taking full advantage of Web 2.0 marketing.

Orthodontics is an industry ready-made for social networking. Orthodontists are specialists in their industry; providing services with an exceptional amount of knowledge and precision that others simply can't offer. Your job is to make sure the average consumer knows the difference between visiting an orthodontist and visiting a general dentist. This is also your opportunity to educate them on why you're the orthodontist they should be seeing.

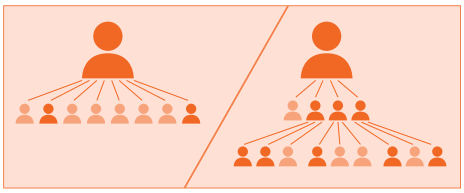
Consumers are tapping into their networks of friends, fans, and followers to discover, discuss and purchase goods and services in ever-more sophisticated ways. As the global economy struggles to correct itself, and social-media marketing becomes a strategic imperative, orthodontic practices will have exciting opportunities to expand in new directions this year. The need for trust, value and brand transparency, among other trends from last year, are just as important today. But the current shift to geotargeting, mobile marketing and online reputation management require orthodontic specialists modify their plans to surpass their competitors.

TEN MARKETING TRENDS

Orthodontists Should Incorporate Now to be Positioned for Success.

1

Build reliable brand advocates. The idea that you need tens of thousands of Twitter followers, blog subscribers, LinkedIn connections and Facebook friends to build your practice via social media is dead. Quality connections with those who are loyal to your practice and brand are far more helpful to spreading your message than large groups of connections who disappear after the first interaction.



2

The key to Consumer 2.0 is their ability to create and distribute feedback and ratings of your business and service. Consumers can easily read and post reviews of your business on sites such as Yelp, Angie's List and Yahoo Local to more industry specific sites like Dr. Oogle (www.doctoroogle.com). It's important to keep an eye on these types of website and manage your web presence. Encourage your patients to post positive reviews and feedback. You can even setup a computer in your office for them to use before they leave.

Excel in one area rather than be all things to all people. This will be a year for orthodontic specialists to focus on their unique niches, and position themselves as the definitive source for orthodontic services related to the specific places in the markets where they operate.

3

Create quality content as a viable marketing tool. Social media marketing and content marketing go hand-in-hand, and this is the year businesses will create useful content that adds value to the online conversation as well as people's lives. The web is a cluttered place; amazing content is essential to break through the noise!

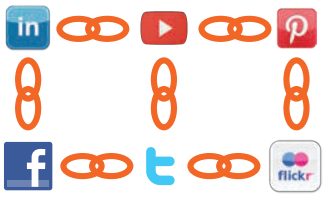
4

Move more marketing dollars into social media. Statistics show that large and small companies are shifting budget dollars into their social media and other digital marketing initiatives, and away from print and radio advertising. Consumers spend more time online than ever, and to reach them and stay competitive small businesses need to have a presence on the social web.

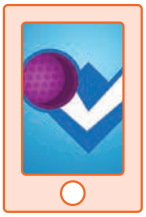
5

Track brand reputations on the social web in greater detail. Social media has given consumers a large platform to voice their opinions, and small-business owners are realizing the importance of actively monitoring their reputation on the web. With dashboards and social media aggregators, it's easier than ever for small businesses to develop, nurture and track their stature online.

CONTENT + CONTEXT + CONNECTION + COMMUNITY = SOCIAL MEDIA MARKETING



Increase branded online experiences to meet diverse consumer needs. Simply having a Twitter account or Facebook page isn't enough this year. Orthodontists must surround consumers with branded online destinations such as a blog, LinkedIn profile, YouTube channel, Instagram account, Pinterest account, Flickr profile and so on. Consumers can then pick and choose how they want to interact with your brand. Of course, quality trumps quantity, so extending a brand across the social web must be done strategically to maximize opportunities without compromising content and communications.



Pursue mobile marketing. There is absolutely no doubt this is the year of mobile marketing. While still in its infancy, it is the marketing imperative of the future. With mobile advertising, branded mobile apps, and mobile marketing apps like Foursquare, consumers will expect businesses to have a mobile presence in 2012.

Make geotargeting and localized marketing a top priority. Local discount websites like Groupon, LivingSocial and Google Offers as well as local review sites like Yelp, Yahoo Local and Angie's List make it easy for consumers to find deals and reviews about businesses in their neighborhoods and beyond. Creating targeted, local marketing campaigns using these popular tools will become the norm this year.

Accept that silo marketing is ineffective. Offline, online and mobile marketing initiatives create an opportunity to lead consumers from one message to another by integrating those strategies. You can drive a significantly higher return on investment by cross-promoting branded online destinations, discounts, contests and events.

Engage in co-marketing to boost returns and lower marketing costs. The economy is still struggling, which means small businesses can benefit from economies of scale by partnering with complementary businesses to develop co-marketing programs in 2012. Promotional partnerships not only lead to reduced costs, but also can lead to increased exposure and new audiences. Ortho Classic's OrthoAMP service offers a great co-marketing program.

This year, all businesses will be experimenting with a variety of online, localized and mobile marketing initiatives. Remember, even if you're not leveraging marketing trends and opportunities, your competitors are.

All of these new social media terms can often sound like Klingon. Here is a quick guide explaining the jargon:

JARGON CONFUSION

$%&@ #%*#$!

Web 2.0

The second generation of the World Wide Web, especially the movement away from static web pages to dynamic and shareable content and social networking

E-Marketing

Using digital technologies such as the Internet, e-mail and mobile to market your business.

TIP:

Make note of the URL for your listings and start promoting these sites and stimulating positive reviews from some of your most loyal customers to get the ball rolling in your favor. (Some of the review sites appear to list businesses with more reviews above others when people do local searches.)

Social Media

Media for social interaction. Social media uses web-based technologies to transform and broadcast media monologues into social media dialogues.

Social Network

A social structure made up of individuals (or organizations) called "nodes," which are tied (connected) by one or more specific types of interdependency, such as friendship, kinship, common interest, financial exchange, dislike, personal relationships.

Facebook

Currently the largest social network on the internet, built on the concept of friend-to-friend connections

Google+

Google Plus is the fastest growing social network. Similar to Facebook but with access to other Google services such as Gmail, Google search and YouTube

Twitter

A social networking and micro-blogging service which enables its users to send and read other users' messages called "tweets." The social media network is based on 140-character micro-blog posts.

Instagram

An online mobile photo-sharing, video-sharing and social networking service that enables its users to take pictures and videos, and share them on a variety of social networking platforms, such as Facebook, Twitter, and Flickr

TIP:

Start publishing your positive reviews in other forms of communication (maybe a T-shirt!). These testimonials can add to your marketing message and act as subtle reminders to other happy customers that they might want to post reviews as well.

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LinkedIn

A professional social media application which allows you to connect with colleagues, business prospects or people within your industry.

Yelp, Yahoo Local, Angie's List

Social networks and local search websites that provide users with a platform to review, rate and discuss local businesses.

YouTube

A social video website with content from both amateurs and professionals.

Groupon, LivingSocial, Google Offers

Localized (Geo-targeting) "deal-of-the-day" websites.

Geotargeting

The delivery of ads specific to the geographic location of the searcher. Geo-targeting allows the advertiser to specify where ads will or won't be shown based on the searcher's location; enabling more localized and personalized results.

Blog

A blog (a blend of the term web log) is a type of website or part of a website. Blogs are usually maintained by an individual with regular entries of commentary, descriptions of events, or other material such as graphics or video. Blogs allow users to reflect, share opinions, and discuss various topics in the form of an online journal while readers may comment on posts.

Micro-blogs

A blog on which one posts brief, frequent updates on one's activities.

TIP:

Make sure you are listed on the major social media sites and that your profile and business information is up to date and as accurate as possible.

TIP:

Add a few reviews of your favorite local businesses, particularly those you may have strategic relationships with.

Upcoming Events

CAO - Canadian Association of Orthodontics
Victoria, British Columbia
September 17 - 19, 2015

OrthoVOICE
Las Vegas, Navada
September 24 - 26, 2015

SAO - Southern Association of Orthodontics
Orlando, Florida
October 4, 2015

PCSO - Pacific Coast Society of Orthodontics
Palm Springs, California
October 22 - 24, 2015

SIDO
Milan, Italy
October 29 - 30, 2015

Dr. Tom Pitts Lecture
Warsaw, Poland
November 6 - 7, 2015

Dr. Tom Pitts Lecture
Belarus
November 9, 2015

Advance In-Office Hands-On
McMinnville, Oregon
November 20 - 21, 2015

Dr. Tomas Castellanos Lecture
Lebanon
November 30, 2015

Dr. Daniela Storino Lecture
Paris, France
December 6, 2015

Dr. Tom Pitts Lecture
Brisbane, Australia
January 18, 2016

Dr. Tom Pitts Lecture
Sydney, Australia
January 20, 2016

Dr. Tom Pitts Lecture
Melbourne, Australia
January 22, 2016

AEEDC 2016
Dubai
February 2 - 4, 2016

Dr. Daniela Storino Lecture
Krakow, Poland
March 4 - 5, 2016

AAO 2016
Orlando, Florida
April 30 - May 3, 2016

Master Course Part III
Calgary, Canada
March 10 - 12, 2016

Master Course Part IV
McMinnville, Oregon
September 15 - 17, 2016

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