

The NEW Orthodontic Reality by Dr. Tom Pitts

Issue 11

THE  
PROTOCOL<sup>TM</sup> MAGAZINE

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Elements of the  
“THRIVE” Equation

Drs. Tom Pitts & Duncan Brown

\*Actual Patient Treated  
by Dr. Jorge Gutiérrez

Squaring the Circle in Orthodontics: Drs. Bruce Ollins & Gabe Ollins

# THE PROTOCOL™



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**The New Orthodontic Reality**

Dr. Tom Pitts



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**Elements of the "THRIVE" Equation**

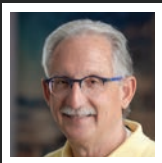
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DR. TOM PITTS

# The New Orthodontic Reality

Covid19's onslaught through the world seemed like an example of Gordon Livingston's phrase, "Only bad things happen quickly... virtually all the happiness producing processes in our lives take time, usually a long time: learning new things, changing old behaviors, building satisfying relationships, raising children. This is why patience and determination are among life's primary virtues."<sup>1</sup>

There is no question that our profession faces challenges, however, we believe that this temporary "difficulty" creates a wonderful opportunity for Orthodontists of vision, where pro-active actions can ensure that we "thrive not merely survive" as we step into the future.

These strategies represent "The Thrive Equation":

- Consistently delivering "WOW" worthy esthetics.
- Dramatically impacting treatment effectiveness through hyper-efficient, gentle mechanics, resulting in fewer appointments and shorter treatment times.
- Providing an extra-ordinary patient experience responsive to patient's evolving perception of "value".
- Spreading influence of "artistic" approaches to esthetics through use of social media, and the strategies of visual artists. Showing before and after dramatic photos on smile changes for impact is very important. In addition, short patient videos before and after treatment is impactful.

**"Action is the antidote to despair." – Joan Baez**



Figure 1: Pre and post treatment esthetic outcome with Pitts21. Photos courtesy of Dr. Tom Pitts



Adoption of these strategies will accelerate the trajectory of recovery and growth on the practice. The "art of taking action"<sup>2</sup>, and the speed at which productive action is taken will determine the future of our practices and of the specialty.

I believe that this new artistic, esthetic, and efficient treatment model can change the future of orthodontic practices and what patients expect. Every patient that I've ever treated will confess that they want to look the very best and youngest possible as they mature in age. Word of "accelerated esthetic treatment" will get out into the community, if we promote and differentiate with before and after "awesome" photos. After we begin to master these strategies, it will take patient education and awareness to a new level through excellent photography.





## ABANDON "LIMITING BELIEFS" THAT SLOW TREATMENT

What is clear is that esthetically planned and precisely executed progressive orthodontic treatment approaches positively effects dental and esthetic outcomes, and we can do so very quickly.



**Case 1:** Amazing progress without resorting to TAD's, Surgery, or Treatment Accelerators - Photos courtesy of Dr. Ilies Tibaoui



# Initial

Pretreatment Facial Photos



*Courtesy of Dr. Ilies Tibaoui*



Severe Class III Malocclusion



IO Photos - Mild Crowding



Severe Class III Malocclusion and Esthetic Concerns

*Courtesy of Dr. Ilies Tibaoui*



### 8 Months

Very rapid progress following “Active Early™” Protocols with Pitts21 system

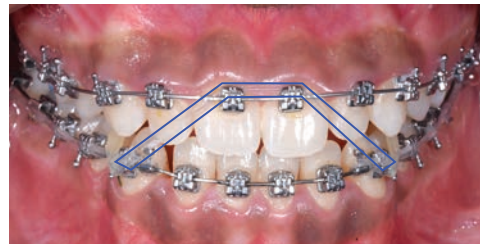


### 10 Months

Very rapid progress following “Active Early™” Protocols with Pitts21 system

*Courtesy of Dr. Ilies Tibaoui*





### 12 Months

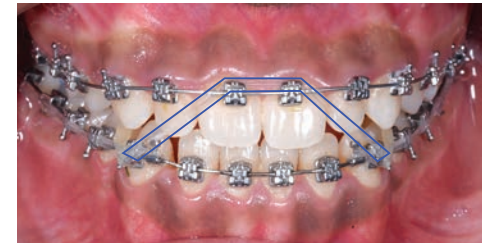
Very rapid progress following "Active Early™" Protocols with Pitts 21 system



### 18 Months

Resolution of occlusal concerns

*Courtesy of Dr. Iliés Tibaoui*



0 Month

4 Months

8 Months



*Courtesy of Dr. Ilies Tibaoui*

12 Month

18 Months



Before

After

18 Month Progress  
Significant esthetic  
improvement without  
surgery, TAD's or  
treatment accelerators.



*Courtesy of Dr. Ilies Tibaoui*



**0 Month**



**12 Months**



**18 Months**

Radiographic Improvement without surgery, TAD's or treatment accelerators



*Courtesy of Dr. Ilies Tibaoui*



## ADOPT A “BETTER ECONOMIC MODEL”

It is an opportune time to expand the concepts advanced in “Orthodontic Finishing: a new economic model”<sup>6</sup>. Make pro-active decisions that avoid the common mistakes that “load” appointments; not starting patients at optimal times, not using SAP/VID bracket placement, not being meticulous in techniques of bonding, not adhering to successful “Active Early™” treatment protocols, not taking photos every visit, not focusing absolutely, at each appointment, and not consciously empower the patient in the process to ensure co-operation.

Post Covid19, increased patient awareness will increase the “value” of greater attention to sanitation, physical distancing, an absolute focus on advancing treatment during fewer appointments, seeing patients more often early in tx, resulting in shorter treatment times. This set of “new” patient expectations, provides a wonderful opportunity<sup>7</sup>. This is a perfect time to change our model, primarily driven by production, to one driven by esthetics, quality, and then production. This will allow us to keep fees at a nice level and also realize the profitability that goes along with fewer appointments.

“When deciding if your practice should adopt “remote appointment” software, factor in that your practice can not afford to be left out of the conversation.”  
- Tom Pitts

## “WHEN YOU NEED TO GO FAST, APPEAR TO “SLOW DOWN” - TOM PITTS

In my consulting days with Joni Abel, we suggested adopting this approach in clinical situations where the orthodontist was under heavy time pressures. “We would move quickly, but appear to slow down and focus on the patient”. Orthodontics is all about focus - patients appreciate precise focus on them.

## ACT NOW TO ADOPT EFFICIENCIES

Early adopters of the Pitts21 appliance, using “Active Early™” Protocols, and the “Engage Early™” strategy of Pitts Broad AW’s are seeing great results happening very quickly. Adopting new approaches with a laser like focus of both case management protocols and esthetic qualities that produce “WOW” worthy results are producing esthetic and occlusal results that are not just “nice”, but are **spectacular**.

In a previous version of The Protocol, we introduced the Pitts21 appliance and initial thoughts on the theory behind “Early Engagement™” as a means of shortening treatment times.<sup>8,9</sup> Through shared experiences, we have learned a lot, and are adjusting treatment protocols continually. In this version of the Protocol, we will share experiences gleaned in the first few years of clinical experience with Pitts21, and suggest some hyper-efficient approaches to shorten treatment times and enhance efficiency.



*Courtesy of Dr. Lili Ivashkevich*

## USE SOCIAL MEDIA TO EXPAND “INFLUENCE”

Less than a year ago, we would have viewed “virtual consults” as a technical stunt. All that has changed.

The “Stay at Home” directives during Covid19 created a society very dependent on technology that maintains remote connections with people in such a way that the usage of messaging platforms have increased by 50% in the last few months<sup>10</sup>.

“Remote appointment” software allows Orthodontists to connect with new patients, bolster caring relationships with existing patients, and develop improved relations with PCD’s (Primary Care Dentists). “End to end” protection of the patients’ personal information is a critical factor when choosing a remote meeting software. Popular platforms like ZOOM or FaceTime so far are not HIPPA compliant. One can use HIPPA and PIPEDA compliant “medical grade” platforms like Doxy.me for this purpose.

## GET READY TO THRIVE

The future is a blank canvas. By adopting: abandonment of self-limiting beliefs, understanding the opportunities afforded by changes in patient’s perception of “value”, focusing on “WOW” worthy esthetics and treatment efficiency, fostering relationships through “remote appointments” social media, and “spreading the word” through effective use of social media, the esthetically driven orthodontist is going to prosper.

We are eagerly anticipating this new orthodontic world.

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## Author's Comments

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Dr. Tom Pitts

*"The "keys" to long term success of the esthetic orthodontic practice are "Differentiation" in terms of patient's results, experience, and "Efficiency" when it comes to case management and treatment delivery. Esthetic based marketing, and the Pitts21 system blend perfectly!" - Tom Pitts*

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# Elements of the “THRIVE” EQUATION

*“The mind that opens to a new idea never returns to it’s original size.” - Albert Einstein*

“Everybody is a genius. But if you judge a fish by it’s ability to climb a tree, it will live its whole life believing that it is stupid.”

-Albert Einstein

## Efficiency as a “Differentiator”

Increasing **clinical efficiency while simultaneously enhancing esthetics<sup>1</sup>**, is a concept I introduced over 20 years ago, and continues to be a primary focus of our teaching. Especially now, this combination of **“Wow Worthy”** esthetics and efficiency, will be paramount in ensuring that orthodontic practices will THRIVE in the future.

**Spreading the influence of “WOW” worthy esthetics**, by adopting approaches of visual artists, applied to enable “social validation” through social media<sup>2 3 4</sup>, is a strategy we introduced in the last issue of The Protocol. Of course, in order to have this influence, we’ve worked very hard to be able to deliver these stunning esthetics. Yes, we have to “walk our talk”.

These approaches become increasingly important strategies in differentiating the esthetic based orthodontic practice.

## Focus on factors that are directly within control of the Orthodontist

Like Richardo Moresca, we view aspects effecting treatment time as a combination of those that are beyond the control of the

Orthodontist, and those that Orthodontists can directly impact<sup>5</sup>.

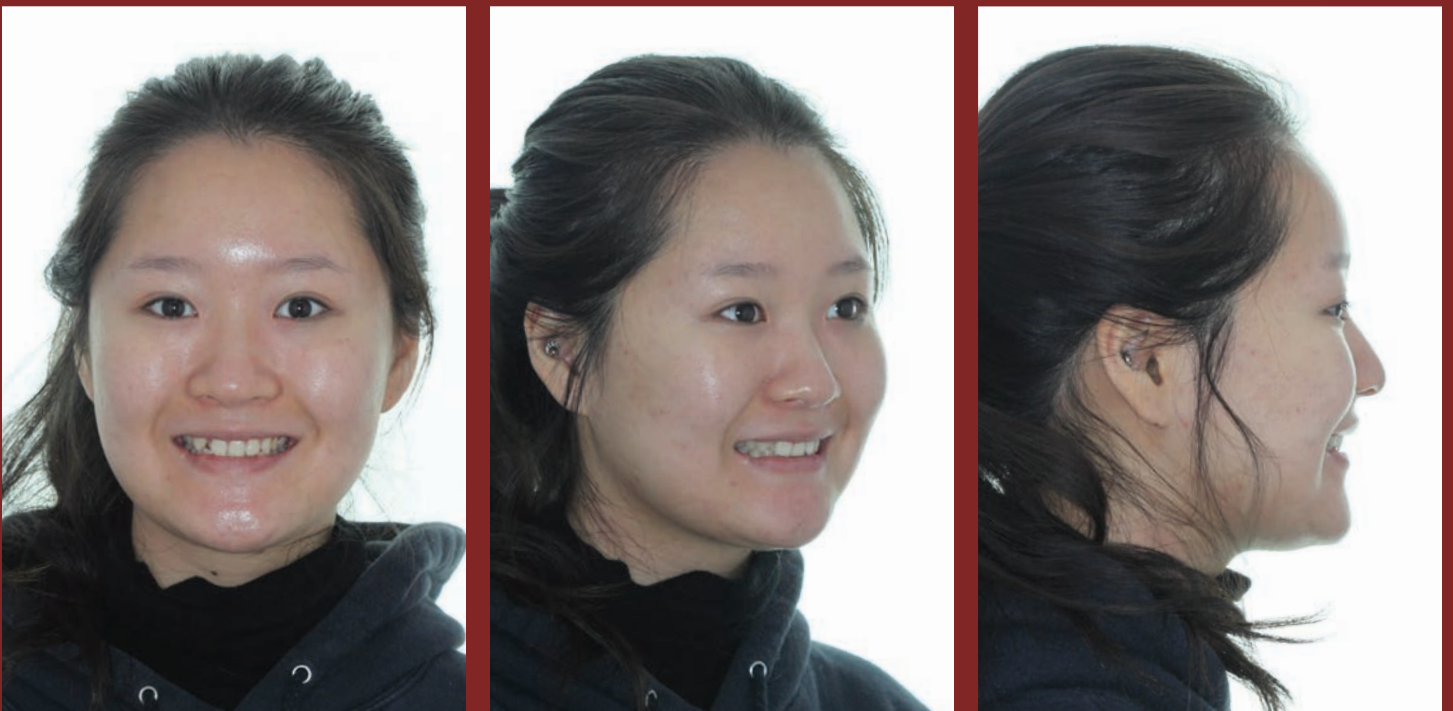
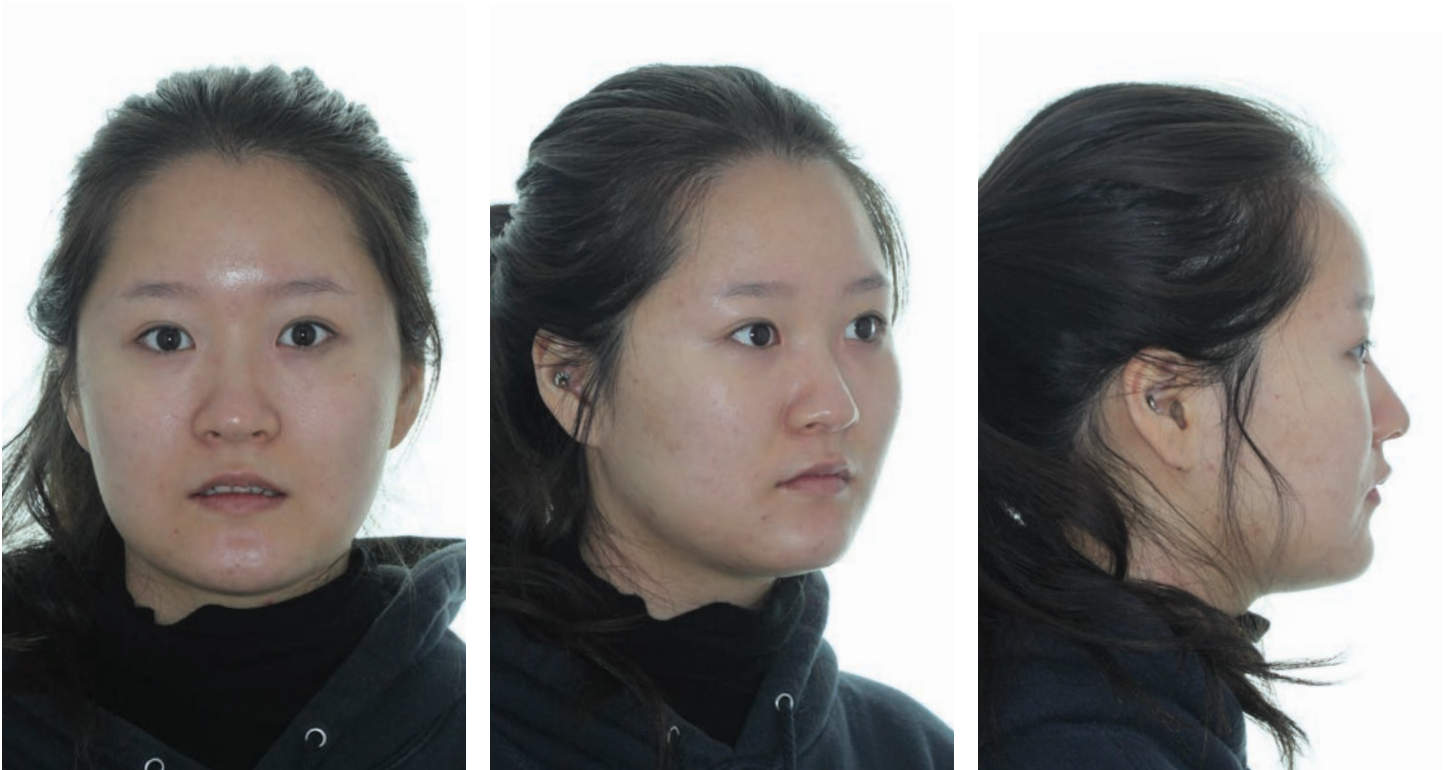
We have less control of aspects like the severity of presenting malocclusion, inappropriate prior extraction of premolars, presence of class II or class III skeletal patterns, the need for orthognathic surgery, and limited biological availability.

Orthodontists do assert considerable control on diagnostic and treatment planning precision, focusing on appointment efficiency by “unloading” non essential appointments, and using the most efficient appliances/case management strategies available. Effective patient management strategies can transform passive recipients, of care, to enthusiastic collaborators in treatment.

Today, we will discuss why the Pitts21 system, “Active Early™” protocols, and an “Engage Early™” AW progression strategy can help you to simultaneously shorten treatment times, and improve the quality of esthetic results, by enhancing control.



# SHORTER TREATMENT TIMES IMPROVED CONTROL



Pretreatment Facial Photos

*Photos Courtesy of Dr. Duncan Brown*



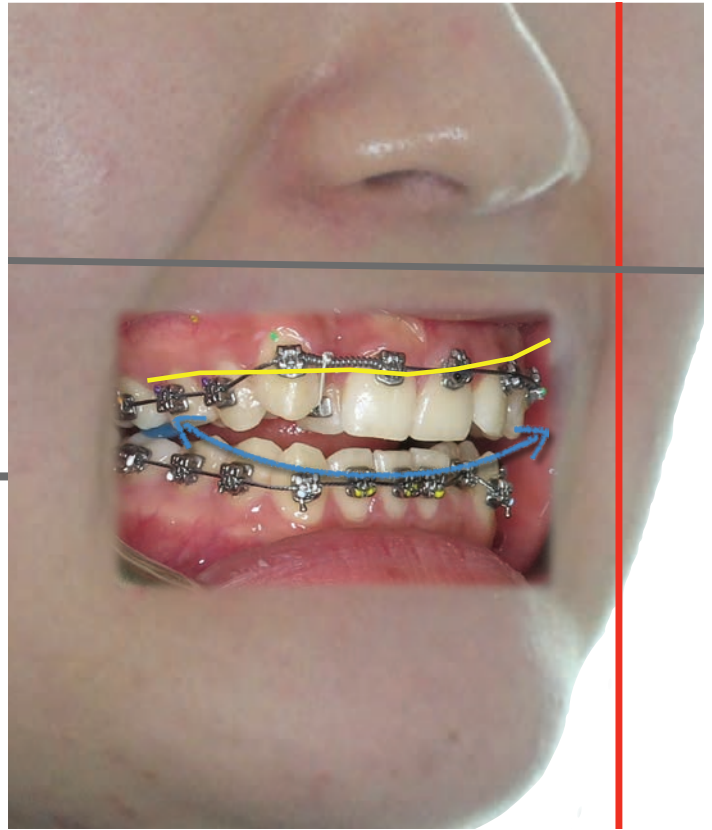
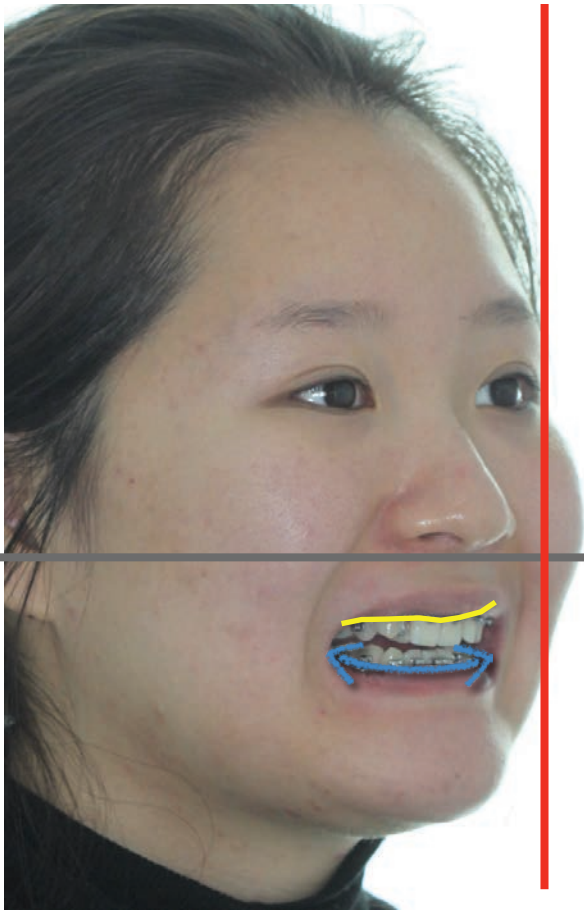
Pretreatment Intra Oral Photos



Pretreatment Radiographs

*Photos Courtesy of Dr. Duncan Brown*



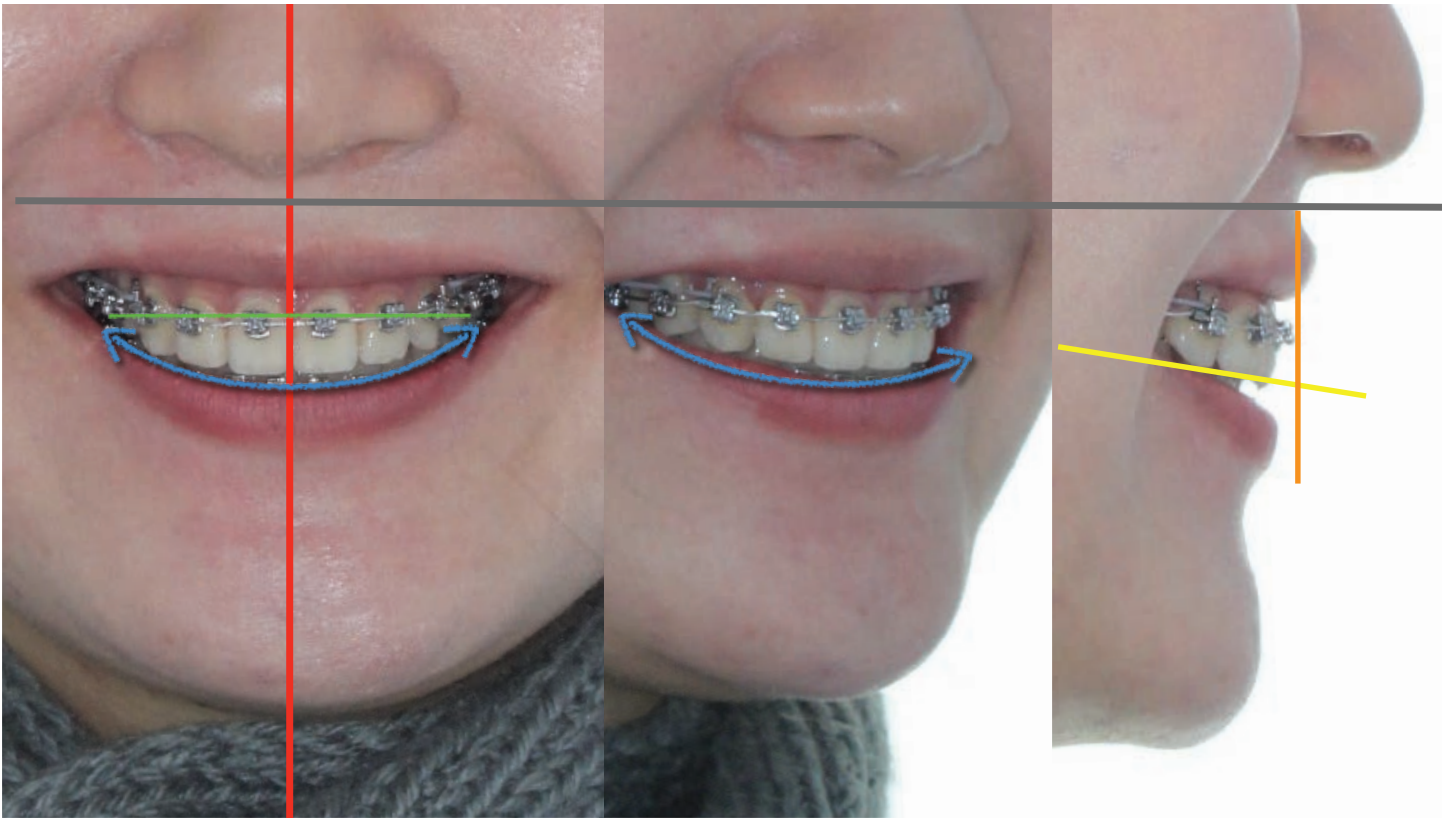


SAP Bracket Position Designed with VEO Target, VID, Flipped Brackets



10 Months - Rapid improvement in esthetic position of the dentition, "Active Early™" case management, and "Engage Early™" AW progression

*Photos Courtesy of Dr. Duncan Brown*



8 Appointments - Rapid improvement in esthetic position of the dentition, "Active Early™" case management, and "Engage Early™" AW progression

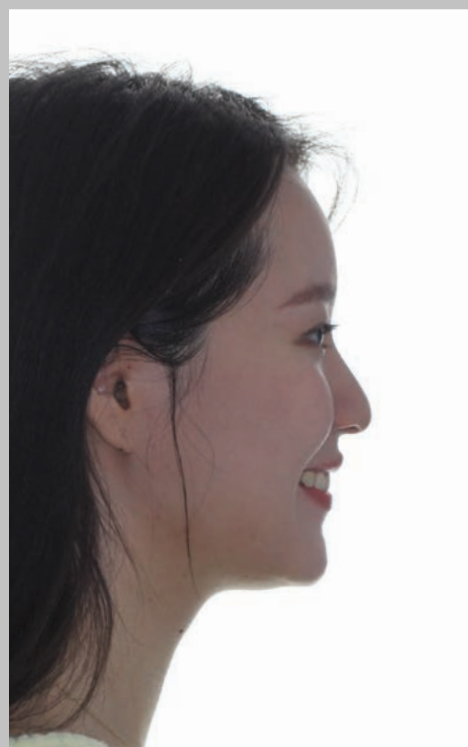
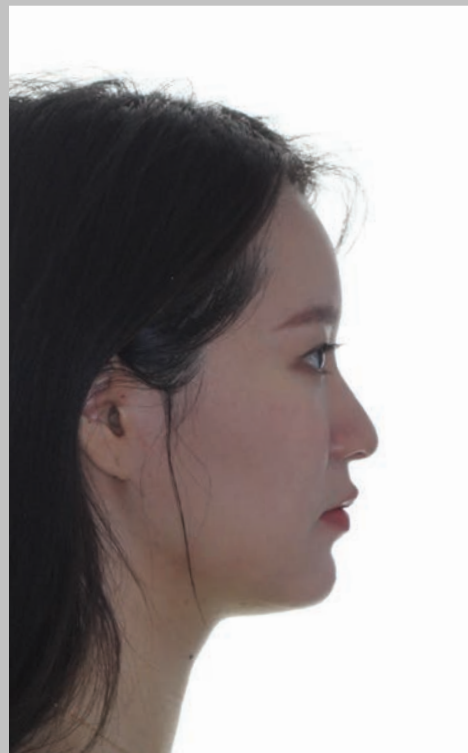


*Photos Courtesy of Dr. Duncan Brown*

**Final Results**  
14 Months, 12 Appointments  
Improved Position of Upper Incisor, Upper Occlusal Plane



**Final Results**  
14 Months, 12 Appointments



*Photos Courtesy of Dr. Duncan Brown*





Final Results  
14 Months, 12 Appointments  
Improved SAP, VID/VIP, MTD



Final Results  
14 Months, 12 Appointments  
Improved Axial Inclination



*Photos Courtesy of Dr. Duncan Brown*





## Theoretical Action of Fixed Appliances

Let us state at the outset that as “wet fingered” Orthodontists, not scientists or engineers, we find it useful to simplify complex concepts, and then use them in clinical situations.

Burstone<sup>6</sup> described orthodontics as falling into two conceptual groups: “**variable cross section**” orthodontics (small AW’s delivering light forces, and larger AW’s delivering heavier ones), and “**variable modulus**” orthodontics (using different materials in similar cross sections to deliver different forces). When PSL became a significant market force “**variable torque**” orthodontics got added to the mix, incorporating “hi-tech” AW’s in an attempt to lessen delivered forces in large cross sectional AW’s.

	Variable Cross Section	Variable Modulus	Variable Torque
Force Delivery	Small Wires = Light Forces Large Wires = Heavy Forces	Soft Wires = Light Forces Stiffer Wires = Heavier Forces	Small Wires = Light Forces Large Wires = Heavy Forces
“Full” Engagement	Rarely Due to Excessive Applied Forces in Larger Wires	Attained in Light Wires	Never to Minimize “Resistance to Sliding”
Timing to 3D Control	Rarely Attained	Attained Early	Rarely Attained
Wire Progressions to Attain “Full Engagement”	Many Wires	Less Wires	Many Wires

Pitts21 is the closest fixed appliance relating to “Variable Modulus” orthodontics. In spite of the obvious benefits of “variable modulus” orthodontics, adoption has been limited, largely because of clinical realities imposed by rectangular slotted appliances, and rectangular wires. When a rectangular arch wire is sufficiently large to fully engage the slot, much of the benefit afforded by using sophisticated materials is over-ridden by the excessive forces generated by large wire cross-sections.

## Why the Pitts21 “Progressive Slot”

**As I’ve stated previously, for me, fixed appliances can deliver more striking esthetic smile results, with a great finished occlusion, in a high percentage of cases, more efficiently, than aligners alone.**

Virtually every Orthodontist uses a version of the “SWA” appliance, with “built in” averaged 1st, 2nd, and 3rd order adjustments with an edgewise appliance. Accepting that some wire “adjustment” is inevitable, most appreciate the control afforded by the mechanism for “in/out” and “up/down” movements. It is in 3rd order or “Torsional” movements that control afforded by the rectangular edgewise mechanism falls dramatically short of ideal and adds to finishing time.

The Pitts21 “progressive slot” helps to rectify this problem.

## Pitts21 System - Greater Efficiency Means Shorter Treatment Times

The Pitts21 “Progressive Slot” and an “Engage Early™” wire progression approach represents a “disruptive innovation” because it allows the **fuller engagement** benefits of “variable modulus” orthodontics **without higher force levels**, characteristic of large cross section rectangular arch wires, and does so **far earlier** in the treatment cycle.

By combining the **Pitts21 “Progressive Slot”, “Active Early™” clinical protocols, “Engage Early™” wire progressions, along with Pitts SAP/VID bracket placement, and accurate bracket placement for occlusion**, we can dramatically shorten treatment times, save appointments, and bring outstanding esthetic results within reach. This flies in the face of conventional orthodontic wisdom that asserts that ligation method, appliance Rx, slot dimension, and AW progressions do not effect treatment times or outcomes<sup>7</sup>.

## The Role of Case Management - Maximizing Greater Appliance Efficiency

The most efficient appliance system deserves the most effective case management strategy. Many years ago, I created a PSL approach called “**Simultaneous Biomechanics**”: “**Active Early™**” protocols of SAP bracket placement, ILSE and disarticulation support wanted tooth movements and prevent unwanted tooth movements in all planes of space. Bracket inversion (flipping and flocking) supplements torsional control in cases where uprighting of the flared anterior teeth is required. Of course, inaccurate bracket placement, can load appointments with any system! Adjusting wires for finishing adds time and appointments.



Pretreatment Facial Photos

## SHORTER TREATMENT TIMES ESTHETIC IMPROVEMENT



Esthetic Concerns SAP, MTD, VID, Axial Inclination

*Photos Courtesy of Dr. Wassim Bouzid*





SAP Bracket Placement, ILSE, Disarticulation



10 Months  
Rapid Occlusal Improvement with Great Control

*Photos Courtesy of Dr. Wassim Bouzid*



10 Months  
Rapid esthetic improvement



*Photos Courtesy of Dr. Wassim Bouzid*

11 Months  
Final Occlusal Result



Beautiful Flow of Esthetic Tooth Position

*Photos Courtesy of Dr. Wassim Bouzid*



Pretreatment facial photos



11 Months  
Beautiful and efficient control of tooth position

*Photos Courtesy of Dr. Wassim Bouzid*

**Before**



**After**



Final Result a Great Esthetic Change



*Photos Courtesy of Dr. Wassim Bouzid*





*Photos Courtesy of Dr. Wassim Bouzid*



## Slop / Target / Torsion Concept in 3rd Order Control

While performance of 1st and 2nd order tooth movements with rectangular slots is acceptable, in 3rd order movements actual “slop” in rectangular slotted systems resulting from oversized slots, undersized wires with larger corner radii, makes torsional control especially challenging<sup>8</sup>, and hitting a 3rd order **TARGET** position even harder.

The clinician’s needs to know, if there is torsion in the slot or not<sup>9</sup>. Variables, within the Orthodontist’s control, need to be adjusted to attain a desired “**TARGET**” for tooth movement.

“**SLOP**” within the system, as a result of manufacturing variations in slot dimension, wire profiles and corner radius, and common Orthodontic strategies (not filling the slot), complicates these decisions, and reduces efficiency.

Many Orthodontists are surprised when they learn their appliance of choice rarely develops “**TORSION**” within the slot to help control 3rd order movements. The fuller the engagement of the wire/slot in 3rd order movement, the greater control of axial inclination attained. The sooner engagement is initiated, the earlier control can be initiated. Inverting the brackets when necessary, allows for introduction, of anterior torsion very early in treatment.

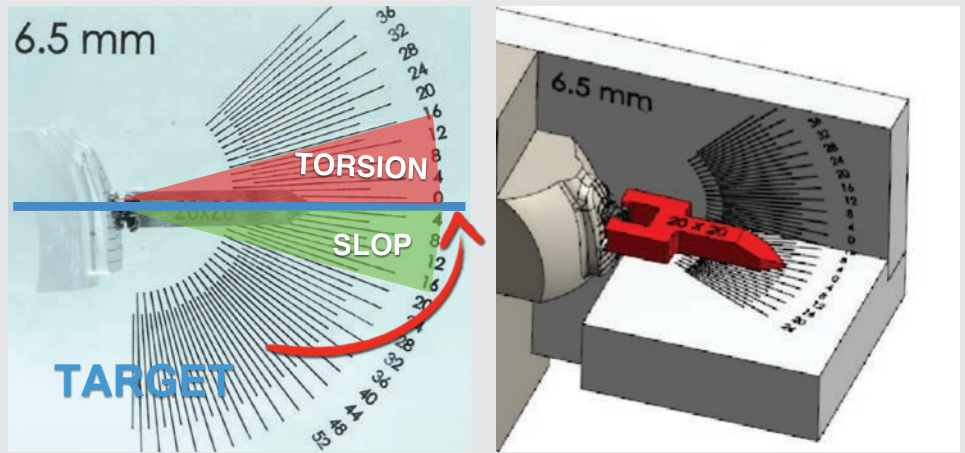


Figure 1: Gizmo 1v2 - Control is determined by Slop/Target/Torsion in AW engagement

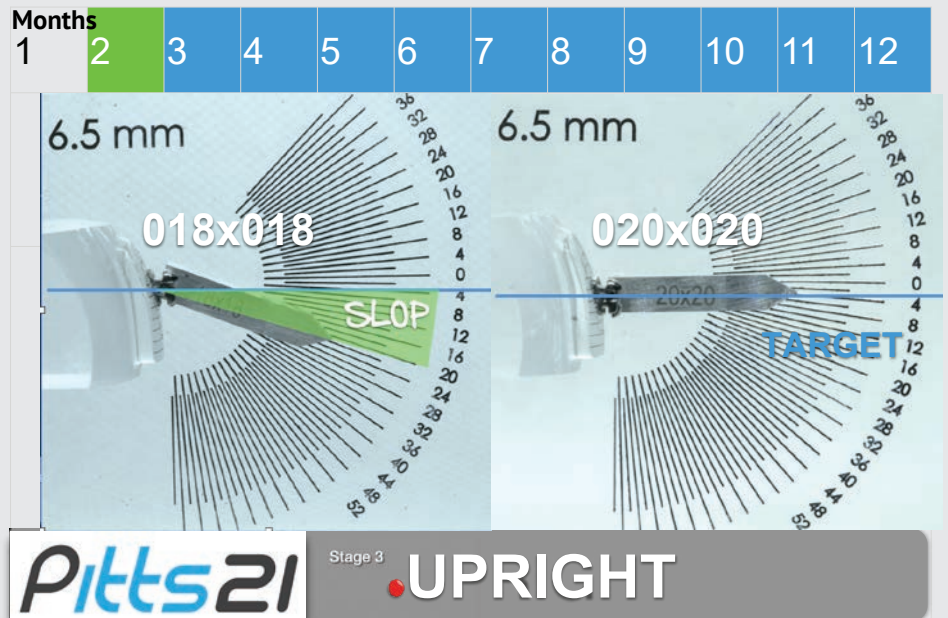


Figure 2 - Pitts21 Upright - Full engagement, target attained 3 months

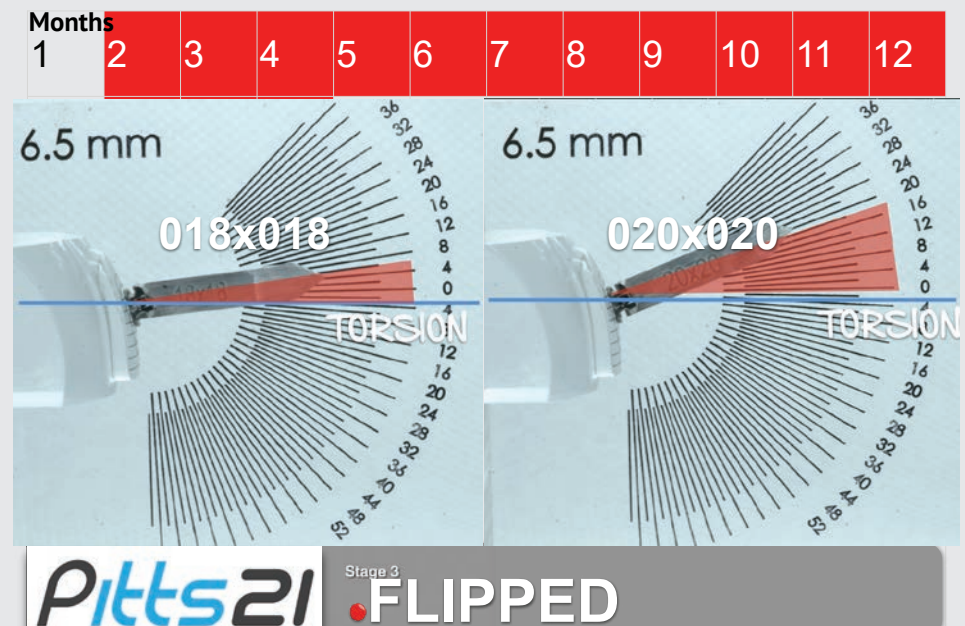
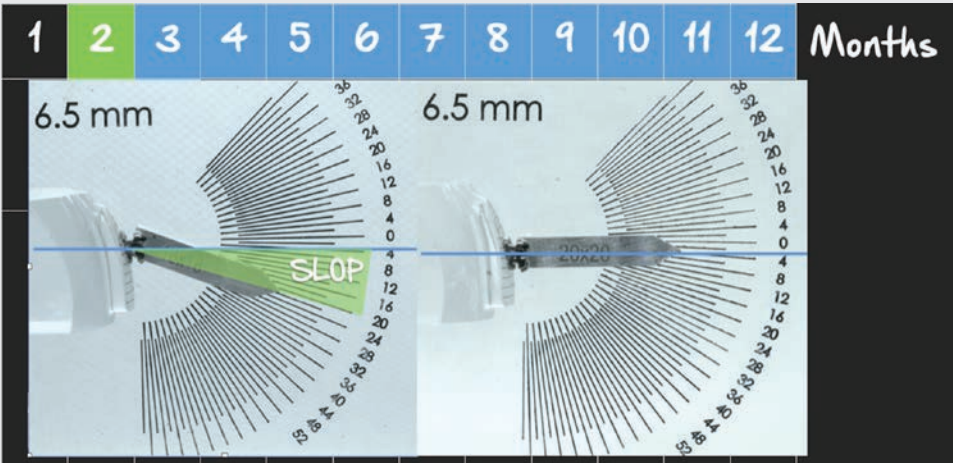


Figure 2 - Pitts21 Flipped - Full engagement 3 months, torsion initiated 2 months



**Pitts21 Upright**



**Competitor Upright**

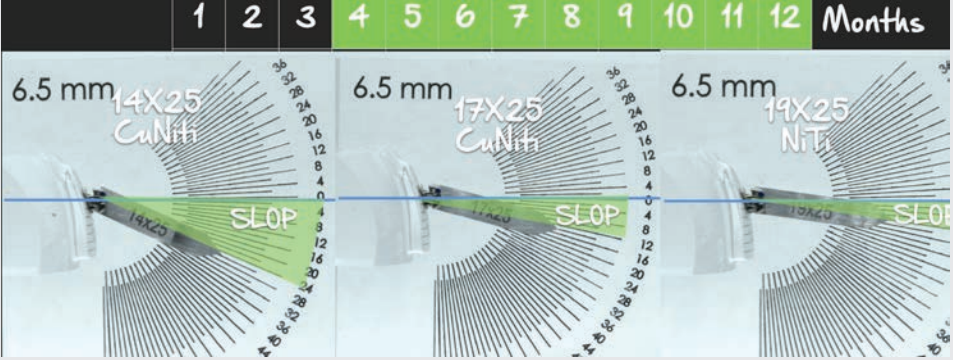
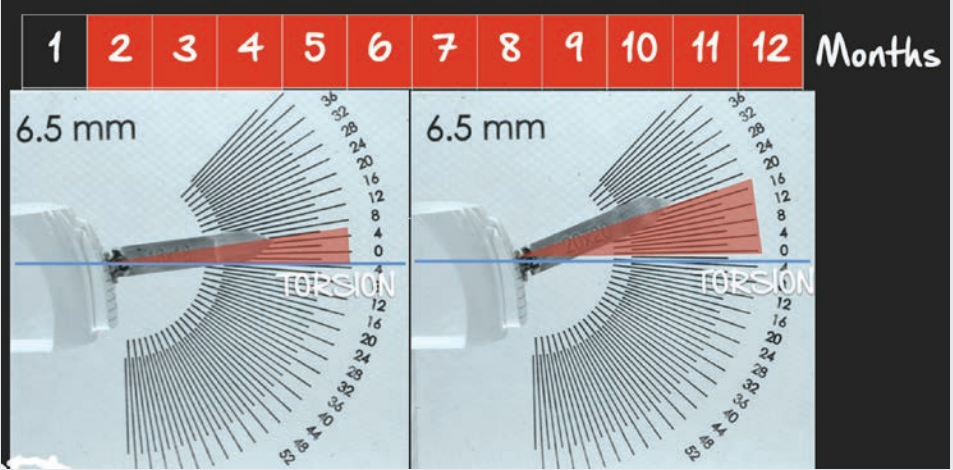
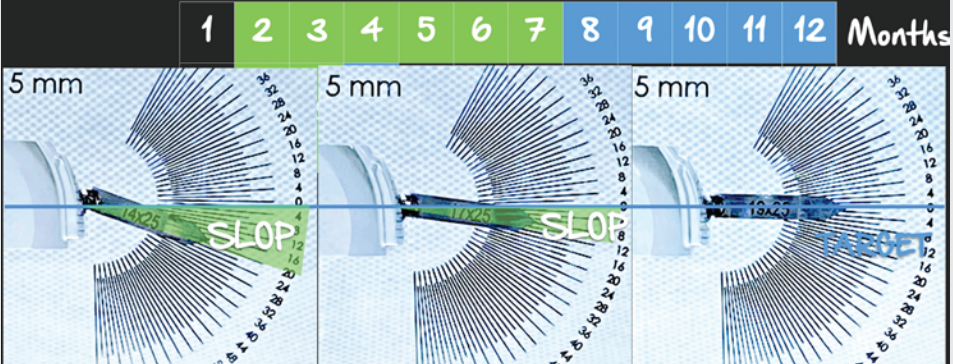


Figure 3 - Pitts21 Upright vs Competitor Upright - with Pitts21 full engagement, target reached, with Lighter Forces™ far earlier than competitor

**Pitts21 Flipped**



**Competitor Low Torque**



Some companies promote use of “variable torque” brackets to upright proclined teeth. Not only, does this strategy not create lingual crown torsion with the appliance, but it increases both cost or inventory and complexity.

Pitts21 “flipping and flocking” strategy creates effective engagement of the appliance | very light forces, without requiring increased inventory.

For simplicity, we view 3D control, of orthodontic tooth movement, as being the result of several factors:

- **Fulllest engagement of the wire/bracket slot**
- **Start and duration of force delivery**
- **Delivery of a biologically acceptable force through the mechanical system**
- **Space for the movement to occur**

### Fulllest Engagement of Pitts21 Bracket / Wire

Ever since there has been rectangular slots, there has been debate regarding the relative efficiency of .018x.025 versus .022x.028 techniques<sup>10</sup>. There is general agreement, the sooner that there is full 3D engagement of the slot, the sooner that 3D control is initiated.

The H4 bracket, with reduced B/L slot dimensions gained 3D control sooner, resulted in early bracket AW engagement to 5Nmm (50gms.) a commonly held threshold for effective tooth movement), by placing the torsional load on the bracket slide and slot base. However, still having a rectangular slot/filling the slot is hampered by too much force. So, .019 x .025 was the largest wire size utilized by most. In the original H4 design, the slide underwent plastic deformation, under repeated cycles or heavy torsional loads, which adversely effected performance<sup>11</sup>. We suggested using .020x.020 AW to place torsional couples on rigid parts of the bracket body, and a redesign of the slide (H4 Gen 3) to improve the elastic limit. This helped, however, was not ideal, because of the buccal lingual shortfall.

The conceptual advantages of the Pitts21 “Progressive Slot” were outlined in earlier versions of the Protocol<sup>12 13</sup>:

- **Fuller engagement** of wire/bracket slot to initiation of 3D control earlier in treatment.
- **Engagement** in AW’s with small cross sections that deliver Lighter Forces™ that are biologically active.
- **Reduction of the number of wire cross sections** to achieve full engagement.
- **Availability** of “full size” wires in various materials to allow a “variable modulus” approach to force delivery.

These advantages have now been confirmed by in-vitro testing with the Pitts21 appliance, when contrasted to other PSL systems using rectangular slots.

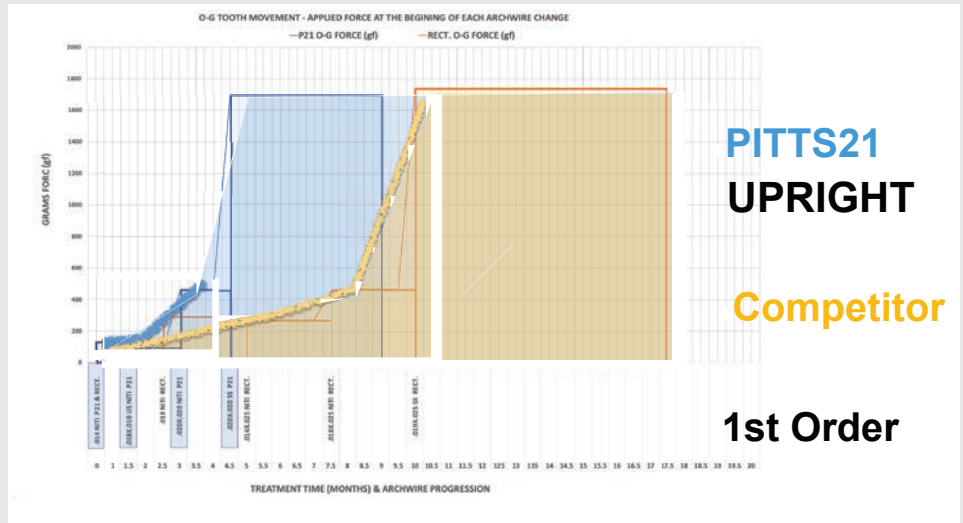


Figure 4 - 1st order efficiency of Pitts21 and “Engage Early™” AW progression

### Timing and Duration of Force delivery - “Engage Early™” the “new” NORMAL

The “Engage Early™” concept of AW progression marries some of the proven features of “variable cross section” concepts, with the inherent efficiencies, of “variable modulus” orthodontics. It is in 3rd order control and force level that the differences between the Pitts21 system and rectangular systems really become compelling.

The conceptual goal is establishing desirable forces and moments to the teeth with the appliance system as early in treatment as possible, frequently by inverting upper anterior brackets. The first dimensional cross section AW engages the slot, and frequently a single AW change engages the slot. Forces delivered by “high tech” AW’s are lighter and more gradually progressive, than those developed in rectangular systems.

Utilizing Lighter Forces™, earlier in treatment, for longer durations, results in, desired tooth movements occurring sooner, and with greater comfort for the patient.

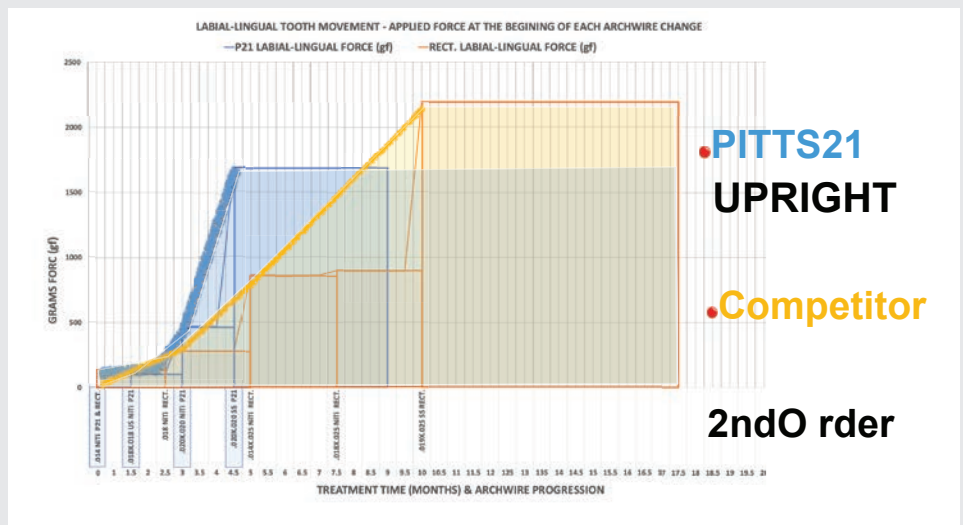


Figure 5 - Labial/Lingual movement - degree of correction with a square slot is greater and earlier than rectangular



## Efficient Delivery of Biologically Active Forces Through the Mechanical System

There has always been a great interest among orthodontists, to better understand the relationship between applied forces and tooth movements, to better manage treatment outcomes. Modern understanding of the physiological processes behind tooth movement have not provided quantification of “optimal” forces<sup>14</sup>. Determination of “optimal force, for tooth movement”, remains an elusive goal, although animal research has suggested conceptual goals bounded by the minimal forces required to initiate the physiological processes necessary for tooth movement, and maximal forces where cell death and hyalinization occur leading to a “lag phase” before tooth movement can commence.

The lower boundary has been shown to be very light (.5gms, or .005Nm) , and an upper limit, which is more ill-defined is above 300gms at which level a “lag phase” is common. Profit has stated that different types of tooth movement have different optimal forces and these include: tipping movement (35-60gm); translation (70-120gm); axial inclination (50-100gm); rotation (35-60gm); extrusion (35-60gm) and intrusion (10-20gm). These force levels are readily attained with fixed appliances.

It is important to not fall victim to marketing hype when it comes to efficiency. One company is presently promoting a “two arch wire system” based on the work by Viecelli and Burstone<sup>17</sup>, “optimizing” delivered forces through a sophisticated multiforce super elastic arch wire. The fact is, that without AW engagement, there is no control, and while the approach may have value in 1st and 2nd order discrepancies, the geometry of the AW wire and slot are not capable of producing effective torsion. Given that the 1st and 2nd order movements are presently well managed, SmartArch is a solution for which no problem exists.

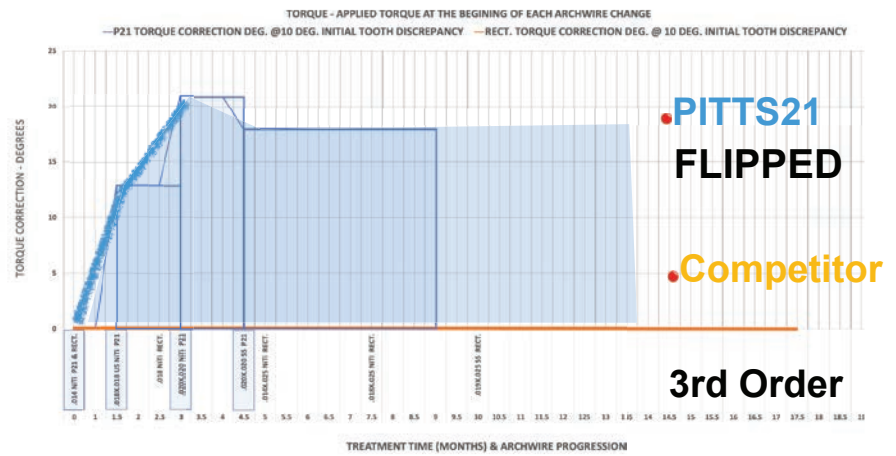


Figure 6 - Torsional movement - engagement is immediate with light forces, rectangular slots never engage

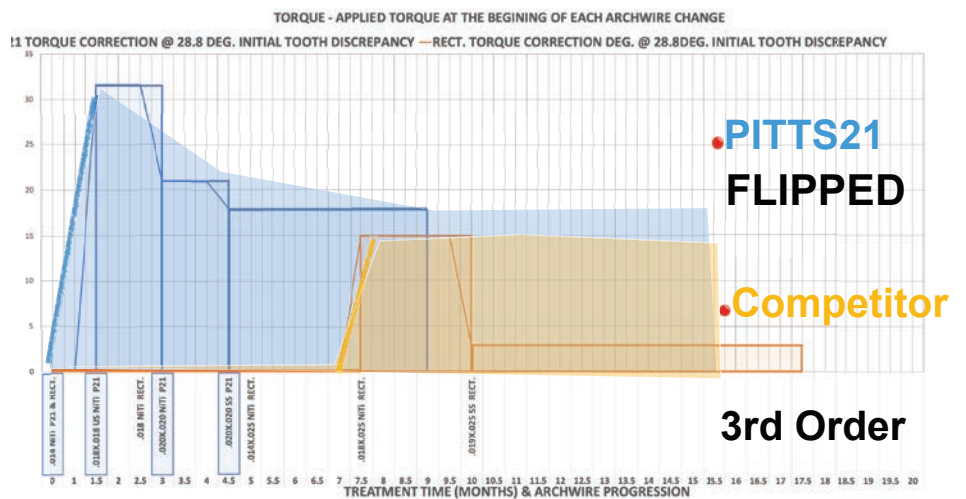


Figure 7 -Very large 3rd order discrepancies are required before rectangular slotted appliances develop torsion within the slot.



We continue to be amazed by the “WOW” worthy esthetic results and the efficiency that are being achieved by users throughout the world.

*Photos Courtesy of Dr. Duncan Brown*

The Pitts21 “progressive slot”, Active Early™ case management strategies, and “Engage Early™” wire progressions ensure engagement, improves control in all 3 dimensions, and does so without resorting to treatment accelerators or unnecessary technologies. This, along with the qualities of PSL, lighter elastic forces can be utilized effectively and right from the beginning of treatment.

### Expanding “Influence” through the use of social media

In prior issues of the Protocol, we discussed some of the elements that make up “WOW” worthy esthetics, and how approaches of visual artists can be applied to enable “social validation” through social media<sup>18 19 20</sup>. These approaches become increasingly important strategies, during practice recovery in differentiating the esthetic based orthodontic practice. In the next issue of the Protocol, we will discuss effective social media approaches to increase your community influence.

The role of excellent clinical and artistic photography and videography is an absolute differentiator. This combined with hyper-efficient treatment, and “WOW” worthy results, it is an easy step to establish a strong community presence.

**We may just want to practice for another 10 years!**

*Photos Courtesy of Dr. Wassim Bouzid*

## USING ARTISTIC PHOTOGRAPHY IN SOCIAL MEDIA MARKETING



**Before**

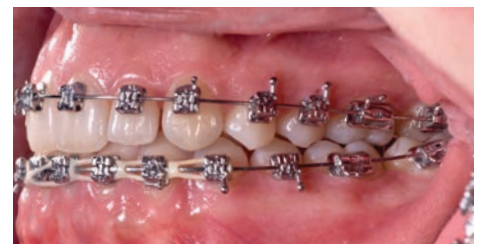
**After**

## AMAZING RESULTS IN 14 MONTHS





Pretreatment Facial Photos  
Esthetic and Occlusal Challenge



3 1/2 Months  
Very Efficient improvement

*Photos Courtesy of Dr. Wassim Bouzid*



13 Months  
Great Control for Occlusal Change

## LIFE CHANGED THROUGH ORTHODONTICS



14 Months  
Very Efficient Occlusal and Esthetic Change

*Photos Courtesy of Dr. Wassim Bouzid*





*Photos Courtesy of Dr. Wassim Bouzid*

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## Authors' Comments

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Dr. Tom Pitts



Dr. Duncan Brown

*"WOW" worthy results, use of hyper efficient gentle mechanics, providing of a superior patient experience, and expanding influence in the community through effective use of social media and branding are the keys to **THRIVE** in coming years and to practice recovery post pandemic. We are looking forward to that!*

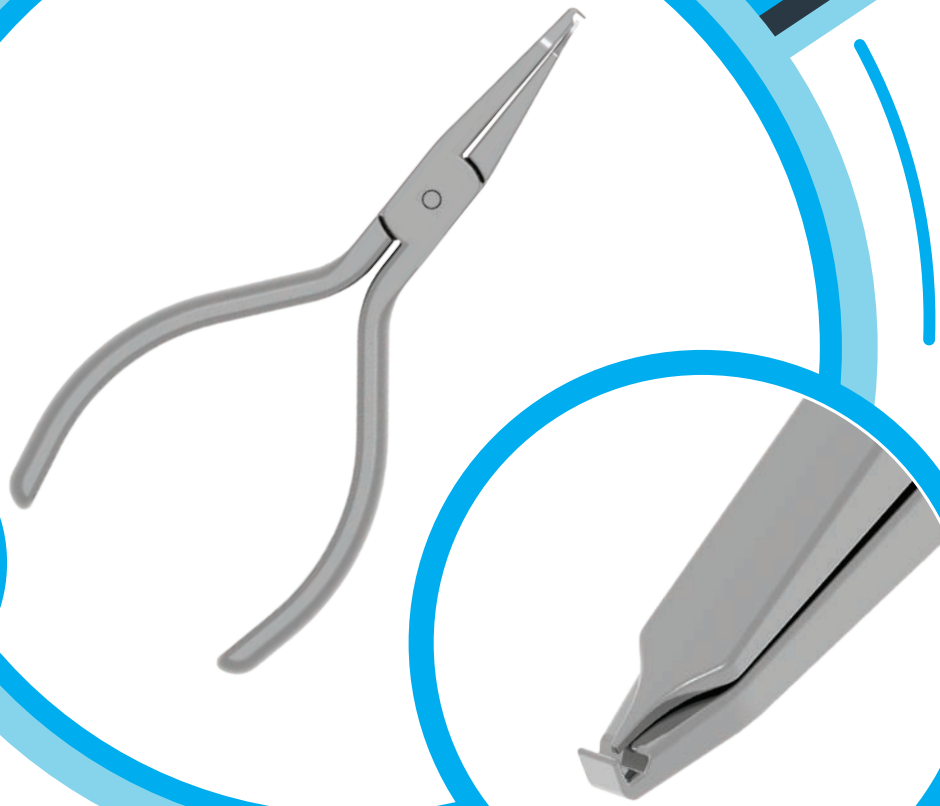
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# H4 / Pitts21 Opening Instrument

AVAILABLE  
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PART NUMBER

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## Open Stubborn Doors Without Patient Discomfort

The **H4/Pitts21 Opening Instrument** has been specifically designed to help open stubborn doors that have become stuck shut due to plaque build-up and poor hygiene. The H4/Pitts21 Opening Plier applies a reciprocal force on the ligating door and bracket body that will open bracket doors that have become stuck due to excessive plaque formation without causing discomfort for the patient.

## Features & Benefits

- Designed specifically for H4 & Pitts21 systems
- Instrument was devised for quick and comfortable opening of bracket doors.
- Each unique tip is designed to engage specific features on the door & body of the bracket

Dr. Jorge Gutiérrez

# The Art Behind Extraordinary Smiles

**T**oday's technology is advancing surprisingly fast, and while we often try to stay updated in our personal lives, we sometimes fall short as clinicians even though technological evolution has drastically favored orthodontists. For example, the alloy components of arch wires have made it possible to apply gentle forces while developing the arches, and when combined with the Pitts21 square slot self-ligating bracket, catch a couple sooner. The Pitts square wire protocol goes beyond the concept of aesthetics and takes it to a more compelling and complete level. Dr. Tom Pitts' "smile design" bracket placement has personally helped me transform my aesthetic

results dramatically and made my treatment very efficient as well. The importance of achieving muscle balance in each patient helps us to largely resolve the origin of the malocclusion. Dr. Pitts continues to demand great occlusion and function together with periodontal health, so the final results are very healthy and beautiful.

Over the years, each of my teachers have left their mark on my training, but I still had a yearning to grow as a clinician and continue to push the boundaries of orthodontic excellence. This, fortunately led me to Dr. Tom Pitts and his protocols. From that moment, I changed what I thought



## Good Teachers Teach, Great Teachers Transform

was possible for exceptional orthodontic aesthetic outcomes and did a 180 on orthodontic procedures, my own personal life, and without a doubt, the life of my patients. I realized, that no matter how excellent you think you are; you can still improve your skills. Dr. Pitts and Dr. Brown have simplified diagnostic processes and case management strategies with Pitts21. Now it's easier than ever before to achieve a transformation in patient aesthetics in less time.



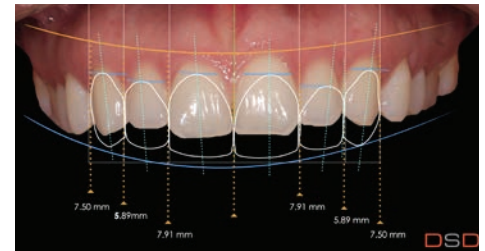
# Smile with The Best

After learning Tom's case management protocols, I completely left the traditional twin bracket appliance in the past and began working with the "Active Early™" concepts. I began bonding the brackets gingival to FA point, planning the cases with DSD (Digital Smile Design), capturing every detail of treatment from start to finish, and turned my practice into a fantastic patient experience with a highlight on emotional dentistry. I consider myself passionate about everything related to the digital world and I'm obsessed with capturing the results in high-quality photos and videos. I use tools like "teeth morphing" to enhance the visual quality of the treatment and to share with patients how the Pitts21 system will change their look and life. This often results

in a very positive emotional response that makes the patient as excited about the treatment as I am.

The hallmark of the Pitts protocol, is based on aesthetics and creating a smile arc with great vertical display of upper anteriors. A divergence of bracket placement, from posterior to anterior, and occlusal to incisal, allows the upper incisal and occlusal plane to follow the contour of the lower lip. The VID plays a critical role in our orthodontic considerations. As Dr. Angle said, the mouth and teeth are factors to improve or worsen the beauty and character of the face. Prior to studying Dr. Pitts, when I was thinking about correcting malocclusions, I automatically established the traditional cephalometric

diagnosis and proposed a strategy, to make a treatment plan, based on the ideal position of the lower incisor, which in many cases, led me to choose a treatment with extractions. The concept of facial aesthetics in orthodontics has changed, it is more pleasant to see voluminous lips, and wider arches, which produce slightly fuller profiles. Orthodontic patients want to improve their appearance and I've realized that one of the most important expressions of happiness, is the smile or lack thereof.











“I’ve realized that one of the most important expressions of happiness, is the smile or lack thereof.”



Knowing our physical appearance is our calling card, an attractive and pleasant appearance can open many positive doors. Great facial and smile esthetics are often associated with more positive traits and can lead to improved success for one's life and self-esteem. The aging process is natural and damage is irreversible, therefore, we must be very careful and consider the contraction of the arches and a fall of the upper lip due to aging. We can combat that, and are now able to create changes in appearance without extractions in many cases using our case management protocols to influence the future of our specialty and patients' lives for the better.

I'm now 100% focused on being part of the evolution in aesthetic orthodontics. I've been very honored to teach alongside Dr. Pitts, showing these advances and protocols not only to orthodontists who want to implement these concepts in their practice but also to residents from the beginning of education. I love teaching residents at the University.

**In conclusion;** we are all looking for a system that improves our clinical outcomes and improves our patients' lives. The most common patient request is for a comfortable treatment in which it does not take years to achieve the desired results. The utilization of the Pitts21 Progressive Slot™ design generates the most "efficient results" I've ever experienced. This allows us to maximize our handling of biomechanics, achieve effective tooth movements, and increase patient comfort, with light forces. Patients are amazed with the quickness of their treatment and most importantly they are pleased that they are able to re-discover the magic of their smile.

**Dr. Jorge Gutiérrez**

*Dr. Gutiérrez received his Master's Degree in Orthodontics and Dentofacial Orthopedics from Justo Sierra University in Mexico City. Dr. Gutiérrez is currently the Postgraduate Program Coordinator Orthodontics and Professor at UJS. He also has a private practice in Mexico City, is a member of the Mexican Academy of Orthodontics, and Fellow of the WFO. Dr. Gutiérrez was personally trained by Dr. Tom Pitts on Smile Arc Protection (SAP), Vertical Incisal Display (VID) and Pitts21 square wire treatment protocols.*



**Dr. Jorge Gutiérrez**



*My residents at Justo Sierra University*

DR. BRUCE OLLINS  
DR. GABE OLLINS

# SQUARING THE CIRCLE IN ORTHODONTICS

## MAKING THE IMPOSSIBLE POSSIBLE

I have been practicing Orthodontics for over 40 years, and count myself blessed to have my son Gabe join the practice 14 years ago. For those of you who have wondered what it is like to call your son “boss”, I can tell you it is better than you might imagine.

I was born and raised in Brooklyn, NY, and attended The University of Pennsylvania Dental School and Rutgers Dental for my Orthodontic training. My son, Gabe, went to University of Maryland for both Dentistry and his Orthodontic specialty training. I had originally wanted to move west, however I landed in Nutley, NJ where I opened my first practice in 1979, and later joined an outstanding pediatric practice in Ridgewood, NJ.

Over the years I have seen many changes in our profession from banding to bonding, O/O (non programed) to straight wire, and then to self-ligation. Having practiced PSL for over 15 years, I have had the opportunity to learn from some the best orthodontists in the world, including Dr. Tom Pitts, who is a dear friend not only to me, but to a multitude of orthodontists around the globe.

We have learned to have it all: beautiful occlusions, beautiful esthetics, and shortened treatment times. Gabe and I attended the Pitts Masters in Finishing Course, and with the guidance of Drs. Tom Pitts and Duncan Brown our skills continue to grow.



# "Comfort is the enemy of progress". P. T. Barnum

Tom has broadened the SL idea to include:

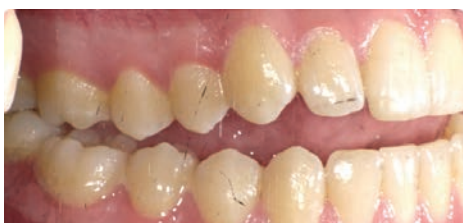
- Bracket position to increase or protect smile arc and enamel display; which is an esthetic winner
- Immediate light elastics
- Use of disarticulation to improve mechanical efficiency
- Broad esthetic arches to fill out the buccal corridors
- Square Wire Finishing™ with the Pitts21 bracket to initiate control as early as the second arch wire, with lighter, more comfortable forces to the patient

Here are some photographs to demonstrate how these innovations have impacted our practice.



## Pre-Treatment

A severe open bite and tongue thrust, displaying very little enamel on smiling and experiencing great difficulty using his anterior teeth.



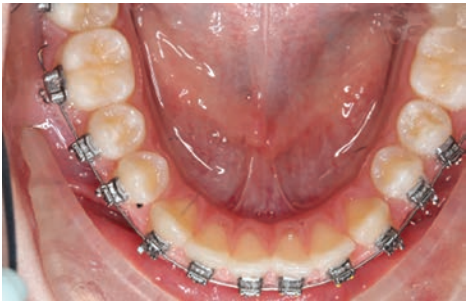
*Photos Courtesy of Dr. Bruce Ollins and Dr. Gabe Ollins*





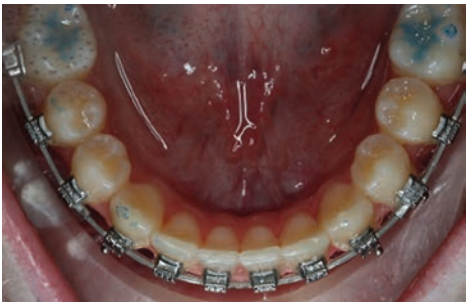
## Bonding

Initial Bonding - SAP bracket placement, ILSE 2.5 oz 5/16 Vertical Elastics, and 2.5 oz X-bite elastics on the L side. Posterior bite turbos were added at the second appointment.



## 10 Months

Progress - 3.5 oz X-bite elastics on the R and L side. Notice the posterior bite turbos to control posterior tooth eruption.



## Finish

Final Results - 12 months 11 appointments is very efficient treatment using Pitts "Active Early™" Protocols, very nice MTD and arch forms attained with 20X20 SS AW in the upper and 19X19 SS in the lower arch. Notice retention inclusion tongue tamers.



Photos Courtesy of Dr. Bruce Ollins and Dr. Gabe Ollins



**Before**

**After**



**12 Months 11 Appointments**

A very nice occlusal improvement, improved smile arc and enamel dimple. This is not just immediate occlusal change, but will be a game changer as he gets older.

*Photos Courtesy of Dr. Bruce Ollins and Dr. Gabe Ollins*



## Pre-Treatment

Class III AOB tendency crowding, proclination



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Image not drawn to size



## Finish

Final Results - 24 months, treated with bicuspid extractions, very nice esthetic and occlusal reset.



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A major reasons I still love going to work after 40 years in practice is the **"life changing"** results that can be attained. These type of cases effect the whole family who are effected by the magic that is orthodontics and the amazing results.

*Photos Courtesy of Dr. Bruce Ollins and Dr. Gabe Ollins*



**Before**



**After**



Final Results - Cephalometric changes during treatment - wonderful control of axial inclination

*Photos Courtesy of Dr. Bruce Ollins and Dr. Gabe Ollins*



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## Pre-Treatment

Initial Records - A severe class II div 1 malocclusion, severe crowding, retrusive chin, and a flat smile line. This patient was treated using Tom's suggested Herbst protocol and design.



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*Photos Courtesy of Dr. Bruce Ollins and Dr. Gabe Ollins*





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## Finish

Final Records - A transformational facial change. The treatment took longer as result of using the Herbst for 12 months, however, the facial and esthetic changes were worth the time.



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*Photos Courtesy of Dr. Bruce Ollins and Dr. Gabe Ollins*

**Before**

**After**



**A wonderful future created through the magic of orthodontics.**

With this case, when I went to the reception room after the appliances were removed, the patient's father gave me a hug, and said, ***"I can't tell how much this means to my daughter and our family!"***

This is the first article I have ever written. I consider myself to be a quiet, unassuming orthodontist, who loves being in the office while trying to do the best for my patients. I consciously avoid the limelight, however, when the "BOSS" asked me to show some cases, I was very flattered, and would never say no to him.

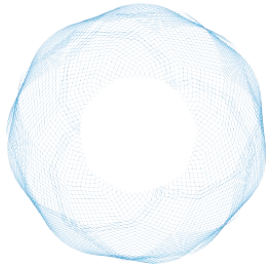
Tom has exponentially changed our practice in terms of quality of results, efficiency, and has "Made Orthodontics Fun Again". From my heart, I know he can do this for you as well.

All the best from Gabe and myself, we look forward to sharing your success when we meet.

*Photos Courtesy of Dr. Bruce Ollins and Dr. Gabe Ollins*



# MEET THE DOCTORS



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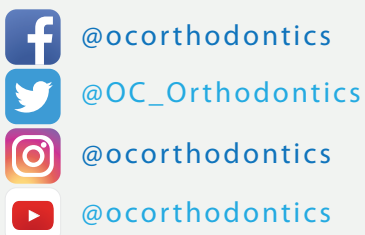


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