

CLINICAL Impressions®

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The Resurgence of Li

The Orthodontic Specialty Responds to

by Didier Fillion, D.D.S.
Paris, France



Dr. Didier Fillion has practiced lingual orthodontics exclusively in Paris since 1987. He has published extensively and lectured and presented seminars on the subject throughout the world. His affiliations include the AAO, French Orthodontic Society, French Lingual Orthodontic Society (which he founded and serves as president) and the European Society of Lingual Orthodontics (as a founding member and honorary secretary). He also serves as course director of the two-year program in lingual orthodontics at René Descartes Paris V University.

Introduction

"Toto, I have a feeling we're not in Kansas anymore." Today's orthodontist can readily relate to Dorothy's apprehension as our specialty competes in an increasingly Oz-like arena. It's not the Wicked Witch of the West and her minions. It's the harsh, ever-changing marketplace realities that have disturbed the relative tranquility enjoyed by orthodontists in past decades. And nowhere are these changing conditions more in evidence than in the USA, where MSOs, dental managed care plans, blatant advertising, and increased competition from nonspecialists are exacting a heavy toll on traditional practices. Changes are going on throughout the world and they will intensify.

What's the answer? Improved management, marketing and clinical techniques are helping many cope with the increased competition. And what better way to set yourself above the competitive mass than to capitalize on your training as a specialist and provide lingual orthodontics? What better way to distinguish your practice than to offer your patients the *only* truly esthetic appliance? My experience and that of orthodontists around the world are proving the value of lingual orthodontics to practice growth. This is reflected in the approximately 200 percent growth of lingual orthodontics worldwide in the last six years. In the early eighties, lingual orthodontics went through a more severe boom and bust in the United States than in the rest of the world. Consequently, American specialists are just starting to recognize the subsequent advances in lingual orthodontic technique, appliances, instruments, laboratory procedures and training. With this article, I would like to share my experiences and make you

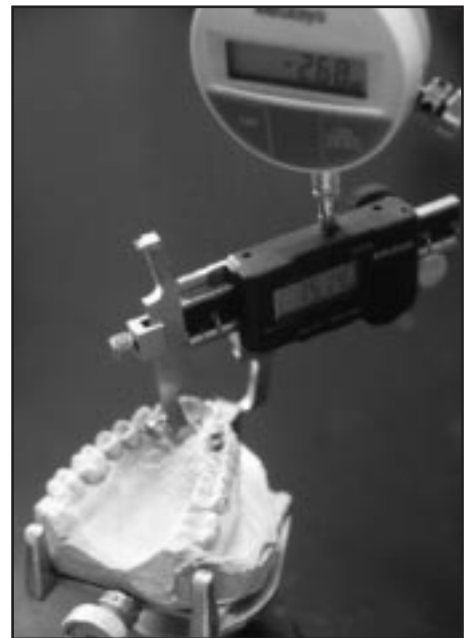


Figure 1. Thickness measuring system adapted to the T.A.R.G.

aware of what lingual orthodontics can do for your practice.

In 1978, I started my orthodontic practice in Saumur, a small town located 300 kilometers from Paris. My first exposure to lingual orthodontics occurred in 1982 when I read the *JCO* article by the orthodontists comprising the Ormco task force. I was excited by the fact that this team of pioneers was affording us the opportunity to use "invisible" brackets. With a plier in my right hand and the journal in my left, I immediately started three cases, all with extractions; only the case with a lower incisor extraction could be finished with lingual brackets! An inauspicious beginning.

In 1984, I decided to take a course given by Drs. Craven Kurz, Bob Smith and the late Jack Gorman, following

Lingual Orthodontics

a Challenging Marketplace



Figure 2. Measuring the distance between labial surface and bottom of bracket slot.



Figure 3. Compensating for different tooth thicknesses at laboratory by varying thickness of custom resin pads.



Figure 4. Bonding with unfilled resin: resin pads have the same forms as those developed at the laboratory.

which I attended all their European courses from 1984 to 1989. Wanting to extend my lingual practice, I left Saumur for Paris, where I made the decision to practice lingual orthodontics exclusively. I had been attracted by esthetics at each level of my life, so I could appreciate the fact that adults are becoming more desirous of a better appearance and, more specifically, a nicer smile. Therefore, I was delighted to be able to offer them a *perfect* esthetic appliance. By 1987, the era of unesthetic appliances for adults was definitely over for me.

The American lingual orthodontic experience in the early eighties was a failure for most orthodontists (mediocre results, a threefold or more increase in chairside time, longer treatment). By 1987, few American orthodontists were practicing the lingual technique, so my decision to use lingual appliances exclusively was a challenge. It proved to be an even greater challenge than I had anticipated, and I knew that for a while I would have to solve many problems in order not to regret my chosen path.

First of all, I had to define how I would work and what would be my lingual prac-

tice characteristics. I set up five basic objectives, essential ones that I still pursue:

1. Use the most esthetic and comfortable appliance.
2. Treat all kinds of malocclusions.
3. Reduce treatment time.
4. Avoid extractions.
5. Obtain the same results as with the labial technique.

How Can These Objectives Be Reached?

Using Seventh-Generation Ormco Brackets Bonded to Both Arches For All Patients

I have found these brackets to have three principal advantages:

- The bite plane of the bracket represents an incomparable advantage for correcting a great number of malocclusions, especially deep-bite and crossbite cases, with immediate bite opening obtained by lower incisor contact with the biting surface of the lingual bracket.
- Gingival hooks facilitate quick ligation.
- Sufficiently wide bracket slots allow for correction of rotations.

The adaptation phase following lingual bracket placement takes 8 to 20 days. The use of light-cured protection paste around

molar and bicuspid brackets and having patients wear thermoplastic splints that provide coverage of the teeth and brackets make this adaptation process much easier. For better esthetics and greater comfort, I finally stopped using auxiliaries such as labial buttons, labial brackets and transpalatal arches. Nothing is visible on the labial surfaces except white elastomeric chains around rotated teeth, the most rapid and efficient way to correct rotations.

Using a Simple But Highly Accurate Laboratory Technique

I prefer to bond lingual brackets directly to the initial model and to use the T.A.R.G. (Ormco) technique to position the teeth in space (virtual setup) and to be able to position brackets to specific heights. I added to it a tooth thickness measurement system in order to compensate for the differences in thickness with the addition of a composite pad. This resin pad is perfectly adapted to the lingual surface and forms part of each bracket base. Thus, each bracket becomes unique by virtue of its resin pad and its orientation to the labial surface of the tooth (Figures 1-4).

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Dr. Fillion

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The advantages of this indirect laboratory system are:

- The brackets are directly bonded to the malocclusion model with filled resins (Phase II®, Paste A and B, Reliance products), allowing a tray for an entire arch to be prepared for precise bonding at one time (Figure 5). The tray is transferred directly to the patient. The transfer tray is made from a hard silicon-based material (Zetalabor [hardness: Shore A 85] from Zhermack®, Ravigo, Italy) to ensure accuracy and permit bonding in the operatory with only unfilled resin.
- The rebonding procedure is accomplished either by cutting the initial transfer tray and setting the initial bracket in it or, if the bracket is lost or the transfer tray is damaged, by using a new unitary transfer tray made from a harder silicone material (Lutesil™ [hardness: Shore A 95] from Bisico®, Bielefeld, Germany) to ensure tray stability during rebonding (Figure 6).
- A decrease in archwire bending throughout most of treatment results from the compensations for different thicknesses. Some esthetic bends are often necessary in the last three months of treatment.

The CLASS system has been popular, but I have found the T.A.R.G. system to be more accurate and to work best in my practice. There is no scientific evidence that one system is better than the other, and clinically, excellent results can be obtained with both procedures. I selected the one that was easier to use in my practice.

Using a Simple But Highly Efficient and Reliable Bonding Procedure

Simple. Using a two-component ("A" and "B" liquids) unfilled resin, polymerization can be achieved in two different ways:

- by using a few drops of the A and B components (Maximum Cure®, Reliance Orthodontic Products) and applying the mix to the lingual surfaces of the teeth and to the resin pads of the brackets that are positioned into the tray.
- by applying liquid A on the enamel of

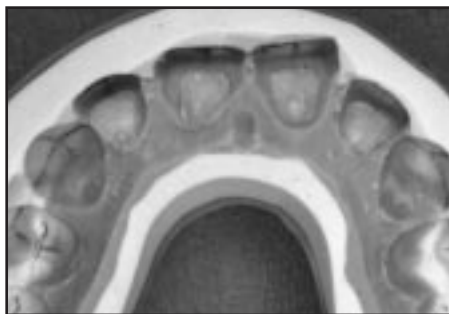


Figure 5. Two-layer silicon transfer tray sufficiently rigid to allow bonding an entire arch at one time.

the lingual surfaces and liquid B on the resin pads, or vice versa (Custom 1-Q™, Reliance Orthodontic Products), the polymerization takes place by contact of the two liquid components when the tray is inserted.

Efficient. Three years ago we initiated systematic microblasting of the lingual tooth surfaces prior to etching. In vivo, we have noted not only an increase in bond strength (tested by voluntary debonding of brackets) but also a significant decrease in the number of bond failures during treatment. In vitro, a study performed in 1996 by Degrange, Altounian, Fillion and Themer at the Department of Biomaterials, University of Paris V, showed results comparable to the ones published by Reisner, Levitt and Mante in the *AJO* in 1997:

- In vitro, microblasting and etching of the perfectly cleaned enamel surface does not increase bond strength.
- In vivo, since the lingual surface is difficult to clean, microblasting seems to be the best way to prepare the bonding area and to enhance the etching process without gingival bleeding.

Reliable. Our system has proven itself in all cases. The oral floor anatomy and the size and position of the tongue can make the bonding procedure tough; nevertheless, use of the Dry Air System (NOLA) allows us to bond a full dental arch at a time in good working conditions, even the lower arch. This most efficient system includes a cheek retractor, an internal suction device for saliva and a tongue cage



Figure 6. A silicon transfer tray is essential for accurate rebonding.

to isolate the dental area from the tongue. The bonding procedure as we do it, from microblasting to splint removal, should not take more than 15 minutes (Figure 7).

Using Safe and Reliable Interproximal Enamel Reduction

From the work of Sheridan, the classical interproximal enamel reduction has become a safe technique with a specific protocol that I have adapted to my practice with the following concepts:

- Safe and healthy *final aspect of the reduced enamel surfaces and periodontal tissues*, with anatomic reduction of the contact points, polishing of the reduced surfaces and protection of gingival tissues.
- No reduction of lower incisors.
- Complete awareness of the reduction effects of the selected instruments.

These principles enable me to use this technique on a routine basis in my practice and allow me to safely extend the limit of enamel reduction and, therefore, decrease the percentage of extraction cases from 49 percent to 32 percent in the last five years. By using this technique, one can remove only what is needed; there is no tooth-profile flattening; and the root-resorption risk, usually high in adult cases, is decreased due to the reduced treatment time.

Using Simple Sliding Mechanics For All Extraction Cases

After testing many different mechanics, including segmented, I realized that even



Figure 7. Dry field system used for bonding lower arch.



Figure 8. Removable labial archwire used for anchorage support.

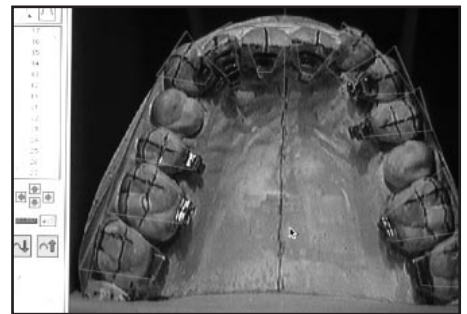


Figure 9. DALI program: brackets bonded on malocclusion model are scanned and teeth with brackets are transformed into a trapezium.

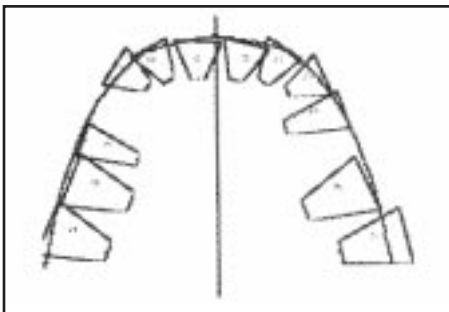


Figure 10. DALI program: initial position.

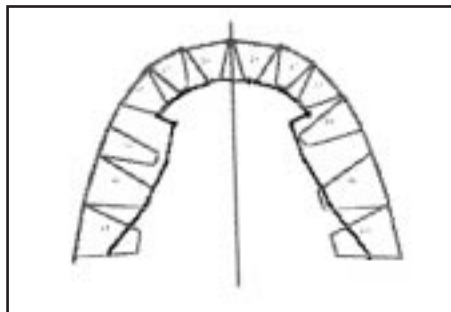


Figure 11. DALI program: shape of archwire to be used for retraction is provided by computer.

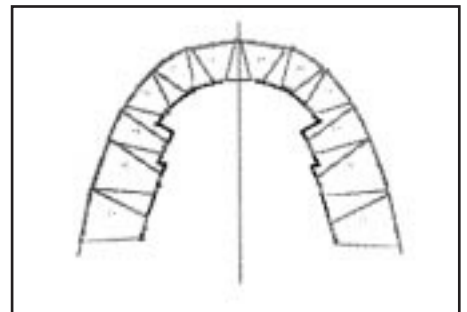


Figure 12. Shape of the archwire corresponding to the final position.

though all can be used successfully, the best way to retract anteriors and close extraction spaces is to use the sliding mechanics designed and taught by the Ormco task force in the early eighties. As with any sliding mechanics, this technique may produce undesirable side effects, such as slowed retraction caused by frictional forces and changes in the dental arch form in the cuspid-bicuspid area caused by the “bowing effect” (which is preventable). Nevertheless, sliding mechanics are the easiest lingual technique to implement and reactivate, as well as affording more comfort to the patient. Furthermore, it allows good control of the vertical and transverse dimensions if used with Ormco brackets with their incorporated bite planes.

A study of my treated cases showed that only 10 percent (*all with a dental Class II relationship before treatment*) required total anchorage control. There are four treat-

ment alternatives for this 10 percent:

- Avoid lower extraction as much as possible in order not to aggravate the initial dental relationship and because of the high risk of excessive lingual inclination of lower incisors.
- Plan anchorage preparation at the lab stage during bracket positioning.
- Use Class II elastics.
- Use a removable labial archwire (anchorage enhancer) at nighttime with Class II elastics (Figure 8).

The first two alternatives must be planned before beginning treatment, whereas the last two can be employed during the course of treatment.

Using the Help of Computer Science

With digital imaging of brackets bonded to the malocclusion model and information such as bracket width and thickness noted for each tooth by the lab technician, it is possible to visualize the initial dental

arch form in two dimensions on the screen and to simulate the tooth movement to an ideal position. For each treatment sequence, one can obtain a very accurate drawing of the specific archwires. The position of the first order bends between cuspids and bicuspid and between bicuspid and molars is perfectly predictable and reproducible for all archwires. Therefore, occlusal interferences can be avoided during treatment, an automatic coordination of the upper and lower arches can be obtained and treatment archwires can be prepared ahead of time by the practitioner or his staff. This software program called DALI (*Dessin de l'Arc Lingual Informatise*, computerized drawing of the lingual arch), used in my practice since 1989, is essential for me to reach the preplanned ideal tooth position and to decrease chairside treatment time (Figures 9-12).

Dr. Fillion

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What are the results obtained in my office today?

Chairside Treatment Time Quite Similar to Labial Treatment Requirements – How Is It Possible?

In France, the dental hygienist profession does not exist and, furthermore, dental assistants cannot work in the patient's mouth. Since I've had to do all the treatment procedures myself, you can imagine the intensity of my motivation to improve swiftness and efficiency. Once again, necessity proved itself to be the mother of invention:

- One can place lingual archwires more quickly by using specifically-adapted instruments and by reducing the need for metal ligatures in the anterior region.
- The indirect bonding technique that I have developed is faster than direct labial bonding and equivalent to indirect labial bonding techniques. With the systematic use of microblasting, bond failures have decreased significantly. Moreover, by using a transfer tray made out of very rigid silicone material (85° Shore), one can reuse it for rebonding in 80 percent of the cases. The rebonding procedure is, therefore, very quick, taking only three to five minutes after archwire removal.
- Since the differences in tooth thickness are compensated for during the bonding procedures at the lab stage, archwire bending is reduced or even eliminated for most of the treatment (except for cuspid-bicuspid and bicuspid-molar bends), which saves a lot of time.
- With the use of shape-memory alloys

(Copper Ni-Ti™) at the first treatment stage, torque control can be achieved without having to change archwires. It was difficult to adapt the prior nickel titanium wires used in the labial technique to lingual orthodontics because of the first-order bends required and due to the narrow lingual arch form. It is now possible to treat the Copper Ni-Ti archwires to modify the shape memory designed by the manufacturer in order to create a new shape adapted to each arch form.

- At last, with DALI software, archwire design is facilitated and the archwires can be prepared ahead of time.

Without a doubt, France is the country in which the restrictions to practice orthodontics are the most severe. In more favorable environments, where specially trained auxiliaries can perform most of the treatment tasks, the orthodontist should spend no more time treating lingual cases than he does treating labial ones.

Lingual Treatment Duration Similar to Labial

For the first half of the eighties, lingual orthodontic treatment was much longer than that required for labial. Why?

- Bracket positioning was not as accurate and there was no system to compensate for the different thicknesses of the teeth, making the finishing phase a very long one.
- Sliding mechanics side effects with lingual brackets were not well recog-

nized or understood.

- Bonding quality was often inadequate.
 - Orthodontists were insufficiently trained.
- Today laboratory steps and bonding procedures are greatly improved, and the most harmful sliding mechanics side effect, bowing, can easily be controlled. Also, the adaptation of shape-memory alloys to lingual orthodontics makes the alignment stage significantly shorter.

It is essential to note that the quality of the final result and the amount of chairside time are directly dependent on the quality of the laboratory phase and on the precision of the bracket positioning on the plaster model. One must be aware that any system that tries to simplify the lab phase and does not pay due respect to these precision requirements will increase chairside time (to correct alignment or resolve torque problems), leading to regression of the lingual treatment progress.

Discovery of an Easier Approach to Treating Some Malocclusions

The bite plane of the seventh generation Ormco brackets causes an immediate posterior open bite, therapy routinely indicated for the deep-bite cases so frequently seen in the occidental population. Altounian, Fillion and Sorel made a study in 1994 of 30 cases showing an overbite greater than 4 mm that revealed results similar to those found in previous studies. Contact of the lower incisors with the upper incisor brackets causes the greatest tooth movement in



Figure 13. Crossbite case: pretreatment.



Figure 14. Crossbite case: one month later.



Figure 15. Crossbite case: nine months into treatment.

the anterior region: 1.5 mm lower incisor intrusion, 0.9 mm upper incisor intrusion, 0.2 mm upper molar extrusion and 0.5 mm lower molar extrusion. As far as I know, there is no equivalent technique (labial or lingual) that can correct severe deep-bite cases as quickly (six months or less) as the lingual orthodontic technique with Ormco brackets. Ormco's recent highly successful introduction of Bite Turbos (modified slotless lingual brackets bonded to the lingual of upper incisors

to open the bite for patients undergoing labial treatment) attests to the effectiveness of these mechanics (see Case 1). Moreover, there is no technique other than lingual to easily correct dental cross-bite in the posterior region (because of the posterior open bite) as well as in the anterior region (a single tooth/bracket contact of one incisor or a lower cuspid is enough to open the bite) (Figures 13-15). Unlike their particular facility for opening deep bites, lingual brackets have no

inherent advantage for correcting open bites. Nevertheless, one can obtain very good results with the appropriate mechanics:

- Modification of the bonding heights of the brackets in order to obtain a 3 to 4 mm differential between the anterior and posterior regions of both arches.
- Vertical intermaxillary elastic wear (spaghetti style); elastics attached to lingual brackets restrain tongue

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Case 1: Deep-Bite Case



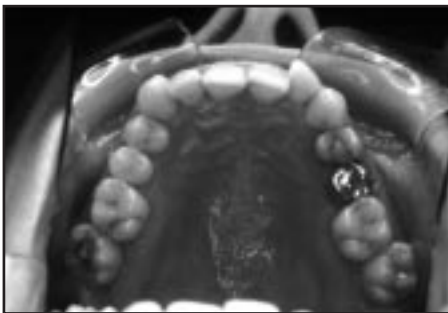
Pretreatment.



Pretreatment.



Pretreatment.



Pretreatment.



Pretreatment.



Pretreatment.



Brackets bonded on malocclusion model with T.A.R.G. and thickness-measuring system. Full size wire engaged in brackets after tooth separation shows the efficiency of this system. Extraction angulation and anchorage preparation were prescribed for this case.

Case 1: Deep-Bite Case (continued)



Beginning of treatment.



Beginning of treatment.



Four months later: posterior disclusion is almost corrected.



Retraction with sliding mechanics.



Lower arch alignment.



Posttreatment: deep bite and gummy smile have been corrected after a 24-month treatment.

thrust, so their vertical effect is quicker (see Case 2 on page 20).

Increased Number of Patients

Benefiting from experience, I've been able to double the number of patients undergoing treatment in my practice five years ago, even though I have to handle all the clinical tasks personally. Like the situation in the United States, lingual orthodontics in France suffered from a bad reputation for many years. Many lectures and papers were necessary to prove that the tech-

nique was as efficient as labial orthodontics. Today 47 percent of my patients are referred by general practitioners, 24 percent by orthodontists who don't practice the lingual technique and 29 percent by treated patients. Seventy-four percent of the patients are women and 26 percent are men (the male percentage twice that of five years ago). Most of these patients had wanted to improve their smile for many years but did not want visible appliances. Once treatment is accomplished, lingual orthodontic patients are really grateful for

what you have done for them.

The Vital Role of Lingual Orthodontic Training

I was very pleased with the attendance and response at the two lingual courses I conducted this past October in New Orleans and San Diego. I received my lingual education from three U.S. practitioners with wonderful clinical and teaching skills: Craven Kurz, Jack Gorman and Bob Smith. These pioneers started from

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ESLO Plans Set for Biannual Meeting in Rome

The European Society of Lingual Orthodontics will convene in Rome for its third meeting, June 18-20, 1998. The aim of the congress is to provide an opportunity for colleagues from different parts of the world to meet, exchange ideas, share experiences, form friendships and explore the recent advances of lingual orthodontic and interdisciplinary treatment. Presentations will be made by leading lingual orthodontic clinicians from around the world, and a trade exhibition will run concurrently with the congress.

The congress will be held in the historical Pontifical Gregorian University (University of Popes and Saints) founded in 1551 and situated in the heart of Rome. Italian and English will be the official languages and a simultaneous translation will be provided. Rooms have been reserved in several hotels (within walking distance of the congress) of different categories with special rates for participants.

Scientific secretary for the meeting is ESLO president, Dr. Giuseppe Scuzzo, and organizing secretary is Sig.ra Maria Teresa Calderetti. To register or for additional information, contact:

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For Greater Precision – T.A.R.G. (Torque Angulation Reference Guide)



For precision indirect lingual bonding, the T.A.R.G. is used by Dr. Didier Fillion in conjunction with his tooth-thickness measurement system that compensates for thickness differences with the addition of composite pads. Specialty Appliances also uses the T.A.R.G. indirect bonding system, with or without thickness variation compensations. The T.A.R.G. is a precision bracket placement device used in indirect bonding for either labial or lingual brackets. It will accurately and consistently establish technician- or doctor-specified torques, tips and bracket heights for each tooth with settings providing up to 0.5° and 0.01" precision. An instruction booklet is included with each T.A.R.G. Order information is provided on page D of the Center Section.

Budget for Ove

by David L. Drake, D.D.S., M.S.
Tiffin, Ohio



Dr. David Drake received his dental training at Ohio State University and his M.S. in orthodontics from the University of Illinois at Chicago. He is a diplomate of the American Board of Orthodontics and has been published in the *Journal of Clinical Orthodontics*. Dr. Drake, a past-president of the Cleveland Society of Orthodontists, maintains a private practice of orthodontics in Tiffin, Ohio.

As you are well aware, the orthodontic marketplace continues to change rapidly. To be competitive, today's practice must be run as a business. We can no longer provide quality and service alone; we must also be affordable. Overhead control requires tracking systems to monitor cost-revenue relationships and the discipline to implement change. It is not too late for '98! An office budget can be created by following these six steps:

1. Develop Gold Standard
2. Forecast Revenues
3. Analyze Past Spending
4. Purchasing Accountability
5. Final Allocation
6. Monthly Review

Develop Gold Standard

Professional averages provide a good barometer for the industry. An annual practice survey is published each May in the *Blair/McGill Advisory* newsletter¹. Dental overhead percentages are broken down into five general areas: occupancy, clerical wages, clinical wages, professional supplies and nonoperating expenses. The *Journal of Clinical Orthodontics* practice study now encompasses eight years and offers a very broad range of trends. Many study clubs and colleagues freely share percentages of overhead.

All consultants recommend specific percentages of gross numbers for profitability. For example, 4-6% of gross should be allocated to marketing, 3.5% to lab and 2% to telephone. Karen Moawad publishes a management newsletter analysis to determine ideal values from participating members' numbers².

As your personalized gold standard is developed, geographic area, maturity of the practice and tax sheltering expenses must be factored in. Compare "apples to apples" when establishing your criteria. Remember, too, that published numbers

are from the preceding year and do not include current cost-of-living increases.

Forecast Revenues

The simplest way to project future gross revenue is to use the following formula³:

- Take last year's production minus 3% for overdue accounts.
- Add 6% for fee increases.
- Then add 14% for total new start income*.

Growth should be a minimum of 15%. Most practices grow an average of 15-20% per year.

Another way of forecasting is to establish goals for each profit center. Multiply the number of starts projected times the average fee and use the total to determine future production. Collections should be 97% of production. If the sales forecast is realistic, future collections can be accurately projected. Next, adjust gross revenues for discounts, refunds, adjustments and bad debt write-off to determine net collections.

Analyze Past Spending

Using a nine-column analysis pad** or computer accounting package, list the last three years' expense for each line item of the profit and loss statement (Figure 1). If you haven't done this before, you will find that traditional P&Ls are too general to pinpoint spending. Dr. Richard Boyd presented a detailed financial statement for in-depth analysis in *Clinical Impressions*, Vol. 5, No. 3, 1996⁴. *Blair/McGill* also provides a thorough accountant's compilation report.

I start the new-budget process in mid-November after the October cash flow

* Evaluate new starts over the past four years to decide on a growth rate. Adjust percentages to fit your practice.
** National Brand 45-603 Nine-Column Premium Analysis Pad

"I recommend that you assign accountability for specific line items to one or more clinical and clerical staff members."

ahead Control

1997 Budget Worksheet

Acct. #s	Professional Supplies	1994 Year End	1995 Year End	1996 Projection	1996 Budget	1996 +/- Budget	1997 Proposed	Adjustments	1997 Final	Monthly
60501	Commercial Lab	13501	34718	17000	24000	- 7000	20100	- 4900	15500	1275
60601	Internal Lab	36221	40740	5000	6000	- 1000	4500	-	4500	375
60701	Lab Wages, Taxes, Benefits						21900	- 4864	17124	1427
60801	Photography	2671	2860	1000	2400	- 1400	1900	- 700	1200	100
60901	Radiography	2200	5434	4500	4320	-	4280	- 40	4320	360
	* Clinic Supplies	23033	45137							
72001	Adhesives			4080	4080		4140	- 60	4020	335
72101	Bands			5100	4800	+ 300	5400	- 600	4420	365
72201	Brackets, Buttons, Cleats			13000	13000	-	13000	- 2700	14700	1225
72301	Burs, Discs, Stones, etc.			1000	1000	+ 120	1100	-	1100	92
72401	Hygiene Education/Hygiene			1100	2040	- 940	1000	- 40	960	80
72501	Elastics, Ligatures, Separators			2100	2500	- 400	1600	- 400	1800	150
72601	Force Systems			2900	400	+ 2300	5000	- 600	2400	200
72701	Impression Supplies			1100	1080	+ 20	1090	- 120	960	80
72801	Miscellaneous Clinic Supplies			200	156	- 44	204	-	204	17
72901	Archwires			5000	4840	+ 160	4980	- 480	4500	375
85001	Infection Control	4525	15133	13000	12000	+ 1000	13000	- 1200	10800	900
85101	Imaging	2049	2338	1200	1800	- 600	1500	-	1500	125
	Total Professional Expense	86196	145540	50900	90036	- 9136	106496	- 14706	89150	7470

* Break-out of Clinic Supplies started in 1996

analysis is complete. I use a column to list each of the past two years' year-end numbers and projections from the first ten months of the current year. I then note the current budget and current year deviation from budget (plus or minus) in columns four and five.

Next, I average the previous two years and third-year estimates and add or subtract projected expenses according to growth forecasts and increased cost of living. This trend analysis provides a historical basis from which the future can be projected.

Purchasing Accountability

Because staying on budget is highly correlated to purchasing, I recommend that you assign accountability for specific line items to one or more clinical and clerical staff members (Figure 2). Review both past spending trends and inventory to project future costs. Staff members are often more

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Four areas of inventory responsibility

LEDGER ACCOUNTS	MONTHLY BUDGET	INVENTORY SECTION
60501	70	COMM (Laboratory)
60503	1000	Commercial Lab (1000)
60504	270	Mitoglydes, Devitoxipolides
60505	500	Hydrex Bond Sealer Spring retainers, distal jet, positiveness Cross Marker
60601	50	Internal Lab Supplies (375)
60603	30	Back down material
60604	100	Plaster and stone
60605	170	Acrylic powder/liquid/separating medium slat. wire, boxes (retainer/mold), silly putty, playdough, welder, flux, tony cleanser, expansion screws
60606	25	Prescription forms, postage & handling
608	100	PINK (Records)
609	300	Photography (film, developing, repair)
727	80	Radiography (film, chemicals, service)
851	125	Impression supplies (trays, wax, alginate, flow wax) Imaging (film, ink cartridge, paper, maintenance, updates)
720	305	WHITE (Adhesives, Attachments & Force Systems)
721	385	Adhesives
722	1170	Bands
723	120	Brackets, buttons, cleats
725	150	Burs, discs, stones, lightening strips, diamonds
726	200	Elastics, ligatures, separators
727	17	Force systems (mtl & alloy) coils, waxwax, lip bursers, jigs, forcewax & straps, crimpable hooks
728	315	Misc. soldering supplies, clinic model boxes, wax embedding, inventory returns, skin stock/accufilm, toothpaste, floss
729	17	Archwires
72901	80	ORANGE (Infection Control)
850	400	UV Supplies (travel toothbrush, wax, alcohol, peroxy sample, Butler floss threader, orange sample), tongue training (paint brushes, swivels, wicks, Chapstick), stimulants, Butler and left, superfloss, proxibrush, periox, MAP pamphlets, lip protectors, mouthparts
		Sterilizing solutions, lotion, gloves, masks, glasses, headnet covers, goggles, G-folds, cups, patient aspirin, distilled water, saliva ejector tips, tips-dirty, cotton balls, trust tips, disposable toothbrushes

Figure 1. (Above) Professional expense worksheet, representing one of five budgeted areas. In 1994, we switched from fiscal to calendar year (totals are from June 1 to December 31). Clinical supplies were not broken out until 1996.

Figure 2. (Left) Four areas of inventory responsibility.

Dr. Drake

continued from preceding page

familiar with the purchasing cycles associated with bulk purchase or seasonal fluctuation. They are also more apt to "buy into" budgeting if they have input and responsibility. Doctors can better anticipate future trends (technique change, open or close satellite, etc.). After this review, any adjusted expenses are entered in the seventh column on the worksheet.

DAVID L. DRAKE, D.D.S. DETAIL INCOME STATEMENT										
Current Period 8/1/97-8/31/97					Comparison Period 8/1/96-8/31/96					
EXPENSES-VARIABLE PROFESSIONAL SUPPLIES										
	1997	%	CURRENT	RATIO	Y-T-D	DATE	CURRENT	RATIO	Y-T-D	RATIO
CHEMICAL LAB	1275.00	1.9	619.25	1.0	8441.78	1.5	3821.25	2.6	9423.46	1.8
INTERNAL LAB	375.00	2.6	552.83	.9	1020.61	.3	588.89	.8	3563.31	.6
LAB WAGES	1427.00	2.1	1119.24	1.8	10189.44	1.8	817.00	1.2	7506.33	1.3
PHOTOGRAPHY	160.00	.2	173.03	.2	1426.89	.3	160.31	.2	707.50	.1
RADIOGRAPHY	360.00	.5	423.28	.7	3100.46	.6	577.05	.8	3300.79	.6
RESISTIVES	325.00	.5	263.96	.4	1700.49	.3	791.89	1.1	3190.01	.5
BANDS	385.00	.6	1432.06	2.3	5214.55	.9	740.81	1.1	3611.59	.6
BRACKETS, BUTTONS, CLASPS	1175.00	1.7	2239.18	3.6	8410.98	1.5	1598.50	2.3	9133.55	1.6
BURS, DISCS, STONES, ETC.	120.00	.2	13.26	.0	1354.64	.2	63.39	.1	1220.01	.2
PATIENT EDUCATION/HYGIENE	80.00	.1	11.86	.0	1579.17	.3	126.93	.2	822.78	.1
ELASTICS, LIGATURES, SHIPS	150.00	.2	.00	.0	566.53	.1	422.77	.6	1581.77	.3
FORCE SYSTEMS	200.00	.3	183.71	.3	1302.16	.2	315.86	.5	2064.14	.4
IMPRESSION SUPPLIES	80.00	.1	87.35	.1	552.38	.1	16.77	.0	375.56	.1
MISCELLANEOUS SUPPLIES	77.00	.0	31.80	.1	193.21	.0	9.80	.0	164.32	.0
ARCHIVES	375.00	.5	594.89	.9	2267.60	.4	309.54	.2	2843.40	.5
INFECTION CONTROL	909.00	1.3	663.98	1.1	5555.46	1.0	1130.78	1.6	8405.93	1.6
TRAINING	125.00	.2	32.87	.1	916.57	.2	73.90	.1	943.98	.2
TOTAL PROFESSIONAL EXPENSE	7499.00	10.9	8355.15	13.3	64614.94	9.8	9416.24	13.6	59082.01	10.2

Figure 3. Current professional supplies portion of profit and loss statement. Note: Orthotrac does not print a budget column on the P&L.

Final Allocation

This is the most time-consuming aspect of the budgeting process. Past spending and future expense must be tempered by projected revenues. Final percentages should compare favorably with the professional average or have a valid explanation for deviation. Final allocations are entered in the eighth column. (The ninth column can be used for monthly breakdown.) Work on fixed expenses first. Occupancy (11.0%) is the easiest. Salaries (factoring in cost-of-living increases with additional bonuses or benefits) come next (23.6%). At this point, approximately 35% of the income is committed.

above-average line items is consulted. An acceptable expenditure is deliberated between the doctor and staff.

Costs can be reduced by bulk purchase, comparison shopping and consolidation or elimination of products. Major orthodontic suppliers provide substantial discounts for preferred, higher-volume purchasers. Buying groups (for gloves, plaster, X-ray film, etc.) can also be helpful in cost containment. Staff should negotiate with vendors to obtain the best value. Depending upon how the P&L is set up, the operating profit (40%) must include enough for business loans, new equipment, instruments and furnishings, remodeling, profit sharing and doctor's salary.

Of course, staying within the budget is not about expenses alone. It also requires exams, starts and completions. You cannot run a profitable orthodontic business if your biomechanics and efficiency have not been mastered. You and your staff must be committed to make the budget work. It is better to be proactive than reactive. Both staff and doctor are now accountable if overhead exceeds the goal. Increased awareness provided by the budgeting process will in itself reduce overhead. Make the commitment to start now. It's a great feeling for the entire orthodontic team to be in control of overhead.

“Increased awareness provided by the budgeting process will in itself reduce overhead.”

Now, fine-tune the variable expenses: professional supplies (11.0%) and non-operating expenses (14.4%). Using these guidelines, overhead will be 60%. The JCO recently reported the 1996 median overhead at 55%.⁵ If 60% overhead is unacceptable and cuts are necessary, the staff person responsible for

Monthly Review

A budget is not carved in stone. It is only a guide and a scorecard (Figure 3). Line item expenses will fluctuate from month to month, and a flexible budget can adapt to change. Monthly comparison of expense to budget, same month last year, and year-to-date must be monitored. Staff should report on their assigned areas and explain discrepancies at the monthly staff meeting. If overage cannot be pinpointed, more line items may be necessary. The budget will prove to be a dynamic, ongoing and ever-changing exercise. With experience, projections will become more accurate.

References:

- Blair, C.; McGill, J.; and Schulman, M.: Blair/McGill Advisory newsletter, 4601 Charlotte Park Drive, Suite 230, Charlotte, NC 28217, Telephone (704) 523-5882.
- Moawad, K.: Hummingbird Associates, P.O. Box 10279, Bainbridge Island, WA 98110, Telephone (800) 552-7558.
- Eash, C.: Profit Marketing Systems, Inc., 1833 Melody Lane, Interlochen, MI 49643, Telephone (616) 275-5906.
- Boyd, R.: Thriving vs. Surviving, Clinical Impressions, Vol. 5, No. 3: 2-7, 1996.
- Gottlieb, E.; Nelson, A.; and Vogels, D.: 1997 JCO Orthodontic Practice Study – Part 1, Trends, Journal of Clinical Orthodontics, 31: 675-684, 1997.



Disciplined Brainstorming: Not an Oxymoron

by Barbara Brunner, M.A.
Orange, California

You've seen it happen. You're in a staff meeting. Someone throws out an idea. Bang! Someone else shoots it down. "It won't work." "We tried it; it flopped." "Our patients don't expect it." "It'd cost too much." "We don't have time."

What's wrong here? First, judging ideas prematurely heightens the probability that: (a) a good idea ineffectually expressed; (b) an old idea that needs revisiting or (c) a whacky, albeit promising idea will get nixed before it's had time to be explored. Second, it stifles creativity. The fact is that mediocre and even goofy ideas are often the genesis of really great ideas. Great ideas are stimulated by the momentum

of lots of ideas. If people are censoring themselves, you have fewer mediocre and goofy ideas from which startlingly clever ideas can spring.

So how do you address challenges without falling prey to these pitfalls? Get really good at brainstorming within the structure of a clearly-defined problem-solving process. Brainstorming – true brainstorming – is the foundation of creative problem solving. Its definition is

"to generate as many ideas as possible as quickly as possible without evaluation." Without evaluation means without regard to doability, cost, previous experience or any of the practical stuff you will get to later in the problem-solving process. It also means throwing out as many ideas as possible before selecting a single idea to explore. The power of brainstorming is to give your creativity full rein so that through free association, ideas power

continued on page 22

"The power of brainstorming is to give your creativity full rein so that through free association, ideas power better ideas."

Shot Down in a New York Minute

Critiquing Ideas Prematurely Defeats Your Goals

M

ajor issues require defined agenda time to be addressed. They usually have a number of aspects that need to be clarified before solutions can be offered. Problem solving sandwiched between agenda items at short staff meetings can leave people feeling that important issues don't get their due. As often, haphazard solutions get the nod that, if ever implemented, may not produce the anticipated result (perpetuating the "we tried it; it didn't work" phenomenon). The answer: Table issues that deserve focus until you can give them the time they merit.

A new twist can give an old idea vigor. If the idea someone suggests is one you tried but didn't work, the reasons could be many – especially if you didn't analyze the situation thoroughly when the idea went awry. Maybe the plan wasn't executed well. Maybe it was a bad plan. Maybe the idea was ahead of its time. If your staff has changed, this staff might do something differ-

ently with the idea. If not, they've matured and would probably put a new spin on an old plan. Perhaps the environment is now right. You're not in the same place you were a few years ago. Nor is your referral base. Nor is your marketplace. Sometimes old ideas – at least in concept – are still good ideas. They deserve revisiting from time to time to see if an aspect of them still shows vital signs.

Allowing ideas to be critiqued as they're mentioned is demoralizing. Our tendency is to allow the ideas of the people with the strongest voices to prevail. Ideas uttered with less than full conviction or half thought through are easily discarded. Not only are you losing potential gems, you may be dampening the enthusiasm for certain people's participation. Continual idea put-downs are discouraging. The nonverbal messages are, "You'd better have your ideas clearly thought through before you open your mouth," or "Don't mention things we've tried before" (meaning you'd better have some experience with the practice before you go suggesting things) or even "Don't mention anything silly or crazy." Sometimes the best ideas come from the most unlikely sources. Structured brainstorming creates the climate for ideas to be generated by even the more reserved members of your staff.

The Express

FURTHER STREAMLINING AN



by **Saul Burk, D.D.S., M.S.**
Gaithersburg, Maryland

The Nance holding appliance has been associated with orthodontics for many years. When extraction methodology was a popular treatment approach, a Nance holding appliance was used in cases that required anchorage control. Today the Nance holding appliance has renewed appeal. The use of a molar distalizing appliance (e.g., Pendulum and Kickplate) may require a holding appliance after distalization of the molars has been completed.

A holding appliance that is inserted at the same time the distalizing appliance is removed is ideal. The Express-Nance can be made chairside in ten minutes or less. I use Ormco prefabricated .032 stainless steel Nance arches (Figure 1). The medium size (#2) is the most commonly used. However, I use #1 and #3 as necessary. It takes too long to modify the large #3 for all applications, so maintain a minimum inventory of all three sizes. I *always* cut the Nance arch in half. The key is to make only three bends per arch side using a three-prong plier. Position both sides in their respective lingual attachments. Then place light-cure acrylic (Triad®) *under* the wires and roll it around the ends of the Nance legs. Use a curing light to set the acrylic. Explain to the patient that the Nance button will get warm as it cures. We ask the patient to raise their hand when the button gets warm. We then remove the light to let it cool. The patient will usually raise their hand every 10 seconds during the first 30 seconds. After that, three 20-second bursts of light are

recommended, giving a few seconds between each burst to allow for cooling of the acrylic as necessary. Create the size button you feel is appropriate. I have found that the more anchorage you want, the bigger the button should be.

Figure 2 shows the wires bent and secure in their respective lingual attachments. Notice three bends per side. The wires are at least 3.0 mm from the soft tissue. Figure 3 shows the acrylic placed and cured. Figure 4 shows the wires placed in an inflamed palate. This is not a contraindication for placing an Express-Nance unless extreme tissue irritation is present. However, notice that Figure 5 shows the placement of acrylic is away from the palatal irritation. Though some of the acrylic is on inflamed tissue, I have not experienced a problem, because the appliance is passive. You will notice the tissue is within normal limits by the next appointment.

Benefits of the Express-Nance:

1. Simple to construct
2. Eliminates a lab procedure
3. Takes one appointment
4. Conserves maximum molar distalization
5. Excellent patient acceptance

Dr. Saul Burk received his D.D.S. from the University of Maryland and his M.S. and certificate in orthodontics from Georgetown University. He was an assistant professor of orthodontics at Georgetown University for 11 years. Dr. Burk is in private practice in Gaithersburg and Olney, Maryland.

**“The Express-Nance
can be made
chairside in ten
minutes or less.”**

-Nance

OLD FAVORITE

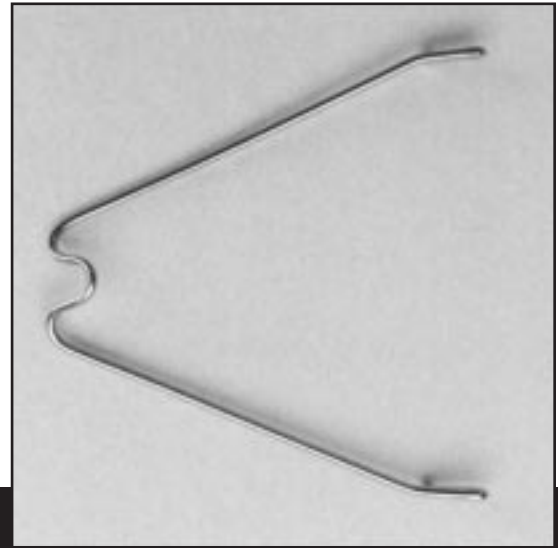


Figure 1. Use preformed Quick-Nance arches cut in half for easier placement and adaptation.



Figure 2. Make three bends with a three-prong plier and secure the wires in their lingual attachments.



Figure 3. Place Triad® light-cure acrylic under the wires and roll it around the ends of the Nance legs before curing.



Figure 4. Wires in place. Note inflamed tissue; Express-Nance can still be used unless irritation is extreme.



Figure 5. Express-Nance appliance in place. Note that placement is away from inflamed tissue.

Quick-Nance Stabilization Growing in Popularity

The Quick-Nance is an ideal complement to all molar distalizing techniques, as it cuts down chairtime and the need for an independent laboratory procedure. Dr. Burk's *Express-Nance* is a new twist on the Quick-Nance technique introduced and described by Dr. Jim Hilgers in his article, "The Pendulum Appliance, Part II: Maintaining the Gain," which appeared in *Clinical Impressions*, Vol. 3, No. 4, 1994.

Quick-Nance preformed wires are available in three sizes in packs of ten:

Size	Length	Width
1	22 mm	26 mm
2	30 mm	33 mm
3	38 mm	40 mm

Order information is shown on page D of the Center Section.

The Molar-Moving Bite Jumper (MMBJ)



by Joe H. Mayes, D.D.S., M.S.D.
Lubbock, Texas

The MMBJ was developed to assist with the correction of dental and skeletal problems. The appliance works exceptionally well correcting skeletal Class IIs and closing missing lower 2nd bicuspid space. We have used the appliance unilaterally, bilaterally and with asymmetric cases. The appliance works equally well with all these dental and skeletal problems and is a valuable adjunct to our skeletal Class II corrections. As the molars are moved forward by the appliance (Figures 1-10), mesial crown tip is totally eliminated by the use of .045 lingual molar tubes with an .045 lingual bar. There are two types of MMBJ. One employs stainless steel crowns on the D/4s bilaterally. The .045 lingual bar extends distally through an .045 tube soldered to the lingual of the bands, unilaterally or bilaterally (prior

A native of Crane, Texas, Dr. Joe H. Mayes received his B.S. from Texas Tech University, followed by his D.D.S., M.S.D. and certificate in orthodontics from Baylor College of Dentistry. Dr. Mayes is engaged in the private practice of orthodontics in Lubbock, Texas, and has been actively involved in new product development.

tack welding facilitates the soldering procedure) (Figure 11). Most of the second type of appliance can be premade with Ormco Cantilever Bite Jumper (CBJ) components to simplify and speed the lab procedures (Figure 12). Both appliances use CBJ upper molar crowns with pre-attached axles, but the second one uses the lower CBJ with preattached cantilever on the side opposite the one with the missing lower 2nd bicuspid. This opens the bite slightly, allowing the other lower 1st molar to move mesially more rapidly. In either case, the D/4 bands are reinforced "à la Jim Hilgers." In other words, bulk up the band with solder when soldering the axle to the band (Figure 13). The solder goes completely around the band to make a very rigid anchor of the lower arch.

Since many Class II malocclusions require widening of the upper jaw, take an extra upper impression at the first visit so that the upper expander can be fabricated prior to the patient visit. When the patient returns for the expander, take a lower impression, pour in lab plaster and separate the lower. If an E is still present in the missing 2nd bicuspid site, refer the patient for extraction so that the molar can be moved mesially. Trim the upper

continued on page 18



Figure 1. New patient exam – Class II mixed dentition.



Figure 2. Occlusal view of lower arch. Patient is missing both lower 2nd bicuspids.



Figure 3. Lateral view of MMBJ. Lower molars may be moved forward with springs, power thread or chains.

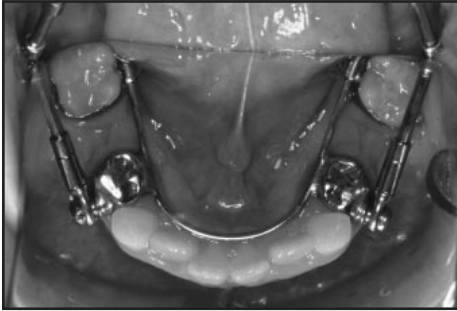


Figure 4. Occlusal view of MMBJ. Approximately 3 mm of space closure has occurred in 7-8 weeks.



Figure 5. Lateral view at end of Phase 1. Note Class III molars.

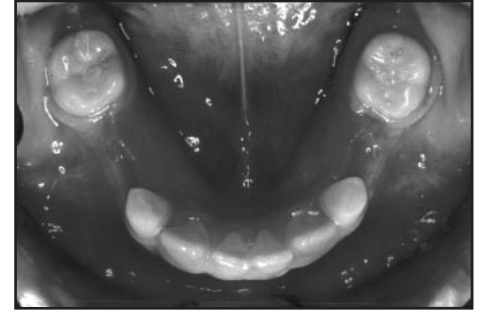


Figure 6. Occlusal view at end of Phase 1. There will still be 1-2 mm of space closure needed with full appliances.



Figure 7. Pretreatment profile.



Figure 8. Posttreatment profile.

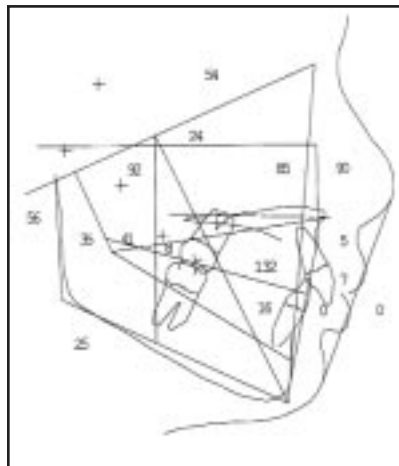


Figure 9. Pretreatment tracing.

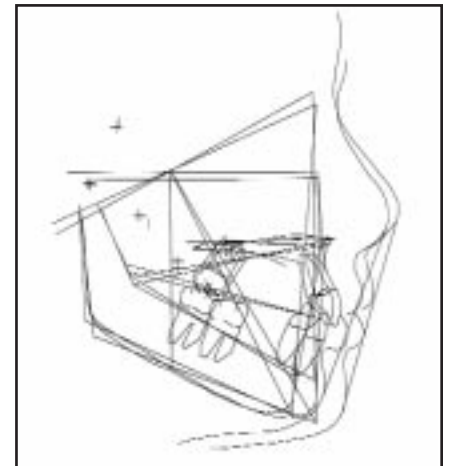


Figure 10. Posttreatment composite tracing.

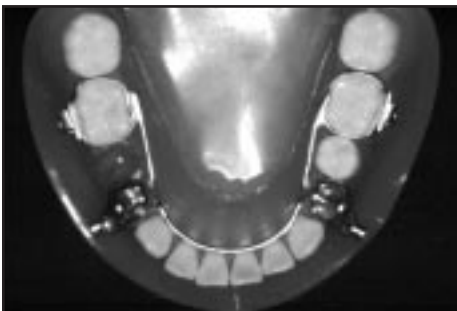


Figure 11. Occlusal view of Basic MMBJ.

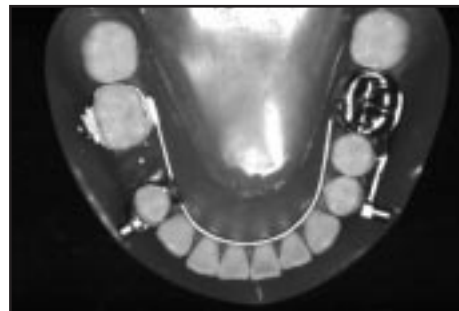


Figure 12. Occlusal view of MMBJ with CBJ components and soldered bicuspid band.



Figure 13. Note solder extending all the way around the band and the .036 stainless steel hook.

Dr. Mayes

continued from preceding page

and lower models around the 1st molars as well as the D/4 on the side of the lower arch with the missing 2nd bicuspid (Figure 14). Cut the upper model down the midpalatal suture line with a die saw (Figure 15). This allows the two halves of the model to be positioned after the desired expansion has occurred.

When the patient returns for the third visit, remove the lower spacers and the upper expander. Fit a band on the lower 1st molar and on the D/4 on the side with the missing bicuspid, and fit a CBJ crown on the opposite molar. Use CBJ Fit Kit crowns for trial fitting to avoid damaging the more expensive crowns with attached cantilevers. Then place the CBJ crown with attachment. Follow the same procedure to fit crowns on the upper 1st molars. Remove the band on the D/4 and tack weld an axle to it. Also, tack weld an .036 hook in place before soldering. Ni-Ti™ springs can be attached to the hook to connect the D/4 and 1st molar in order to bring the molar forward. Flow solder around the axle base and the band. Place the band back on the tooth (Figures 16-17). Measure the interaxle distance with the lower jaw pushed forward in an edge-to-edge position. This enables the lab personnel to cut the rods and tubes to the correct length before cementation. The bands and crowns that were *fitted in the mouth* are taken to the lab, along with the removed upper expander.

The upper expander is placed on the two halves of the upper lab model, and the

two halves are then sticky waxed in place to hold the separation (I sticky wax the halves on a tile used for soldering) (Figure 18). Place the upper CBJ crowns (previously fitted in the mouth) on the model after the expander is removed. Fabricate an .045 stainless steel transpalatal bar and solder and polish (Figure 19). It can be removed at the next visit, approximately 12 weeks away.

Next fabricate the lower part of the appliance. Tack weld a 4.5 mm length .045 tube to the lingual of the lower molar band for ease of soldering; or you can use an .045 inconel Ormco tube tack welded to the band (Figure 20). Soldering is essential for sufficient strength of the attachment. Fit the CBJ crown on the model as well as the molar and bicuspid bands. Place the .045 lingual bar (that was premade on this model) into the molar tube. Make any necessary adjustments to the bar and make a mark approximately 3 mm distal to the D. This will allow the attachment of a stop on the lingual bar to prevent the molar from completely closing the space of the missing E. Remember, an E is 10 mm mesiodistally and the lower 5 is 7 mm mesiodistally. Therefore, we need to leave a little space when closing. This is not necessary if the cuspid and 1st bicuspid are present. Hold the lingual bar in place with sticky wax and solder to place on the lingual of the CBJ crown and the lingual of the D/4 (Figure 21). Since the molar will move forward on the .045 lingual bar, the bar must not be bent distal to the D/4, or the molar will bind.

Check the fit of the upper and lower parts of the appliance in the mouth. Microetch the inside of the bands and crowns if this was not done previously. Crimp the mesial and distal of the crowns, attach the tubes (already cut to correct length) to the upper crowns and cement the appliance with glass ionomer cement (Figures 22-23). Attach a 9 mm 150 gm Ni-Ti spring to the hooks on the labial of the D/4 and the 6 (Figure 24). Check the rods to see if shims are needed for midline correction or lower jaw advancement and then attach the screws with Ceka Bond®. Now give the patient instructions on possible problems and how to care for the appliance. Also advise the patient that as the molar comes forward, the lower lingual bar may impinge on the tongue. The bar will be trimmed at regular visits with a handpiece unless required more often.

If an in-house lab is not available, an excellent alternative would be Allesee Orthodontic Appliances, Inc., (AOA). I have worked very closely with them on the designs of all the appliances I use. However, this is a rather simple appliance and can be done in a lab in the office with minimal equipment.

As a variation of the CBJ, the MMBJ has proved itself a reliable and easy solution for the correction of a skeletal Class II with the dental deformity of a missing unilateral or bilateral lower 2nd bicuspid. The appliance helps with our overall goal of having braces on our patients for the shortest possible time.



Figure 14. Lower model with teeth relieved and premade .045 stainless steel lingual bar.



Figure 15. Upper model sectioned through the midpalatal suture and molars relieved.



Figures 16-17. Lower appliance trial fitted and ready for cementation.

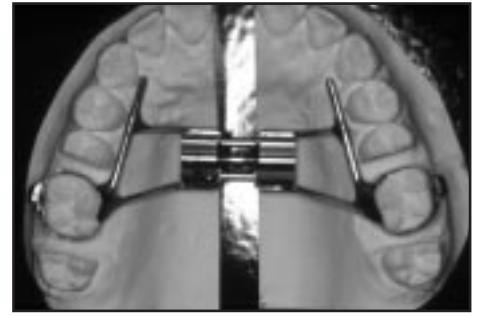


Figure 18. Removed upper expander placed on upper model halves for positioning and waxing to soldering tile.

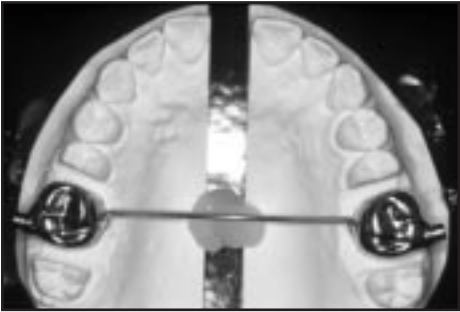


Figure 19. Crowns fitted in mouth placed on upper model and .045 stainless steel transpalatal bar ready to solder.



Figure 20. Ormco inconel tube (.045 lumen).



Figure 21. Finished lower part of MMBJ ready for trial fitting in the mouth.



Figures 22-23. Cemented appliance ready for fitting of the rods to be checked.



Figure 24. Final delivered appliance with Ni-Ti spring in place to bring the molar forward.



Figure 25. Patient R.F., age 12 years 7 months, missing both lower 2nd bicuspid.



Figure 26. Patient R.F., age 23 years 5 months. She was treated with an MMBJ and full appliances and has been in retention approximately nine years.

Take Advantage of MMBJ Mechanics in Your Practice

Perhaps the best way to get started with the MMBJ is to rely upon the expertise of Allesee Orthodontic Appliances (AOA), P.O. Box 725, Sturtevant, WI 53177, phone (800) 262-5221. AOA can provide either of the two types of MMBJ described by Dr. Mayes. Or they can just size lower Ds or 1st bicuspid crowns with presoldered axles to your model.

If you prefer to use your own lab, you can order the essentials from Ormco: CBJ Kits, CBJ Fit-Kits, CBJ components, spacers, .045 inconel tubes, lower D and 1st bicuspid ss crowns, and 9 mm .010 x .030 light force Ni-Ti[®] closed coil springs (see page D of the Center Section).

Dr. Fillion

continued from page 9

scratch and established the foothold necessary for lingual orthodontics to overcome the many initial limiting factors and setbacks and to evolve into its current advanced and continuing-to-improve state. I am glad to follow in their footsteps and join other lingual orthodontic clinicians in accelerating the growth of this technique in the U.S. for the benefit of the public and specialty alike.

The Eastman Dental Center at Rochester and Indiana University continue their vital roles as academic centers for the technique in the U.S. In October 1996, a lingual orthodontic program was created at the University Rene Descartes of Paris V by Dr. Alain Decker, chairman of the Department of Orthodontics. Dr. Gerard Altounian and I are coaching this two-year program. Six orthodontists (including three foreigners) participate in this didactic but essentially clinical program that will develop the necessary skills to conduct a large-volume lingual practice. With the increasing interest in lingual orthodontics, other schools around the

world are taking note, and it is hoped that other resident and continuing education programs will be developed.

Today's orthodontist need not reinvent the wheel or suffer through the extended learning curve our specialty confronted in the early years of lingual orthodontics. State-of-the-art training can be found throughout the world, and established lingual orthodontic societies and study clubs offer ongoing support.

Conclusion

Today, I do not regret my 1987 decision. By and large, I have reached the objectives that I set for myself, and my enthusiasm for the technique continues to grow. Many areas of lingual orthodontics have yet to be explored and a great number of improvements are at hand. Moreover, I am continuously elated and inspired by the happiness of my patients with their invisible braces. In 1991, I wrote in a French orthodontic journal that "this decade will make lingual orthodontics as easy to use as labial orthodontics," and we

are close to reaching this goal. In fact, I am convinced that lingual orthodontics will someday replace labial orthodontics for adults.

There is a need to learn and practice the lingual technique because:

- this intellectually stimulating technique, with some practice, is almost as easy to use as the labial one.
- it is a great way to uncover adults who are desperate for a nice smile but adverse to visible appliances, thus increasing one's potential number of patients.
- this technique makes it easier and faster to treat certain kinds of malocclusions than is possible labially.
- and last but not least, patients will soon have the awareness and rationale to criticize the orthodontist who does not offer this technique.

The rewards that I enjoy everyday from practicing lingual orthodontics are such that I want to stay on the same road. I have come a long way and now I wish to share the road with others.

Lingual Orthodontic Learning Opportunities with Dr. Didier Fillion

Since 1987, Dr. Didier Fillion has been invited to present his lingual orthodontic results not only at French and other European meetings but also at meetings in the United States and Japan. He continued to notice the astonishment of colleagues who were not practicing the lingual technique at the quality results he was routinely achieving. He realized that his lectures were inadequate for sharing his experiences and conveying his keys for success. Consequently, he decided to develop seminars, either in his practice for six participants or outside for groups of 30 to 50 orthodontists. Dr. Fillion was honored to share one course with Dr. Jack Gorman in Paris in November 1992 and now enjoys conducting courses

on a regular basis with Dr. Gorman's son, Dr. Courtney Gorman, who continues the Gorman orthodontic tradition in Marion, Indiana.

Dr. Fillion recently modified his course content in order to devote more time to the problems-solutions area. He has developed a list of 50 topics covering the lingual technique, which he describes in detail by showing a great number of clinical examples. He presents the treated cases and then explains how to achieve the results he obtained. Dr. Fillion explains how to achieve excellent results with simple, efficient mechanics and eliminates unnecessary complications.

Dr. Fillion will present his 1998 U.S. seminars in San Francisco, April 16-17; Chicago, April 18-19; and Atlanta, April 20-21. For information about these seminars, contact:

Fillion Lingual Orthodontic Seminars
3500 Behrman Place
New Orleans, LA 70114
Phone (800) 474-3633
Fax (504) 362-1104

Information about Dr. Fillion's other seminars and speaking engagements around the world is provided in the Course Schedule on the back cover. For his in-office Paris seminars, contact Dr. Fillion at: Phone 331 4405 9057; Fax 331 4755 1833.

Case 2: Open-Bite Case



Pre-treatment.



Pre-treatment.



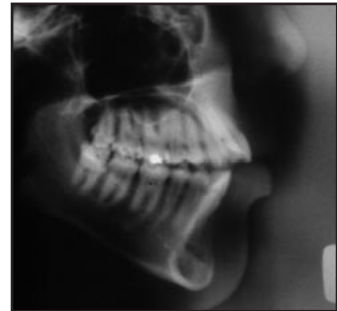
Pre-treatment.



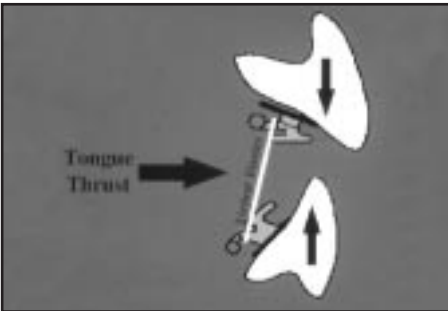
Pre-treatment.



Pre-treatment.



Pre-treatment.



Vertical elastics on lingual brackets push tongue back from teeth.



Vertical elastics worn at night like spaghetti.



Post-treatment: correction after a 19-month treatment. Permanent retention with .0175 Respond® bonded to lingual surfaces.

Brainstorming

continued from page 13

better ideas. What stalls the process and dampens the creative spark is making value judgments about ideas as soon as they're uttered. If we're gonna rock and roll in the idea arena, we must silence the initial nit-picking. There's a carping critic in each of us; granted, there's more in some people than in others (no finger-pointing). But whatever the percentage, exacting assessment of ideas is crucial to prudent decision making. It keeps us from making rash judgments, playing the fool or making costly mistakes. We must segregate the brainstorming segment of the problem-solving process from the segment in which we actually decide on a plan of action. If we don't keep the steps separate, we can get confused, because we think that to run with a crazy idea for a while is foolhardy. Someone in the group might actually get the idea that you'd implement this plan, but you're just talking. Talk is cheap: you haven't decided anything. You're just taking a little jaunt down the "what if" lane on the highway of life. A good problem-solving format encourages you to run with a number of ideas before you begin making determinations about payoffs and probabilities for success.

"The fact is that mediocre and even goofy ideas are often the genesis of really great ideas."

One way to look at the critical aspect of our personality is to view it as a role. It's a part of us, not our entire personality, but a role we assume from time to time in managing the course of our everyday affairs. Being a first-rate judge is a worthwhile role when it is executed at the appropriate time. Analyzing a challenge or coming up with solution possibilities at this time may slow or stop the new idea generation process. The more ideas generated, the more good

ideas you'll have. To get really serious about the brainstorming process, you need some equipment. A flip chart. Squirt guns. And somebody with chutzpah.

Flip Chart

So first, we gotta hang the judge. On a flip chart, list all the critical things you and your teammates are likely to say when new ideas make your eyes roll. "*Been there; done that.*" "*The doctor won't go for it.*" "*What would our patients think?*" "*People'd think we're nuts.*" Whatever. Get everything down. Don't leave anything out. Then raise your hand and take the pledge. "*I (your name) promise never to utter these remarks or anything like them in our meetings.*" Read the list. Everybody in unison. Keep the list in full view every time you meet. Remind yourselves before each meeting: "*And what are we not going to say today?*" (It works best if you get the appropriate Mr. Rogers intonation.)

Squirt Guns

Laws must have teeth. That's where the squirt guns come in. They're your enforcer. At the beginning of the first problem-solving meeting, hand out a squirt gun to every member of the team. Do it with a flourish. You're bringing in the heavy ammunition. Anyone who says anything remotely resembling the criticisms you've promised one another not to say gets it. Give no quarter. This is not a theoretical construct. It works. I've done it – with senior executives around a marble conference table in the boardroom of an insurance company in West LA. The oriental rugs dried in no time.

Someone with Chutzpah

Put someone in charge of the brainstorming process. They're the drill sergeant; they're the cheerleader. They are not the doctor. They are not part of the process. They keep the process moving by staying on guard to keep you from working on a specific idea during the brainstorming, from criticizing ideas or from censoring yourself. "*How about...no, that won't work*" can get you doused as well. They're also full of praise when you really start cookin'.

Until you can throw ideas out quickly, go around the room. One person – one idea. Next person – next idea. Keep it moving. Quick. Quick. Quick. If it's not going fast, you're evaluating too much. It should look like a great game of charades or Pictionary. (Have someone write the ideas on a flip chart. They're not part of the process, either. This also keeps things moving.) If someone doesn't have an idea, have them pass. Encourage people to say anything – to say the first thing that pops into their mind. Crazy ideas sometimes aren't all that crazy. The orthodontist who set up a limousine service for pickup and delivery paid for it in the first year. (You can imagine how eyes rolled the first time that suggestion was aired.) What you throw out in jest can often get to the crux of an issue. In a recent problem-solving session on improving efficiency, someone blurted out, "*Keep the doctor off the phone.*" It was said as a joke, but dozens of staffers in the audience groaned – the doctor did a heads up. (And we later came up with a couple of ideas to make it work.)

Get stuck? Ask for ideas from industry. Orthodontists who use pagers so mom can go shopping during long appointments probably got the idea from restaurants. Or ask "out there" questions. What would contradict history? What would be the most outrageous solution? What would get you on the cover of *People*, *The New York Times*, *National Enquirer*? What would arouse curiosity? Here's one. What if you were *less* effective?

A good problem-solving formula combines a number of elements. Brainstorming is one and it's key. Get it working, then you're ready to bring back the critic and hammer out how to make these novel ideas work.

Creative problem solving was the topic of Ms. Brunner's Gorman Institute workshop that she conducted with the staff of Dr. Keith Black of Asheville, North Carolina. Ms. Brunner is manager of Ormco's Practice Development Seminars and Clinical Impressions Live! programs.

Alexander Discipline International Symposium

Arlington Marriott Hotel, Arlington, Texas, May 21-22, 1998

"Vertical Problems – Open- and Deep-Bite Treatment" Symposium Speakers

(partial listing as of C.I. press time)

Dr. Jorge Calderon – Mexico
Dr. Renato Pimentel – Brazil
Dr. Julio Saldarriaga – Colombia
Dr. Adele Fantoni – Italy
Dr. Isao Koyama – Japan
Dr. Fumikazu Kushima – Japan
Dr. Atsuhiko Horiuchi – Japan
Dr. Shinji Takagi – Japan
Dr. Wick Alexander – USA



Arlington Marriott Hotel

Dr. Wick Alexander Extends an Invitation to ADI Members and Nonmembers to Share Learning Experiences and Texas Hospitality with Orthodontists from Around the World

For two decades, the Alexander Discipline has enjoyed continuous worldwide growth as orthodontists are becoming increasingly aware of this uncomplicated technique based on sound principles and extensive clinical experience. Contributing to this success has been a focus on education through ADI study clubs; basic and advanced Alexander Discipline courses; and presentations to graduate students, university continuing education programs, alumni groups and society programs. Previous worldwide symposiums sponsored by Dr. Alexander in Arlington and by the Alexander Discipline Study Club of Japan in Osaka, Japan, proved to be exceptionally popular and productive. So plans are well in place for the ADI Symposium to be held May 21-22, 1998, in Arlington, Texas, immediately after the American Association of Orthodontists meeting in Dallas.

The theme of the meeting will be "Vertical Problems: Open- and Deep-Bite Treatment." A panel of speakers will make 30-minute presentations on the subject followed by open discussion. Ample opportunity will also be provided to share your experiences, problems, and ideas with co-disciplinarians.

Social events include a golf tournament to be held Wednesday afternoon, May 20. If you are interested in competing in the tournament, please make this known when registering for the symposium and bring your clubs. On Friday night, you'll experi-

ence generations of Texas heritage and enjoy a party at the West Fork Ranch in Fort Worth. Bring your jeans and cowboy boots for an evening of fun.

A block of rooms at the Arlington Marriott Hotel (located in the heart of the Metroplex entertainment district and near the DFW airport) has been reserved at special rates for symposium attendees. You can make reservations by calling the hotel directly at (800) 442-7275 or (817) 261-8200 and indicating you are with the Alexander Discipline International Symposium.

For planning purposes, please make your hotel reservations and register for the symposium as soon as possible. Registration is easy. Simply mail a check for \$100 payable to "The Alexander Discipline" to cover the registration fee to: The Alexander Discipline International Symposium, 840 W. Mitchell Street, Arlington, TX 76013-2585. Also include a note indicating if you plan to participate in the golf tournament. If you are bringing guests, indicate the number who will participate in the golf tournament and the number attending the West Fork Ranch party. If you have any questions or need further information, contact: Ms. Brenda Horton, phone (817) 275-3233, fax (817) 277-3826.



Guests enjoy Texas hospitality at the West Fork Ranch.

Lecture/Course Schedule at a Glance – Through July 1998

Date	Lecturer	Location	Sponsor, Contact and Subject
3/6	Joe Mayes/Paula Allen	Denver, CO	Ormco; Katie (800) 854-1741, Ext. 7573; Seminar—Fitting and Removing the CBJ*
3/19-21	Didier Fillion	Kyoto, Japan	JLOA; Dr. Hamanaka 81 742 46 9498; Lingual Orthodontic Typodont Course*
3/23-24	Luis Batres	Panama City, Panama	Dr. Batres (507) 264-3920; Lingual Orthodontics*
3/25-26	Rand Bennett	Tokyo, Japan	Ormco Japan; R. Kishi 81-3-3432-0065; "Effective Tx to Achieve a Quality Result"
3/31-4/2	Stanley Braun	Boston, MA	Harvard; Dr. Peck (617) 432-4281; "Latest Advances in Modern Edgewise Therapy"
4/16-17	Didier Fillion	San Francisco, CA	Fillion Lingual Ortho Seminars (800) 474-3633; Lingual Orthodontics
4/17-18	Jim Hilgers	Pinehurst, NC	Ormco; Pat Contreras (800) 854-1741, Ext. 7501; Seminar—"Hyperefficient Orthodontics"
4/17-18	Terry Dischinger	Lake Oswego, OR	Dr. Dischinger; Kelly (503) 657-8081; "Comprehensive Hands-On Herbst Training"*
4/18-19	Didier Fillion	Chicago, IL	Fillion Lingual Ortho Seminars (800) 474-3633; Lingual Orthodontics
4/20	Wick Alexander	Oakbrook Terrace, IL	Illinois Ortho Society; Dr. Hayward (847) 382-5589; Verification of the Alexander Discipline
4/20-21	Didier Fillion	Atlanta, GA	Fillion Lingual Ortho Seminars (800) 474-3633; Lingual Orthodontics
4/22-25	Jim Hilgers	Mission Viejo, CA	Dr. Hilgers; Kim (714) 830-4101; "The Essence of Practical Orthodontics"
4/24	Barbara Brunner	Las Vegas, NV	Ormco; Katie (800) 854-1741, Ext. 7573; Seminar—"Just Say It!"
4/24	Joe Mayes/Paula Allen	Atlanta, GA	Ormco; Katie (800) 854-1741, Ext. 7573; Seminar—Fitting and Removing the CBJ*
4/25	Clark/Moawad/Zuelke	San Francisco, CA	OMG; Sabine (800) 621-4664; "Three Leading Companies, One Powerful Message"
5/1	Clark/Moawad/Zuelke	Atlanta, GA	OMG; Sabine (800) 621-4664; "Three Leading Companies, One Powerful Message"
5/1	B. Brunner/J. Piankoff	Detroit, MI	Ormco; Katie (800) 854-1741, Ext. 7573; Seminar—"Round Peg..Round Hole"
5/2	Clark/Moawad/Zuelke	Chicago, IL	OMG; Sabine (800) 621-4664; "Three Leading Companies, One Powerful Message"
5/7-8	Nasib Balut	Lima, Peru	Universidad Cayetano Heredia; Dr. Williams 51 1 440-3302; The Orthos System
5/7-9	Mario Paz	Beverly Hills, CA	Dr. Paz; Shelly (310) 278-1681; Hands-On Lingual Ortho with Typodonts & Patients*
5/15	Jim Hilgers	Dallas, TX	AAO Annual Session; Lecture—"Hyperefficient Orthodontics"
5/15	Jerry Clark	Dallas, TX	AAO Annual Session; Lecture—"How to Stay One Step Ahead of the Competition"
5/16	Michael Swartz	Dallas, TX	AAO Annual Session; Lecture—"Fact or Friction"
5/16	Joe Mayes	Dallas, TX	AAO Annual Session; Lecture—"Simplified Delivery of the CBJ"
5/17	Didier Fillion	Dallas, TX	AAO Annual Session; Lecture—"How to Achieve Excellence with Lingual Orthodontics"
5/18	Jim Hilgers	Dallas, TX	AAO Annual Session; Lecture—"Class II Trans-Arch Mechanics"
5/19	Jim Hilgers	Dallas, TX	AAO Annual Session; Lecture—"Tandem Mechanics"
5/19	Michael Swartz	Dallas, TX	AAO Annual Session; "Molar Distalization"
5/21-22	Wick Alexander	Arlington, TX	ADI; Brenda (817) 275-3233; ADI Symposium
5/29-30	Rebecca Poling	Orange, CA	Ormco; Katie (800) 854-1741, Ext. 7573; Staff Records & Bonding*
5/30-6/1	Kyoto Takemoto	Tokyo, Japan	Dr. Takemoto; R. Kishi 81 3 3432 0065; In-House Lingual Ortho Typodont Course*
6/3-4	Kyoto Takemoto	Tokyo, Japan	Dr. Takemoto; R. Kishi 81 3 3432 0065; In-House Lingual Ortho Typodont Course*
6/5	Jim Hilgers	St. Louis, MO	Ormco; Katie (800) 854-1741, Ext. 7573; "The Era of Hyperefficient Orthodontics"
6/5-6	Joe Mayes	Paris, France	AOSM; Josiane 331 4859 1617; STM & CBJ Typodont Course*
6/9	Joe Mayes	Lisbon, Portugal	AOSM; Josiane 331 4859 1617; STM & CBJ Typodont Course*
6/12-13	Barbara Brunner	Orange, California	Ormco; Katie (800) 854-1741, Ext. 7573; Seminar—"Executive Presentations"
6/19	Jerry Clark	Montreal, Canada	Ormco; Katie (800) 854-1741, Ext. 7573; "Marketing: Strategies & Tactics"
6/26-27	Terry Dischinger	Lake Oswego, OR	Dr. Dischinger; Kelly (503) 657-8081; "Comprehensive Hands-On Herbst Training"*
6/28-30	Wick Alexander	Tokyo, Japan	R. Kishi 81 3 3432 0065; Alexander Discipline Comprehensive*
7/1-2	Wick Alexander	Kamkura, Japan	R. Kishi 81 3 3432 0065; Alexander Discipline Advanced
7/1-5	Luis Batres	Panama City, Panama	Dr. Batres (507) 264-3920; Alexander Discipline Comprehensive*
7/6-8	Didier Fillion	Paris, France	Dr. Fillion (Fax) 33 1 4755 1833; In-Office Lingual Ortho, Typodonts, Lab & Clinic*
7/16-18	Duane Grummons	Marina del Rey, CA	Dr. Grummons; Kaci (310) 822-8711; Innovations in Nonextraction Orthodontics

*Typodonts and/or Participation

For additional information on any course, please call the contact number shown or (international doctors) Ormco distributor.



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