

# CLINICAL Impressions®

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# The Art and Science of Building Relationships

by B. Keith Black, D.D.S., M.S.  
Asheville, North Carolina



arn it, Jim, I'm a doctor, not a salesman."

As an original *Star Trek* fan, I hope you recognize the paraphrased rebuff from Dr. McCoy to Captain James T. Kirk. As the only doctor on a deep space military vessel, Dr. McCoy enjoyed job security. He may have had to put up with scary alien encounters, Spock's Vulcan

anatomy and Kirk's impetuous nature, but he needed only to concern himself with being a clinician – nothing compared with running the business of an orthodontic practice today. Our roles, on the other hand, are numerous and varied. Besides clinician, we're coach, psychologist and director of marketing and sales.

Having determined the title of this article, I'm still uneasy with it. Why? Because it clearly indicates that I am a salesman. When I went to school, I know I went there to become a doctor of dental surgery, a dentist. I then received an advanced certificate in orthodontics as well as a masters degree in orthodontics from the University of North Carolina at Chapel Hill. There are courses in sales in business schools across the country, but I didn't take any of them. Why would I? I'm a doctor.

When I discuss selling at lectures around the country, many orthodontists are, at first, themselves uneasy. This article will attempt to aid you in a paradigm shift about selling. It contains some basic business facts and a discussion of a model of selling that is patient centered. I will share my thoughts about what the patient is really buying and offer some ideas for positioning the practice for you to consider so that you, too, can enjoy Dr. McCoy's feeling of job security.

## Why We Hate the "S-Word"

The concept of selling conjures in my mind a man in a two-piece leisure suit in a used car lot trying to get me to

buy something I don't want. This common image of the typical salesman explains why selling is a difficult role for us to assume as health care professionals. This image of selling is a manipulative one where the salesman forces products on people who neither want nor need them. The image is unwarranted in health care delivery. Think of how much you enjoy helping others get what they want or need. I truly find it satisfying to help others get what they want. In helping others get what they want, we are building relationships. Selling as an outgrowth of building relationships is a concept that I think most of us can find comfortable. It's an approach quite different from the traditional model of selling that we find so distasteful.

The traditional model of selling (Figure 1) is 10 percent opening, 20 percent qualifying the individual, 30 percent presenting the product or service and 40 percent closing, closing and more closing – in other words, high pressure sales. In the model of Relationship or Patient-Centered Selling, the pyramid is inverted (Figure 2). The majority of time is spent in building a relationship with the customer or patient – over 70 percent of the time in building trust and identifying the needs of the patient – with only 10 percent delegated to the close. This model of selling is excellent for orthodontics. If it is employed appropriately, you'll spend most of your time ensuring that patients have the opportunity to express their wants and needs and understand why your practice is best



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Dr. Keith Black received his M.S. and certificate in orthodontics from the University of North Carolina, Chapel Hill. He has been in private practice since 1986, lectures at UNC and is a sought-after speaker on practice management and efficient clinical systems. Active in local community affairs, Dr. Black has been awarded Employer of the Year as well as Small Business Leader of the Year by the Asheville Chamber of Commerce. He and his wife Susan have two daughters, Michelle and Kathryn, and are expecting their third child in September.

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# Selling Orthodontics: That Last a Lifetime

## Traditional Selling

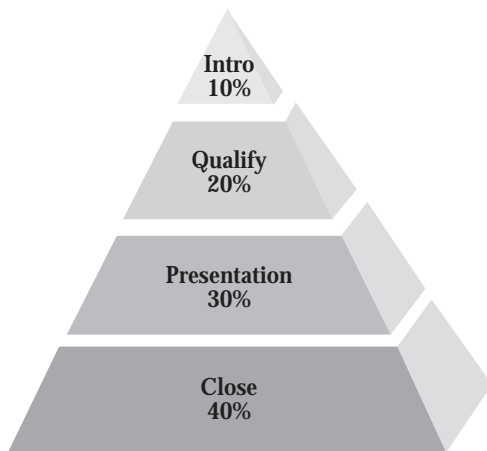


Figure 1.

## Relationship Selling

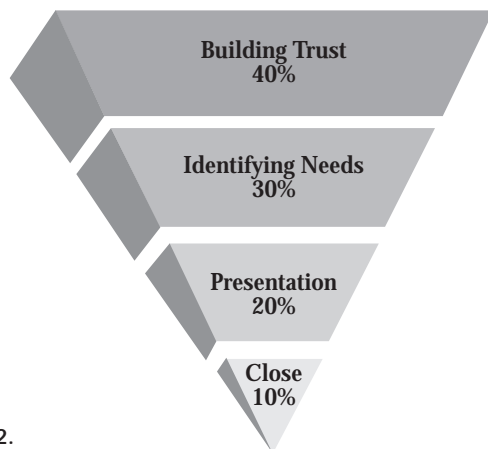


Figure 2.

suit to meet those needs. You simply will need to “sell” the opportunity to start.

### Raving Fans: Why a Patient-Centered Model?

The Patient-Centered Model allows the doctor as consultant to share expertise about what would be best for the patient from a position of authority and respect. It is an excellent complement to optimum patient relations – a marketing strategy that has been highly regarded in our profession for years. To have existing

patients offer the kind of testimonials that make prospective patients see the value in the investment they are making, we must create raving fans. In a survey done by the Forum Corporation of 2,374 customers from 14 organizations, more than 40 percent listed poor service as the #1 reason for switching to the competition. We are all familiar with the 3/11 rule of marketing, but let me paraphrase it. If three customers are satisfied with a product or service, they may tell other people about it, if the subject comes up. If customers experience an unpleasant service or product that did not meet their expectations, they will tell 11 other people. Since patient recommendations are critical to prospective patients’ perception of your practice, patient service then becomes a vital marketing strategy and is integral to incorporating the Patient-Centered Model into your practice. The final measure of quality customer service is simply how patients perceive it. Perceived service quality is the difference between the

“The first thing we did to incorporate the Patient-Centered Model was to go to the one-step consultation.”

service they got and the service they expected. Perception is how we make sense out of what we experience. It is not the quality of the service you give, it is the quality of service patients *perceive* that causes them to be satisfied with you and offer glowing recommendations that solidify their own and their dentists’ referrals. In survey after survey of businesses around this country, it is poor service that accounts for the majority of customer dissatisfaction. A recent study published in *U.S. News and World Report* cited why customers stopped coming to a business:

- 1 percent died;
- 9 percent were drawn away for normal competitive reasons such as another office opening closer to home;
- 14 percent were dissatisfied with the product; and
- 68 percent were displeased with the attitude of indifference on the part of an office representative.

Our goal for our practices, then, should have customer

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## Dr. Black

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service as its highest priority. Paul Hawken, founder of Smith and Hawken and author of *Growing a Business*, states, “Our goal as a company is to have customer service that is not just the best but is legendary.” Lewis Gerschener, CEO of American Express Travel Related Services, says, “Service is our most strategic weapon. It is the only way we can differentiate ourselves in the marketplace.”

### The Patient-Centered Model in Action

The first thing we did to incorporate the Patient-Centered Model was to go to the one-step exam/consultation. We have used it now for over seven years. The patients can be seen in a short period of time, have all their questions answered and concerns alleviated and be ready for braces in one 1-hour appointment. In most cases, the one-step approach serves patients’ needs best and is consistent with the Patient-Centered Model. Time is a precious commodity in today’s dual-income, on-the-go world. The one-step approach takes into account patients’ busy schedules and is of tremendous value and benefit to them. I may have been rationalizing that my patients expected a separate

**“Every contact is a chance to meet an expectation, exceed an expectation or fail to meet an expectation. Our lowest acceptable standard is to meet a patient’s expectation.”**

consultation based on my own preestablished idea of what an orthodontist was supposed to do. Once I got past the idea that I was rushing patients (i.e., using high pressure sales tactics) and understood that their needs are more important than my need to show them what I know, I finally got comfortable with the approach.

So let’s talk about the 70 percent of the Patient-Centered Model that relates to building trust and satisfying patients’ needs. Roger Levin, a dental practice management consultant, counsels that everyone listens to a radio station with call letters WIIFM (“What’s In It For Me?”). If we’re not attuned to hearing and responding to each patient’s needs, we may be “selling” something different from what our patients want to purchase.

I’ll use an example from my own life. When I purchased a life and disability insurance policy, I was buying comfort and safety. The insurance salesman sold – helped me purchase – the ability to take care of my family in the event of my absence. If the salesperson had positioned the insurance as an *investment* and I was in the market for *security*, we might never have made a deal. I certainly would not have felt that he had “helped me purchase” anything.

I think we as orthodontists get caught up in “selling” our clinical expertise. We prominently display our diplomas and list a string of professional affiliations in the biographies that dominate our brochures. We “sell” functional results. Patients “buy” an attractive smile and improved self-confidence and self-esteem. We “sell” clinical expertise. Patients “buy” an enjoyable place for themselves or their children to come. On the whole, patients don’t know the difference between average and excellent results. They don’t know what a reasonable cost for quality care is. They can’t judge the technical competence of a doctor, whether the diagnosis is correct or whether the treatment plan is optimum, given their particular circumstances. In fact, simply having a D.D.S. diploma on the wall gives most patients all the assurance they need of your clinical capability. To them, the diploma is the level playing field. To distinguish ourselves, we need to ensure excellence in everything with which our patients come in contact and create value in their experience with us.

### So If Not Clinical Expertise, Then What?

Because people cannot judge you based on objective clinical criteria, their decision to begin with your practice is based on things they *can* make judgments about and what they are told by others. The majority of dentists make noncommittal referrals, giving patients at least two names of local orthodontists. (I may get called first because my name is early in the alphabet. I hope a Dr. Adams never moves into the neighborhood.) Because so little distinction is made through such referrals, the image that we project becomes the first critical elements by which we are judged – the initial patient call, the literature we send (including whether they can follow the map or directions we give), the attractiveness of our signage, the neatness of the parking lot and building, how we greet them when they first walk into the office as well as the general appearance of the office and the staff. Given that 85 percent of what we remember comes through our eyes with only 11 percent through our ears, we need to view our practices through our patients’ eyes, taking a visual inventory from time to time to ensure that what our prospective patients perceive about our practice is the image we intend to give.

We have a phrase we use around the office that sums up this idea: “People don’t care how much you know until they know how much you care.” Research from a variety of sources would concur. The U.S. Office of Consumer Affairs determined that 55 percent of a person’s decision to buy rests on how well one likes the seller. Research by the Carnegie Foundation for the Advancement of Teaching indicates that 15 percent of one’s financial success is due to one’s technical knowledge, while 85 percent is due to one’s personality and influence. In other words, people do business with people they like and trust.

So how do people get to like you and trust you? Juan Carlson, who revitalized an airline near bankruptcy through landmark customer service, might suggest it is through what he terms



“People don’t care how much you know until they know how much you care.”

“moments of truth.” Every time individuals come in contact with your company (in your case, your practice), they experience a moment of truth and thereby feel better, worse or the same about you. Every contact is a chance to meet an expectation, exceed an expectation or fail to meet an expectation. Our lowest acceptable standard is to meet a patient’s expectation. It is how each individual moment of truth is handled that will determine your success in the marketplace.

The initial patient call as well as the initial examination are critical moments of truth because they are the foundation from which all other perceptions will flourish. One of the first things I teach new staff members who are taking initial patient calls is to use language that assumes that the individual is already a patient. It’s simple phrases such as, “When Jimmy gets his braces...” or “When you bring Sally in, you can relax with some hot coffee,” that imply that patients and parents are already included as members of our patient family.

We script the new patient call in terms of what to ask as well as ways we can respond to help the prospective patient feel comfortable. For example, we look for ways to congratulate patients for the decision they have made about exploring the possibility of orthodontic care. Sometimes mothers who are making the call about a young child are uncertain about the validity of their concerns. In such a case, Sherry Rauschenplat, our receptionist, may compliment the woman on having the foresight to have her child seen early in order to take advantage of all that orthodontics has to offer. If the patient is an adult, she might mention that we have over 100 adult patients and that we provide a private adult treatment room so that they’re comfortable. We make these comments as a means of building rapport that we know will be reinforced over time as we get to know one another.

Our most powerful visual aid is the practice itself and we maximize its impact with an office tour during the initial exam. It’s

our “infomercial,” providing a limitless number of opportunities to create positive moments of truth. Through the tour, we focus on two things: demonstrating how we will satisfy needs the patient has specifically mentioned (or that we might surmise based on their profession, etc.) and suggesting at least five aspects of the practice that we have designed based on the feedback we continually solicit from patients.

We might mention how the openness of the office reflects our philosophy of accessibility to both patients and parents and that through it we also create an active, fun atmosphere that they’ll enjoy sharing. For mothers concerned that their children have an enjoyable experience, we point out what contest is running, the reward system for good hygiene and making appointments on-time, the Gameboys in the on-deck area and our reasons for providing these services and incentives.

Do other practices around the community offer such services? Sure, some do. We make sure patients know we do. If the patient or parent is in the health profession, we may go into the sterilization procedures in more depth, with lead-in phrasing such as, “You might be more interested than others in our sterilization procedures since you know firsthand how important these precautions are.” We might highlight the X-ray machine with intensifying screens that limit exposure to no more radiation than being in the sun for three hours or that everyone in the clinic is a certified dental or orthodontic assistant. These nuances of communication show patients that we regard them as individuals. Every time you respond to an expressed need or concern, especially one mentioned in an earlier conversation, you show that the caring aspect of your practice is as important as the clinical. Example: “I remember you mentioned that you’re concerned that Susie not have teeth extracted as you did when you were young, so I wanted to clarify that Dr. Black is committed to doing everything possible to ensure that Susie keeps all of her teeth.” Combining this care with a strong walkout package that includes video imaging of pictures and review of the appointment creates an impressive visit. This attention to listening, caring and acknowledging your patients’ needs through empathetic responses is integral to building strong relationships.

## What Are Patients Coming to Your Office For?

When patients come into your office, what are they really coming to buy? We’ve already established that while our clinical expertise is a given, it is not why people come to us. Psychologists say that humans do everything for one of two reasons: 1) to gain pleasure; or 2) to avoid pain. Put another way, people purchase good feelings or solutions to problems – good feelings and problems as *they perceive them*. Seventy-five percent of all buying decisions are based on *subconscious* wants and needs as related to the pleasure/pain dichotomy. People buy based on emotion; they justify the decision based on logic. Prestige, perceived

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# Implants as an Alternative for Missing Maxillary L

by Julia E de Harfin, D.D.S., Ph.D.  
Buenos Aires, Argentina

## Introduction

Dental agenesis occurs more and more frequently (as studied by Sinclair, McNeill, Joondeph, Thilander, Dolder, Grahnen, Meskin, etc.), especially missing maxillary lateral incisors, which represents a true challenge to an aesthetic solution. For a long time, moving the entire lateral segment mesially to place the cuspid in the lateral incisor position was suggested as an alternative treatment (Tuverson, Zachrisson, McNeill, etc.). Since the cuspid has a very different crown and root shape to that of the lateral incisor, as well as a darker shade, these solutions end with compromised results that do not fulfill the aesthetic requirements of good orthodontic treatment. Since lateral movements are made using bicuspid, which have shorter, thinner roots, functional requirements are not fulfilled either.

On the other hand, replacing the missing lateral incisor by fixed prosthetic means requires reshaping neighboring teeth, with the consequent removal of varying amounts of enamel, depending on the type of restoration chosen (traditional fixed bridge or Maryland bridge), with the eventual risk of gingival recession, caries and the resulting aesthetic compromise.

The osseointegrated implant is the most conservative and biological method, since a missing tooth can be replaced without damaging the neighboring teeth, provided the following factors are taken into account:

1. Angulation and position of the roots of neighboring teeth.
2. Smile-line height.
3. Width of the interdental space.
4. Amount of bone available.
5. Length and width of the implant.
6. Position of the implant with respect to the basal bone.
7. Remaining gingival thickness (and its transparency).
8. Degree of patient's commitment to future maintenance.

We will take all these considerations into account as we describe the following case.

## Case Report

**Motive for the Consultation.** The 23-year-old patient consulted to resolve her problem of congenitally missing maxillary laterals. She had been wearing a removable acrylic appliance to replace them (Figures 1-4) and was experiencing the consequent phonetic and aesthetic problems. Patient presented a mesiofacial biotype, with a straight and harmonious profile. Dentally, she had Class II molar and cuspid relationships. The lower left 2nd primary molar was in infraocclusion,



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Dr. Julia Harfin completed her dental and orthodontic training at the University of Buenos Aires, where she later received her doctorate in 1969. She serves as professor, Department of Orthodontics at Maimonides University. Dr. Harfin has spoken and published extensively domestically and internationally and belongs to numerous orthodontic and dental societies, including the American Association of Orthodontists and the *Sociedad Argentina de Ortodoncia*, where she has served as president from 1990 to the present time. She maintains her private practice of orthodontics in Buenos Aires, with a heavy emphasis on adult treatment.

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# ive Treatment aterals\*



Figure 1.



Figure 2.



Figure 3.

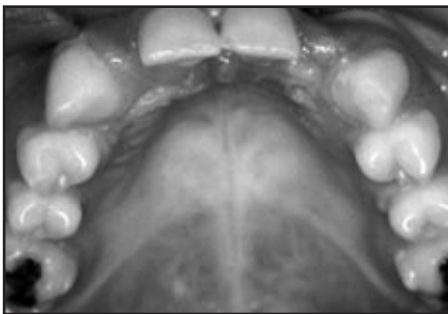


Figure 4.



Figure 5.



Figure 6.

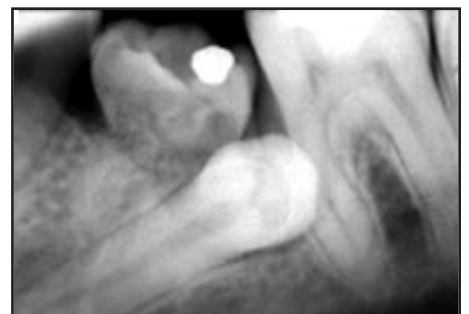


Figure 7.

with a mesially inclined lower left 1st permanent molar and distalization of the lower left 1st bicuspid as well as the formation of a diastema due to its rotation (Figures 5-6). The inadequate inclination of the upper right cuspid, along with a very pronounced mesial inclination of its root (in the opposite direction to that required for an implant space), was another problem. On her radiographs (Figure 7), we can see the almost horizontal position of the lower left 2nd bicuspid, with its fully formed root and its crown next to the middle third of the 1st molar's mesial root. This represented a

major challenge for its proper placement.

**Treatment Plan.** With the placement of two osseointegrated implants to replace the missing laterals as our objective, we started treatment by placing preadjusted aesthetic brackets on the maxillary arch (Figure 8). As seen in this same figure, two acrylic teeth were added to the arch as a temporary solution to the patient's aesthetic problem during active treatment. The maxillary central incisor and cuspid roots were uprighted, leaving adequate room for the implants. This space should

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Figure 8.

# Orthodontics and

by Raymond T. Bedette, D.D.S.  
Auburn, Maine

## **T**he Internet: Do I really need to do this?

The Internet is growing exponentially, especially a portion of it known as the World Wide Web (WWW). Currently more and more people in your community are connected each day. Directories of local businesses are appearing in the smallest of communities. Commerce, off to a slow start on the Web, is rapidly gaining acceptance as security issues are being addressed. You need to become connected now to position your practice and benefit from the information revolution. The revolution is not coming – it's here!

## **What am I going to gain from being on the Internet?**

Three areas to directly benefit your office are unlimited information on nearly any subject, business promotion and access to an increasing supply of orthodontic literature.

## **Information**

The Internet (including the WWW) is limitless; finding what you want is the trick. Someone recently described the Net as "a library with all the books on the floor." Another way of thinking of the WWW is as a vast rack of magazines in which the articles are interconnected. Following a reference from one magazine to another requires only a click of the mouse button. The most difficult and time-consuming process of using the WWW efficiently is sifting through the millions of sites to find what you are looking for. The next most difficult problem is then deciding if what you found is legitimate. If you are looking for restaurant reviews, it's not a critical loss if the writer has questionable taste, but if you are looking for scientific material or advice regarding stocks, you would like to be *assured* that it is a responsible site. At this point in time, that is not always easy to do, so use a healthy bit of skepticism when you get information. In the last presidential election, there were numerous sites that appeared to be "official candidate Web sites" that upon closer inspection revealed that they were not. Some were clever satiric send-ups, others were of a more sinister nature. A "Wild West" attitude permeates the Internet. There is scant evidence of governmental or legal controls. This is both a blessing and a curse. No matter what one's interest, others can be found who share it. This can range from the sublime to the ridiculous to the hateful. The Uniform Resource Locator (URL) or Web address itself cannot be easily corrupted, so you can rely on a known address to be correct; however, some clever hackers have succeeded in altering site contents on very famous addresses, such as the Pentagon's.



Dr. Ray Bedette received his D.D.S. and his orthodontic training from the State University of New York at Buffalo (University of Buffalo). A diplomate of the American Board of Orthodontics, Dr. Bedette also is coeditor-in-chief of *The Orthodontic CYBERjournal*, an on-line magazine for the orthodontic profession. He maintains his private practice of orthodontics in Auburn, Maine.

The limitless range of information on the WWW includes travel sites (try <http://www.expedia.com>), instant maps of anywhere in



# the Internet

the US ("map-it" at <http://www.proximus.com/yahoo>), music (<http://www.mass-music.com>) – you can sample the CD's before you order), the world's largest bookstore (<http://www.amazon.com>), lodging in most of the world's major cities, flight schedules, IRS forms (<http://www.irs.ustreas.gov>) and much, much more.

There are also customizable services that will search the Internet for news on the topics of your choice and report back to you at regular intervals. Two of the best are PointCast (<http://www.pointcast.com/main.html>) and MyYahoo (click on "MyYahoo" at <http://www.Yahoo.com>), a new service from the Yahoo directory site. Using MyYahoo, for example, you can get nearly instant updates on headlines, business news, entertainment and current quotes on up to 30 traded stocks, bonds or mutual funds. The data runs like a ticker tape across the bottom of your screen while you are doing other things, or it can appear as part of a screen saver. You can easily shift into an in-depth follow-up on any of the items reported. In seconds you can have all the pertinent new releases regarding a stock in your portfolio or the background on the latest headlines in a variety of subjects. The service is free!

There are many sites devoted to orthodontic products and companies. Ordering your office supplies via the Internet is only a matter of time. Examples are:  
**"A" Company** – <http://www.acortho.com>  
**CounterPoint Software** (for direct reimbursement) – <http://www.counterpointsoftware.com>  
**Dental Exchange** (wide range of companies/services) – <http://www.dentalxchange.com>

**Dentaurum** – <http://www.dentaurum.com>  
**Dentofacial Software** – <http://www.dentofacial.com>  
**Dockstader Orthodontic Lab** – <http://www.dockstader.com>  
**Ferraro Orthodontics** – <http://www.i-i-m.com/ferraro.htm>  
**GAC** – <http://www.gacintl.com>  
**Indesco, Inc.** (office design) – <http://www.indesco.com/~plan>  
**J&J Orthodontic Lab** – <http://www.pictac.com/jjortho>  
**Lancer** – <http://www.lancerortho.com>  
**Lord's Dental Studio** – <http://www.lordsdental.com>  
**Masel Orthodontic Products** – <http://www.masel.com>  
**Microdental Lab** – <http://www.microdental.com>  
**Ormco** – <http://www.ormco.com>  
**Ortho Organizers, Inc.** – <http://www.orthoorganizers.com>  
**Ortho-Vision Technologies, Inc.** – <http://www.webworldinc.com/ovt>  
**Pro Orthodontic Lab** – <http://proorthodonticlub.com>  
**Raintree Essix** – <http://www.essix.com>

**Welcome! *The Orthodontic CYBERjournal* is dedicated to the art and science of orthodontics and dentofacial orthopedics. Please help it grow by submitting articles, tips and techniques, problems, solutions and humor.**

This site is best viewed using a 3.0 or newer browser capable of handling tables such as Netscape 3.0 or MS Explorer 3.0.

- **Clinic and Research**
- **Business, Economics and Office Design**
- **Odds and Ends**
- **Humor ???**
- **Product Spotlight**
- **Guest Book - Post Messages**
- **Article Submission**
- **Sponsoring This Site**
- **Related Web Sites**

A recent issue of *The Orthodontic CYBERjournal*, an on-line journal with everything from research to product presentations (<http://www.OC-J.com>).

**3M Unitek** – [http://www.mmm.com/product/index\\_U.html](http://www.mmm.com/product/index_U.html)  
**Tru-Tain** – <http://www.tru-tain.com/prod.html>

Many sites contain both product promotion and other items such as articles and humor. One of the best ortho sites combining multiple interests is Ormco's (<http://www.ormco.com>). (Well, after all, this is their publication.)

## Promotion

"Homepages" (individualized information centers on the Web) are appearing commonly for private practices. As the on-line portion of the community becomes larger, the Web will gradually become the first source of information, bypassing the yellow pages as the depth and quality of information available on the Web

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## Dr. Bedette

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makes the yellow pages pale by comparison. Office homepages allow present and potential patients or parents access to information regarding orthodontics and how it is delivered in a particular office. FAQs (frequently asked questions) can be posted for all to read. These can include areas of expertise, level of education/training, types of appliances used, financing information, even before-and-after photos. Other promotional information such as special interests, photos of the office and/or staff, location maps and personal information such as the doctor's or staff's hobbies are all very easily distributed and kept up to date by a homepage on the Web. If you would like to see an excellent example of a tasteful yet effective practice promotional homepage, have a friend surf you over to Dr. Steve Hechler's offering at: <http://www.hechler.com>.

The goal of an office Web page is to have it become a local attraction in and of itself. You want potential clients to visit the page whether they are seeking to find out about your office or not. In retail, Sears and Roebuck started the concept of the loss leader, selling something below cost to draw attention to their other products. The Web is no different. There are a couple of reliable ways to do this.

First, provide material that will attract people in the 10-to-15 age group. They are very likely to be connected, if not at home, then at school. Go for humor, contests, school news items, school sports or activities, local celebrities, whatever is happening in your area. You may want to enlist the help of one of your computer-savvy patients.

Second, become a jumping-off point for other Web sites that are of interest to young people or parents. A well organized list of hyperlinks (connections) to other Web sites can take some time to assemble, but if it is good enough, you can get your site bookmarked and visited frequently. How about a good set of connections to theme parks, rock groups, video game interest groups or television fan clubs? For adults, you can link to cooking sites, gardening, automobiles, sports, travel or organizations such as PTAs, MADD, environmental causes, etc.

### What do you want to avoid?

Obviously, the politically incorrect or material not suited for young viewers. Be sure to check out all the sites you link to be certain they do not themselves link to questionable material. It is best to try to check out the pages to which they link and at least a generation beyond that. In the Web world, five jumps (hyperlinks) can be a universe away, so it is impossible to be certain; however, at least double-check that first couple of layers.

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NOTE: This site is best viewed with a browser that supports tables. [Download a tables browser now.](#)

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Ormco's own homepage with the Ormco Zone, a work of art and tons of information by Webmaster Darrell Johnson at Ormco (<http://www.ormco.com>).

On your page itself, try to emulate other Web sites or magazine layouts that you like. Do not try to cram a lot of material or items onto the page. Leave some room, let the eye be drawn from item to item. White space (empty space) is an important element in the form and function of printed and Web material. Keep in mind the audience you are trying to reach – the parents and especially the kids. Avoid long descriptions or articles. The average Web surfer will not read lengthy material nor wait for a page that is slow to load. That means images need to be managed scrupulously. A good rule of thumb is that it takes about one minute to transfer 100 kilobytes of data. If it takes more than a minute or so for something to appear on their screen, it will not appear – your visitor will be gone. If images are managed well, you can produce good crisp images well under 100 kilobytes, but multiple images add up. You need images, but use them wisely. If you feel it necessary to include a large number

of images, you may want to place hyperlinked small versions or icons on the initial page, allowing viewers to load the larger images if they choose. For example, not everyone will want to see a map to your office; a simple icon labeled "map" would make it available on an as-needed basis and not force everyone to wait for it to download.

## Literature

While the dental community, and especially the orthodontic community, has been slow to get involved with the WWW, that is changing rapidly. Sites with articles and information pertinent to dentistry and orthodontics are becoming available. Of interest to the orthodontist are:

**AAO** – <http://www.aaortho.org>

**ADA** – <http://www.ada.org>

**Biomechanics in Orthodontics** –  
<http://www.ats.it/fiorelli/home.html>

**British Journal of Orthodontics** –  
<http://www.oup.co.uk/jnls/list/bortho>

**Dental Bytes MagEzine** –  
<http://www.dentalbytes.com>

**Dental Digest** – <http://www.dentaldigest.com>

**Dentistry OnLine** – <http://www.priory.com/dent.htm>

**Dentistry Tomorrow** – <http://dentistry.mall.it>

**European Journal of Orthodontics Online** –  
[http://www.infomed.es/dental/ortonet/revistas/rev\\_eur.html](http://www.infomed.es/dental/ortonet/revistas/rev_eur.html)

**Journal of the Australian Orthodontic Institute** –  
<http://www.anatomy.su.oz.au/~snowmd/AustOrthInst.html>

**JCO Online** –  
[http://www.infomed.es/dental/ortonet/revistas/rev\\_jco.html](http://www.infomed.es/dental/ortonet/revistas/rev_jco.html)

**L'Orthodontie en France** – <http://is.eunet.ch/npu/orthofrance>

**Orthodontic Forum** –  
<http://blue.nowcom.co.kr/~abeh/index.htm>

**Orthodontic Links for Orthodontists** –  
<http://www.bracesinfo.com/orthlink.html>

**The Angle Orthodontist** –  
<http://www.dental.washington.edu/angle-orthodontist.htm>

**The Electronic Study Club for Orthodontists** –  
<http://www-hsc.usc.edu/~jzernik/eclub.htm>

**The Orthodontic CYBERjournal** – <http://www.OC-J.com>

**Virtual Journal of Clinical Orthodontics** – <http://vjco.it>

Dr. Gary Roebuck and I met on the Dental Forum of Compuserve. We started *The Orthodontic CYBERjournal* (<http://www.OC-J.com>) in the spring of 1996, because we felt there was an opportunity for a different kind of journal for orthodontists. With the publication of our first issue, perhaps our most profound realization was that our view of the orthodontic community was very provincial. Our goal was to provide an on-line information exchange among orthodontists in the US and Canada. What we found was a global community. Daily we get E-mail, comments and ideas from everywhere: Taiwan, Peru, Europe, Australia, Iceland, Central America, even Texas. From these encounters, it is clear that orthodontists everywhere

are facing the same challenges – clinically, economically and politically. Why reinvent the wheel? For orthodontics to remain a viable specialty, we need to share our knowledge! The Internet, and the WWW in particular, are changing the way the world thinks. The Internet knows few geographic or political boundaries, is nearly instantaneous, is easily kept up to date, freely permits the sharing of information in a variety of formats and is inexpensive.

**“Office homepages allow present and potential patients or parents access to information regarding orthodontics and how it is delivered in a particular office.”**

A Web journal can provide material in a way that cannot be duplicated by printed or recorded media. Written articles and photos can be combined with sound, video, animation and instant links to referenced material. Past and current issues are searchable by key word, so it is no longer difficult to find that elusive comment or relocate the information that you meant to re-read. Hypertext links can connect to related information in separate issues or on other sites located thousands of miles away. For example, we recently published an article by Dr. Fiorelli on cantilever mechanics, connecting directly from our site to his in Italy.

Another feature of a Web journal, such as *The OC-J*, is the ability to print copies at will. This can be extremely helpful, especially with articles such as illustrated appliance construction as in our articles on the Pendex and Essix temporary bridge. Copies can easily be made for placement in a lab manual. The spreadsheet from Dr. Richard Boyd's article on analyzing your business can be used directly or given to your accountant.

Open forums are a common feature of many Web sites. Visitors to *The OC-J* can post comments for the world to read and receive responses directly to their own E-mail address. We are actively working toward multilingual versions of key articles to be published in the same issue.

One of the most restricting factors of printed material is the time it takes from when a publisher receives an article to its arrival on the desk of the reader. It is not unusual for this process to take months, sometimes approaching a year. Revolutionary ideas in the delivery of orthodontic care can become rather rusty waiting at the printer's. On the Web it is possible to do this in hours or, more practically, weeks. Articles and accompanying images can be submitted electronically in files from anywhere in the

# Dr. Bedette

continued from preceding page



Indesco, Inc., shares interior design ideas and office plans (<http://www.indesco.com/~plan>).

world. A recent article we published was forwarded over the Internet from Portugal, edited and published in a matter of days.

Future issues may include downloadable files for office forms or brochures, audio files, video, and real-time discussions with authors/educators. *The Orthodontic CYBERjournal* is available worldwide, 24 hours a day and has just begun to flex its wings!

## What will we be doing on the Internet in the future?

Though the medium is still in its infancy, one thing is certain: the scope and breadth of the uses of the Internet will continue to grow.

Some very large corporations are investing billions of dollars in hardware and software development for Internet applica-

tions, so you can be sure it will get much easier, much faster and offer much, much more.

In the near future, we will be instantaneously sharing clinical records such as X-rays and photos. Insurance claims will be filled out and submitted on paperless Web-based forms. Cases will be consulted and planned via conferences on the Net, with all the consulting doctors in visual contact. Already, researchers are working on ways to send models via data transmission that will allow their reconstruction by the receiving office (see E-modeler at <http://www.webworldinc.com/ovt>). Three-dimensional images will be common, allowing 360° views of faces and occlusions. Databases will exist that allow you to compare treatment plans and appliances and choose among the most efficient. Other treatment-planning and diagnostic aids will be available. You will be able to scan in the cephalometric models along with age, sex, etc.; the treatment plan will be returned to you almost instantaneously.

We may not like all of the implications of these changes, but they will happen. No longer will you be isolated in your practice; the World will be one giant group practice that will allow the exchange of ideas and treatment methods on a daily basis. You will not keep up with changes in orthodontics by sporadic continuing ed. programs but will have a constant multimedia flow of new techniques and materials presented for your assimilation on a regular, if not daily, basis. Certified continuing ed. courses are already available on the Net (<http://www.temple.edu/dentistry/di/ce>).

Where is the cutting edge now? There are a few efforts that represent the integration of the Internet with the daily routine of the dental/orthodontic practice. One example is the IDT network

(<http://www.dental-idt.com>) that creates an interoffice multi-specialty network linking the general practitioner and specialists to create truly comprehensive treatment plans that are carried to completion in a unified and organized way. IDT links offices via the Internet, allowing the transfer of patient records, including X-rays, photos, health histories, etc. Access is limited to only those dentists who are involved with the particular case. Another example is QSINET On-line Practice Management System (<http://www.qsinet.com/live/main/q-f.htm>). Currently geared to general practitioners, it is an all-encompassing system that handles everything from practice management to on-line payment by patients.

This is just the beginning.



# Applying Game Rules to Practice Scorekeeping

by Barbara Brunner, M.A.  
Orange, California

**S**corekeeping – monitoring key numbers to indicate the trend in practice growth or decline – is an essential business management tool. Things such as exams-to-case-start ratios, delinquent receivables at 30-, 60- and 90-day junctures, the number of appointments per treatment and time in the chair translate directly to profitability. If you're doing this kind of number crunching and actually finding time to make use of the information, congratulations. It takes appreciable commitment to gather, input, graph and analyze these numbers. Key staff members, however, whose performance is vital to keeping the trendlines of these numbers positive may not seem entirely interested in monitoring them. Watching paint dry is more exciting.

So how about making a game of it? Something happens to people when sport is involved. They'll often pay good money to work harder at a game than they will work to get paid good money. My unscientific analysis of this phenomenon gives light to three reasons: 1) Players see a link between their actions and the scoreboard; 2) Players get immediate feedback about whether the gambit they just made worked; 3) Scoring is simple.

## The Scoreboard and Me

Picture this. You're a clinical assistant. One of the myriad of numbers the doctor flashes at you monthly is the

exam-to-case-start ratio. How well the treatment coordinator does her job directly affects that ratio. You don't see where you fit in.

If Vince Lombardi were coaching your staff, he might tell you that it's his job to help everyone on the team understand how their job links to all other jobs. No offensive lineman ever scores, but they gotta do their jobs so quarterbacks and running backs can do theirs. As a clinical assistant, you may not perceive a direct link between your job and the exam-to-case-start ratio, but Mr. Lombardi would work to help you see that there is an indirect and important link. Prospective patients touring the office see full well how you interact with existing patients and, based on these snapshots, make favorable or unfavorable initial impressions. If you were to ask the treatment coordinator if there is a way you could reinforce any of the messages she is conveying to the prospective patient and then act on that advice, you may become more aware of giving each prospective patient a nod and a smile. You may also become more concerned about whether they subsequently enrolled in treatment. When front and back office jobs remain isolated from each other, there is little opportunity to build cohesiveness that signifies a seamless interplay among staffers.

More important is that players each have their own scorecards. Since the case-start ratio is not a primary scorekeeping opportunity for you, the clinical assistant, why not develop one of your own – one on which you have a direct impact, such as limiting or reducing bond failures or getting on-time appointments into the chair on time.

In recreation, people choose the activity at which they will excel, and most people become committed to what they freely choose. The more choices you give staffers – within the bounds of your business, of course – the more they should enjoy their jobs and the better they should perform. Some staffers may decide to do just enough to get by. They are probably doing that anyway. Many of your players will really enjoy the game of goal setting and scorekeeping. And since researchers report that people setting goals for themselves usually make them more challenging than their supervisors would have, you may get more than you bargained for.

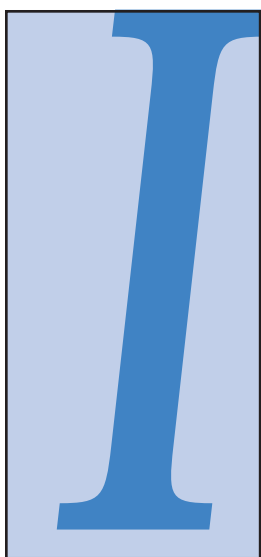
## Immediate Feedback is a Must

In most sports, scorekeeping lets players review their performance during the game to make adjustments. But compare ice hockey with figure skating. Ice hockey is a rowdy sport, with crowds screaming at each thrust and block, yelling about each call. Figure-skating crowds are demure, offering polite applause when they appreciate a particularly intricate move. Why so different? Figure-skating crowds don't know for sure how well the participants are faring until the judges flip the scores – 5.5, 5.7, 5.2, 6.0. The skaters themselves don't know if they are ahead or behind until it's too late to do anything about it. In ice hockey, everyone always knows the score. Teams make ongoing adjustments in game tactics depending on whether they're ahead or behind. You don't execute a treatment plan exactly as you laid it out at the diagnosis. You use feedback from each patient visit to direct the course of action. You can't make any adjustments to case starts in March if

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# Retention...A Practical Critical Last Step to Sta

by R. G. "Wick" Alexander,  
D.D.S., M.S.D.  
Arlington, Texas



In 1994, I was honored to conduct a seminar in Osaka, Japan, on long-term stability with Dr. Robert Little, the eminent authority on the subject. His widely-recognized work at the University of Washington determined that the degree of crowding that develops following retention varies and cannot be predicted. Dr. Little stressed that instability will likely occur and that we must recognize our limitations while focusing on preventing undesirable change.

Dr. Little's findings have been invaluable in heightening our awareness of the likelihood of instability and in challenging us to exert our best efforts to deal with it. In my practice and through participating in studies at Baylor College of Dentistry, I have worked continuously to analyze and cope with the problem. I routinely see patients whose parents I treated 10 to 30 years previously. When possible, diagnostic records on these cases are taken, and while we experience disappointments, the stability we are seeing in both extraction and nonextraction cases is very encouraging.

I've found retention to be just as impor-



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Dr. R.G. "Wick" Alexander has lectured and published extensively and is best known for developing the Alexander Discipline, an orthodontic philosophy popular throughout the world. Dr. Alexander received his dental and orthodontic education at the University of Texas. He serves Baylor College of Dentistry as clinical professor of orthodontics and maintains a private orthodontic practice in Arlington, Texas.

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tant as active treatment for a lasting quality result. For retention to be successful, the patient must have been treated to a normally balanced occlusion. Comprehensive yet practical retention procedures must then be followed. Over the years, my retention appliances and program have been refined. Our current approach is efficient and effective, and I would like to share it with you.

## The Countdown to Retention

The last six weeks of treatment in our office are devoted to finalizing the posterior occlusion and anterior overbite. This is accomplished by archwire sectioning and the wearing of specifically attached elastics (3/4" 2 oz. Ostrich) in the posterior arches and, if necessary, an anterior box elastic (3/16" 6 oz. Impala). Figures 1-4 demonstrate a Class I case in which this procedure was initiated *early* to demonstrate the technique. With the use of finishing elastics at the end of treatment, the posterior occlusion is so tight that placing a retainer wire across the occlusion would cause interference (Figures 5-6). The maxillary wrap-around retainer design eliminates these interferences.

## The Maxillary Retainer

The wraparound retainer is constructed with a facial bow soldered to C-clasps around the terminal molars (usually 2nd molars). One of the negatives of the wraparound design is the tendency for the anterior portion of the wire to slip gingivally. A new preformed retainer wire has been designed to eliminate this and other problems found with previous designs (Figure 7). The advantages of this preformed wire include:

1. Flat surface against the anterior teeth

continued on page 16

# Approach to That bility

Finalizing Mechanics Initiated Early to Demonstrate Technique

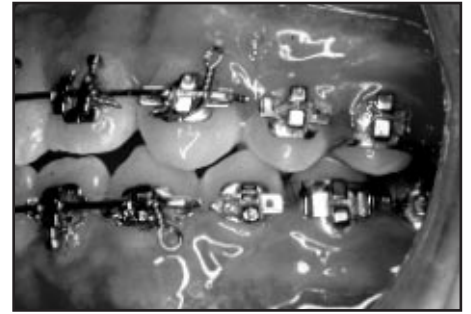


Figure 1. Upper and lower archwires sectioned.



Figure 2. Finishing elastics and anterior box elastic initiated.



Figure 3. After two weeks of wearing finishing elastics.



Figure 4. Three months after appliances removed.

- for stability.
- 2. Round surface against the lips for comfort.
- 3. Increased wire stiffness that resists slipping gingivally.
- 4. Lateral offset bends.
- 5. Smaller adjustment loops positioned more posteriorly.
- 6. Arch form conforms to Alexander/Orthos™\* design.

This preformed retainer wire allows much faster adaptation in the lab so that retainer construction is more efficient. Also, the appliance is much more patient friendly due to the wire's stiffness and the unique anterior wire-and-loop design.

Special note should be given to upper 2nd molars. In many cases, these teeth have not fully erupted when the retainer is constructed; therefore, the acrylic on the lingual and the retainer wire on the distal should be contoured to allow the teeth to continue to erupt. This is accomplished by placing a C-clasp around the maxillary 2nd molar. Design the clasp so that it does not touch the distolingual cusps (Figure 8). Then solder the labial bow retainer wire to the C-clasp in the distobuccal cusp area, leaving enough space to adjust the C-clasp for greater retention (Figure 9). When preparing the maxillary retainer for delivery, take care to recontour the acrylic to prevent its

touching the lingual surfaces of the teeth (Figure 10). This enables the posterior teeth to continue settling after appliance removal (see Chapter 14 of *The Alexander Discipline*). If desired, adjust the bite plate anteriorly to allow the teeth to close without touching any acrylic, so that when the patient closes, only teeth are occluding with teeth.

## The Mandibular Retainer

In recent years, the bonded multistranded mandibular 3 x 3 has become very popular, mainly due to its ease of placement and its effectiveness in preventing relapse.\*\* After the appliances have been removed, take impressions and pour twice



Figure 5. Retainer with wires crossing the occlusion.



Figure 6. Poor buccal occlusion resulting from retainer design.

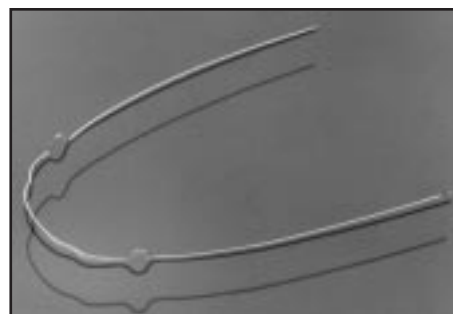


Figure 7. The Wick Flat Bow Retainer Wire.

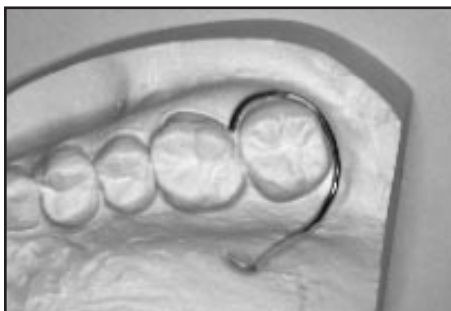


Figure 8. C-clasp designed for placement on partially erupted upper 2nd molar to permit continued eruption.

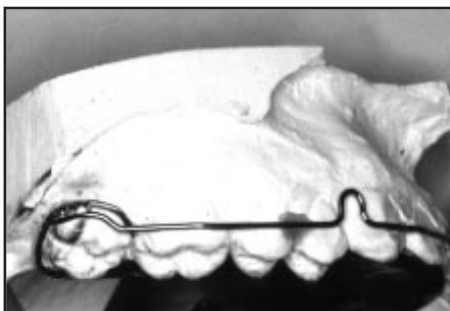


Figure 9. C-clasp soldered to retainer wire.



Figure 10. Recontouring acrylic to prevent its touching lingual tooth surfaces.

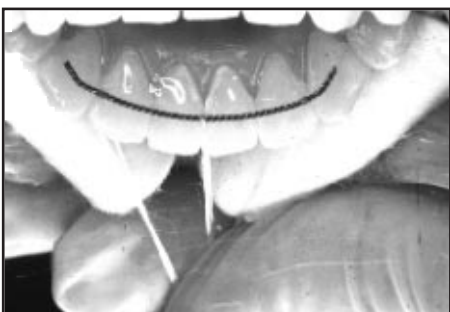


Figure 11. Contour Triple Flex wire to lingual surfaces.



Figure 12. Adapting the 3 x 3 with a 90° Wick Utility Plier.

\* Products identified as "Orthos" are distributed in Europe as "Ortho-CIS."  
 \*\* Personal communication: Dr. David Kemp



– once for working models, once for final records. Contour an .0215 multistranded wire (Triple-Flex™) directly or indirectly on the lingual surface of the anteriors, cuspid to cuspid. In extraction cases, the wire can be extended to the mesial groove of the bicuspids. In two days, the patient returns to receive the retainers. Prepare the lingual surfaces for bonding by etching and sealing. Hold the preformed wire in place with dental floss or elastics (Figure 11). Bond the wire to each of the anterior teeth with a low-viscosity light-cured bonding agent.

When time has elapsed between the removal of brackets and placement of the

3 x 3, the anterior teeth can shift slightly. If this happens, a simple procedure can realign the teeth while the wire is being bonded. Place one beak of a 90° utility plier (Figure 12) on the distolingual surface of one incisor and the other beak on the mesiolabial surface of the adjacent tooth and gently squeeze. The contact points can be positioned accurately and held while the ultraviolet light cures the adhesive.

### A Closing Note

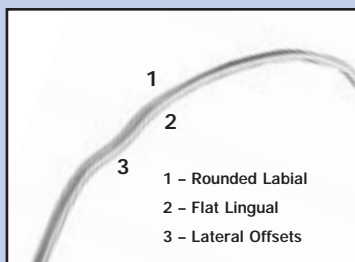
Approximately six years ago, we began instructing the patient to wear the maxillary retainer only *12 hours per day* initially; after four months, eight hours

(at night only) for one year; the second year, three times per week; third year, one time per week. This resulted in a tremendous reduction of lost retainers without affecting the stability of the teeth.

I've described how we have updated our retention procedures and made them more efficient. Achieving long-term stability requires our best efforts throughout treatment and retention. All the bases must be covered. I am convinced that improved retainer design and motivating patients to adhere to a reasonable schedule of wearing their retainers contribute significantly to our ultimate goal.

## ...and speaking of more efficient retention:

Gird up with battle-tested weaponry for the ongoing struggle for long-term stability. Order information is provided on page D of the Center Section.



**Wick Flat Bow Retainer Wire** – The wraparound retainer has steadily increased in popularity, since it eliminates wires crossing and disturbing the occlusion. The Wick Flat Bow Retainer Wire adds a number of significant improvements to the design: flattened lingual and rounded labial anterior surfaces, proper wire stiffness to prevent gingival slippage, correct contour and smaller adjustment loops. Three preformed sizes (50, 54 and 58 mm between loop centers) cover the range and minimize inventory requirements. The Wick Flat Bow Retainer Wire simplifies retainer fabrication, improves function and increases comfort.

**Triple Flex** – Over the years, easy-to-adapt .0215 Triple Flex™ multistrand wire has proven its effectiveness as a 3 x 3 mandibular retainer. The Center Section also includes order information for .0150, .0175 and .0195 sizes. Excellent formability, flexibility and springback characteristics have made Triple Flex a widely selected force for leveling and alignment. Triple Flex is available in packs of ten 14" straight lengths.

**AEZ® 90° Wick Utility Plier** – Unique broad, flattened tips are ideal for activating bracket rotation wings and grasping and cinching archwires distal to the molar without excessive stretching of the patient's cheek. Truly utilitarian, the plier is designed to handle a variety of functions, such as repositioning contact points of shifted lower incisors while bonding the 3 x 3 retainer, as recommended by Dr. Alexander. (Also included in the Center Section is order information on the AEZ 45° Wick Utility Plier with broad, flattened tips that parallel the archwire during insertion and are handy for activating closing loops and for inserting and removing archwires and lip bumpers.) Unlike the sharp tips of a Weingart plier that could gouge a patient if the instrument slipped, the broad, flattened serrated tips of Wick Utility Pliers are safe as well as resistant to splaying after heavy use.



The AEZ 90° Wick Utility Plier



The AEZ 45° Wick Utility Plier



Triple Flex

# Dr. Harfin

continued from page 7

not be less than 6.5 mm when the width of the implant is 3.75 - 4 mm, since a minimal 1 mm separation is necessary between each root and implant (Figure 9). Simultaneously, the lower left 2nd primary molar was extracted and the clinical exposure of the 2nd bicuspid was accomplished by means of an osteotomy and gingival incision. Special consideration was given to preserving the periodontal structures of the neighboring teeth. A week later, a standard edgewise bracket was placed to begin relocation of the bicuspid, despite the patient's age and the fact that the root of the tooth was already completely formed (Figure 10). This procedure was done using a sectional appliance with preadjusted brackets

(Figure 11). A Ni-Ti® coil spring was used to close the anterior diastema and compensatory bends were made to straighten the lower left 1st molar. Later, lingual buttons were used to finish rotating the bicuspid (Figure 12). Figure 13 reveals the excellent result obtained with this technique.

Once the maxillary arch had been stabilized and proper spacing, root paralleling and adequate aesthetics of the anterior segment had been achieved, we proceeded to place the dental implants. In cases where the aesthetics are greatly compromised (as shown in this case report), the choice of implant system is important, since it should have the

greatest range of prosthetic solutions. Furthermore, an evaluation should be made of the available connections between the implant and the final prosthetic restoration.

To achieve the greatest aesthetic harmony, the crown-implant union should be at a subgingival level. Nevertheless, research has shown that the presence of a gingival sulcus deeper than 4 mm diminishes the oxygen pressure, creating the proper conditions for the development of highly aggressive, anaerobic subgingival flora. Balancing these two variables – trying to achieve better aesthetics while diminishing the risk of peri-implantitis – is accomplished by controlling the depth



Figure 9.



Figure 10.



Figure 11.



Figure 12.



Figure 13.



Figure 14.



Figure 15.



Figure 16.



Figure 17.



Figure 18.



Figure 19.

of the remaining peri-implant sulcus. To achieve this goal, type 31 implants were selected. Both implants were placed during the same surgical procedure. Even though the bone height and quality were good, alveolar collapse on the left side was considerable (such collapse is due to loss of the vestibular bone plate). It has been customary in such cases to flatten the bone until its buccolingual width is greater than the diameter of the implant. By following this procedure, the gingival limit of the implant would remain apical in relation to the cemento-enamel junction of the neighboring teeth; in the case of a greater gingival thickness, we would have had a peri-implant sulcus much greater than 4 mm. Gingivectomy would have been necessary to avoid this situation, compromising the aesthetics even more.

After all the facts were considered, we positioned the implant at the level of the existing bone crest, resulting in a slight gingival defect due to the presence of a small part of the implant that remained without a bone cover. The guided regeneration technique (highly predictable in implantology) was used and a nonreabsorbable membrane was placed (GorTex No. 6), its position fixed by means of the implant screw cap. The membrane was extracted 60 days later by a minor surgical procedure; then a four-month period was allowed for integration of the implant. For this technique to be successful, the implant must have primary or immediate immobility. Throughout the healing period, the orthodontic appliance remained in place (Figure 14).

Another treatment option for patients with collapse of the alveolar process is to first achieve the bone regeneration of the collapsed zone with guided regeneration techniques and a bone graft. After adequate time for the bone to regenerate in the buccolingual dimension, the implants are placed in a second surgical procedure.

Six months after the implants were placed, we uncovered them, verifying their immobility and monitoring the

subsequent bone filling. Afterward, the gingival healing screws were placed, the flap was sutured and temporary crowns were placed (Figure 15). After the healing period, the screws were removed and the proper healthy condition of the internal epithelium within the peri-implant sulcus was verified, as well as its depth (Figure 16). In any zone with significant aesthetic compromise, the temporary crowns should remain 10-60 days, enough time for the maturation of the gingival connective tissue; any alteration of the height of the gingival margin is thus prevented. In many cases, placement of the temporary crowns helps us reassess the aesthetics and determine if gingival plastic surgery is indicated.

Construction of the permanent crowns is similar to that used with natural teeth, depending on the prosthetic choice. On this particular patient, threaded UCLA-type crown supports were selected (Figures 17-18) and metal-ceramic restorations were placed and cemented (Figure 19). It's very important that this type of single-tooth implant restoration be diagnosed with the greatest possible accuracy in order to place the implant at the most adequate height and to determine the resulting gingival contour that would achieve the greatest gingival harmony. The excellent aesthetic result can be observed.

continued on following page



Figure 20.



Figure 21.



Figure 22.



Figure 23.

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continued from preceding page

**Results.** The predetermined objectives were achieved within a period of 16 months for the maxilla (eight months for orthodontic correction and eight months for osseointegration and prosthetic restoration) and 18 months for the mandible (complete relocation of the lower left 2nd bicuspid, despite the age of the patient and the fact that the root was completely formed). The functional and aesthetic results are shown (Figures 20-28), as well as the reaction of the gingival tissue six months later (Figures 29-31), where a highly acceptable aesthetic result can be observed. The texture, color and form of the gingival papilla, as well as its adaptation to the implants, are excellent.

## Conclusion

Osseointegration as an alternative in the treatment of missing lateral incisors is highly recommended, based on current knowledge. The orthodontist plays a key role in preparing the occlusion prior to placement of the implants. Keep in mind that the proper location of neighboring teeth and their roots is fundamental in reaching the proposed aesthetic objectives. Osseointegration is recommended for patients who have completed their active growth periods. From the biological point of view, this is the most conservative restorative treatment, making it possible to maintain a functional occlusion in both anterior and posterior segments. Once the proper age is reached, the disadvantages are minimal (only one surgical procedure in two phases) and there is a high predictability of clinical success (>90%) whenever the indications are correctly considered and each patient is evaluated individually.



Figure 24.

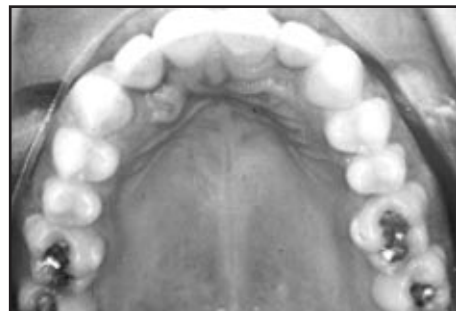


Figure 25.



Figure 26.



Figure 27.

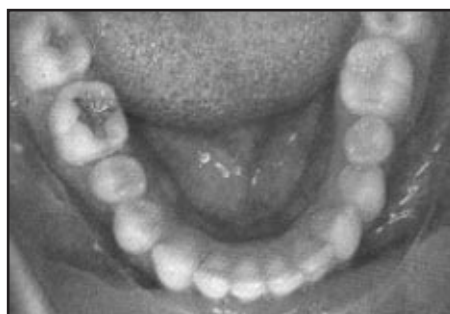


Figure 28.



Figure 29.



Figure 30.



Figure 31.

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value, comfort and security are the roots of these emotional needs.

Buying a car provides a good example. We all need transportation. Some of us want the bright, showy sports car. With such a purchase, we may not only be buying transportation, we may also be buying prestige. Others are satisfied with a simpler means of getting from point A to point B, maybe in a Ford Taurus. Perhaps with such people, security needs rank higher than prestige needs, and keeping more of their savings in the bank satisfies those security needs. In much the same way, patients buy orthodontic services for their own reasons, not necessarily why we think they should. Discovering those reasons and focusing on what we provide to address them is the job of my two treatment coordinators, Vicki Kemper and Nicole Waycaster. If patients are looking for a bargain, they will usually know it through the response we get at the initial patient call about whether we can book time for initial records. Bargain hunters must be convinced of the value of the investment, so we amortize the cost over the life of the individual and help the patient get in touch with how an improved smile will enhance their self-esteem, self-confidence or maybe in getting a job or promotion.

When challenged with the fee being too high, Vickie might ask (usually Dad) how much he paid for his car in a given year (based on when he might have been in his early 20s) and what he would pay for one today, and then show how orthodontic fees have not kept pace with inflation over the last 20 years. When Nicole picks up on the fact that the patient will make a decision based on being in a prestigious practice, in her arsenal of features to highlight are that I am a lecturer at the university, am asked to make presentations to orthodontists on a national level and was awarded Small Business Leader of the Year by the Asheville Chamber of Commerce.

In dealing with a quiet father who feels overwhelmed by the process of early

treatment, the women would probably empathize with him and relate personal experiences with their own children and how they helped them cope. People are persuaded far more by the depths of your beliefs, feelings and emotions than any logic or knowledge you exhibit. When you and your staff sincerely believe that you are offering the patient exceptional value, odds are the patient will see it as such. You and your staff should have an unshakable belief in the value of orthodontics and that the manner in which you deliver it is the best anywhere.

### Selling vs. Helping People Get What They Need

There is a big difference between selling and helping people buy what they want. Find out prospective patients' needs and wants, select what you mention to them about your services based on those needs and wants and inform them that you are doing it. In most cases, if you know your community, if you regularly solicit patient feedback through surveys and focus groups, you will have developed service standards that will match those needs. Helping to solve a problem gains loyalty and creates the basis for long-term relationships. Size up and respond to each patient's problems in a way that makes them glad they have done business with you. Remember, we all take credit for purchases that we are proud of, such as a beautiful home. We're quick to place blame on the seller of purchases we don't like, such as that lemon of a car.

People don't come to us to "buy" braces. They're buying a solution to a problem. When they are buying the solution, what they are really buying is the expectation of feeling good. You may have the best clinical results in the profession, but your success will depend on how your patients feel about those results and the environment in which those results were accomplished. If we employ the Patient-Centered Model, we have transformed our role from salesperson to consultant in their making a decision that will have a lifetime of rewards.

# Lingual Orthodontics—The Ir

# T

he “hidden agenda” of lingual orthodontics extends beyond “invisible braces” themselves to the prevailing unawareness in the profession of the current worldwide growth of the technique and its

potential for increasing practice profitability. In these days of encroaching MSO's and discounters, lingual orthodontics affords a unique approach to positioning your practice on the inside track and offering your patients a truly aesthetic alternative well worth a premium fee. Today's improved bonding, archwires and lingual mechanics greatly facilitate the discipline. Perhaps of even greater benefit has been the development of a seasoned cadre of lingual practitioners with excellent teaching skills to guide your entry into or accelerate your mastery of the technique. Take a step up in orthodontics and take advantage of the learning opportunities provided by these distinguished clinicians. **Additional course information is provided on the Course Schedule on the back cover.**

**Dr. Didier Fillion** has practiced lingual orthodontics exclusively in Paris since 1987. He holds quarterly in-office courses in French and English and has lectured and presented seminars throughout the world. Dr. Fillion has served in highest positions in French and international lingual orthodontic societies and congresses. For the first time, he is bringing the Fillion Lingual Orthodontic Seminars to the United States – New Orleans, October 13-15 and San Diego, October 16-18. “Lingual-friendly” case selection, “patient-friendly” mechanics and “orthodontist-friendly” technique will be thoroughly drilled, and many progress cases with adjustments will be presented. For additional information or to register, contact: Fillion Lingual Orthodontic Seminars, 3500 Behrman Place, New Orleans, Louisiana 70114;

phone (800) 474-3633; fax (504) 362-1104. For courses in Paris or other locations, call 33-1-47042793 or fax 33-1-47551833.

**Dr. Courtney Gorman** maintains his private practice in Marion, Indiana, and serves as associate professor, Department of Orthodontics, Indiana School of Dentistry, where he directs the lingual training program and also conducts an

Dentistry, 1121 W. Michigan Street, Indianapolis, IN 46202; phone (317) 274-7782. To handle the heavy demand, Ormco is sponsoring a similar workshop in Orange, California, on October 24-25, 1997. Call Ormco at (800) 854-1741, Ext. 7575.

**Dr. Mario Paz** maintains a large lingual practice in an area of high cosmetic



From left: Drs. Didier Fillion, Courtney Gorman, Kyoto Takemoto and Mario Paz.

annual typodont workshop on lingual orthodontics for the Continuing Education Department. The next Indiana workshop will be held January 30-31, 1998. Included are an introductory session, diagnosis and treatment planning, comprehensive typodont exercises, laboratory procedures, bonding techniques and marketing. Practicing orthodontists as well as students from all graduate orthodontic programs are encouraged to attend. Last year's workshop filled quickly, so register early. For additional information or registration, contact: Continuing Education Department, Indiana University School of

consciousness and expectations. He conducts semiannual in-office courses that enable orthodontists new to lingual therapy to start treating lingual cases and that also advance the skills and knowledge of those familiar with the technique. A wide range of patients at all stages of treatment is seen, evaluated and discussed (course is limited to six participants). The course includes lectures, lingual prescription writing, new lingual archwire sequence and mechanics, enamel reproximation techniques, typodont practice and marketing. The next course is scheduled October 9-11, 1997. For details, contact Shelly at

# side Story

## Scorekeeping

continued from page 13

Dr. Paz's office: 9735 Wilshire Blvd., #308, Beverly Hills, CA 90212; phone (310) 278-1681; fax (310) 274-5286.

**Dr. Giuseppe Scuzzo** enjoys a heavily lingual orthodontic practice in Rome and



**Dr. Giuseppe Scuzzo**

serves as visiting professor in lingual orthodontics at the University of Ferrara. Dr. Scuzzo founded and served as president of the Italian Lingual Orthodontic Association and now holds the positions of president of the European Society of Lingual Orthodontics and scientific secretary for the forthcoming Third European Lingual Orthodontic Congress to be held June 18-20, 1998, in Rome. He invites his colleagues to take advantage of this exciting opportunity to hone skills, share experiences and explore the latest advances in lingual technique and appliances. Dr. Scuzzo has published and lectured extensively in the field and conducts many courses jointly with Dr. Kyoto Takemoto. To contact Dr. Scuzzo, call 39-6-5685852 or fax 39-6-68592443.

**Dr. Kyoto Takemoto** starts over 200 lingual cases each year in his Matsudo City office and in his lingual-oriented satellite office in Tokyo. He presents hands-on typodont courses in lingual orthodontics in-office, throughout Japan and around the world. He demonstrates the unlimited applicability of lingual mechanics to orthodontic treatment, including open-bite and extraction cases. A prolific writer and speaker, Dr. Takemoto has years of experience teaching orthodontists at beginning to expert levels of lingual orthodontic proficiency. Every phase of lingual treatment is covered extensively in his courses. Information and registration for Dr. Takemoto's Japanese courses are handled by Roy Kishi (Ormco, phone 81 3 3432 0065; fax 81 3 3432 1255). Contact Dr. Scuzzo regarding Takemoto/Scuzzo courses.

you don't compute the numbers until April 5. You probably won't notice a pattern of bond failures until you've wasted a lot of chair time. Give staffers the wherewithal to make midcourse corrections. Keep scoring immediate and you may be well on your way to mentoring more than hired hands all around your practice.

### Scorekeeping Must Be Simple

Drudgery scorekeeping is no motivation. A tic mark on a hand-drawn chart will do. When people keep their own scores, they know whether they won or lost that day, how much they improved or what to analyze when the trend is going south. Scores must be stated in things you count. Percentages are too vague. Sure, you can develop the goal as a percentage increase, but you must measure it in things you can see and touch. Can a TC estimate whether a 10 percent increase in case starts to exams is doable? She can if she translates that percentage into living, breathing people: 28 vs. the current 25. It's that real number that tells her whether to take off her coat and call the babysitter at 5:20 p.m. when, late in the month and two bodies short of the goal, the last exam finally shows up. Keep it simple also applies to what you ask staff members to watch overall. Together, agree to three scores. Keep them visible and continually updated. Cheer when they're good; huddle when they're not. Need to watch additional indicators? You should. You and your accountant have a good time.

There are three kinds of workers: those who know they are winning, those who know they are losing, those who don't know the score. Players – employees – who have no goals or ways of measuring their work vis-a-vis those goals don't know whether they're making gains, remaining stagnant or losing ground until weeks – sometimes months – go by. They certainly have little opportunity to take corrective action on a day-to-day basis. True, you can't measure smiles, the gladdened heart, the feeling of confidence

you engender in parents, but each of these and the thousands of other little things you do every day are reflected in some meaningful bottom lines. If you're already watching them, get your staff off the bench and onto the playing floor by helping them construct scoreboards for their work. If they can't measure it, they can't manage it.

Goal setting and scorekeeping is one segment of a course entitled *Round Peg... Round Hole* that focuses on hiring and training being conducted by Ms. Brunner and Ms. Janette Piankoff in Boston, Massachusetts, on September 19, 1997, and Atlanta, Georgia, on October 10, 1997. For more information about this course, contact your local Ormco representative or call Katie Morrissey at (800) 854-1741, Ext. 7575. Ms. Brunner is manager of Ormco's Practice Development Seminar Series. She holds a master's degree in organizational communication and management from Ohio University.

### Work is a lot like bowling...

except there's a person called the doctor who stands in front of the pins with a curtain. The doctor sees the pins, but the staff member who is bowling can't. The bowler throws the ball, hears something and asks, "How'd I do?"

"Change your grip," yells the doctor.

The bowler changes grip, throws the ball, hears something and asks, "How'd I do?"

"Change your stance," answers the doctor.

The bowler changes stance, throws the ball, hears something and asks, "How'd I do?"

"Don't worry about it. You've got a review coming up in six months. We'll talk then."





## The Gorman Institute

### Rediscovering Lost Arts – Orlando, Florida

Feb. 5-7, 1998 (Thurs.-Sat.) at the Hilton at Disney World Village

#### Ormco and Master of Ceremonies

Dr. Courtney Gorman invite you and your staff to participate in an exciting new agenda for the fifth annual session of the Gorman Institute at the most popular spot on earth—Disney World. Separate yet interwoven programs for doctor and staff will be held each day from 8:00 a.m. to 12:40 p.m., affording a learning and recreational opportunity guaranteed to cure winter blues (including a staff appreciation party on Pleasure Island on Friday night).

The program is geared toward increasing practice efficiency by improving clinical, communicative and marketing skills of doctor and staff. You'll return home with the know-how to raise teamwork to that higher level where productivity reigns and doctor, staff, patients and parents all enjoy the enthusiastic ambiance.

#### Doctor Program

**Dr. Bob Scholz:** "Rediscovering Listening:



The Hilton at Disney World Village

Understanding Your Referring Dentist's Needs" and "Rediscovering Tradition: Using Family Rules to Manage"

**Dr. Keith Black:** "The Art of Conversation: Crafting a Message with Intention and Punch"

**Dr. Duane Grummons:** "Re-creating the Connection Between Fees and Value"

**Dr. Mike Swartz:** "How Your Staff Can Cut Bond Failures in Half"

**Dr. David Sarver:** "The Art of Vision: Reverse Engineering Through Imaging"

**Dr. Richard Boyd:** "The Art of Shared Vision: Marketing Communication Through Imaging"

#### Staff Program

**Dr. Duane Grummons:** "The Art of Communicating with Patients and Staff"

**Dr. Keith Black:** "The Art of Conversation: Crafting a Message with Intention and Punch"

**Dr. Mike Swartz:** "Cutting Bond Failure Rates in Half"

**Ms. Janette Piankoff:** "The Lost Art of Managing Up"

**Ms. Barbara Brunner & The Staff of Dr. Keith Black:** "Rediscovering Creativity: Staff Problem Solving"

This fifth meeting of the Gorman Institute will be one to remember. To register or for registration information, contact Ormco at (800) 854-1741, Ext. 7575, or (714) 516-7575 or fax (714) 516-7543. Register before October 1 for significant discounts. We look forward to seeing you in Orlando!

## It Had to Happen!

Ormco, the leading orthodontic company, and Solutions By Design, a design agency highly recognized for developing creative orthodontic communications, have joined forces to expand their service to the profession.

- **Customized Practice Brochures:** Solutions By Design handles the entire package – writing, creative design and printing – to differentiate your practice by emphasizing its unique advantages.
- **Semi-Custom Practice Profile Brochures:** Eight semi-custom practice brochures are designed for impact, accessibility, versatility, adaptability and cost effectiveness. Choose the format that best meets your needs.
- **Exam Brochures:** Three brochures – adolescent, two-phase and adult – visually and verbally convey orthodontic fundamentals to each type of prospective patient and provide an efficient means to record findings and recommendations.
- **Practice Identity Development:** Solutions By Design has successfully produced over 500 corporate identity programs



**ORMCO®**

**STRATEGIC ALLIANCE**

for orthodontic practices around the world. They have the experience to design the perfect logo to identify your practice.

To find out how Solutions By Design can increase your practice profitability, contact your Ormco representative or distributor.

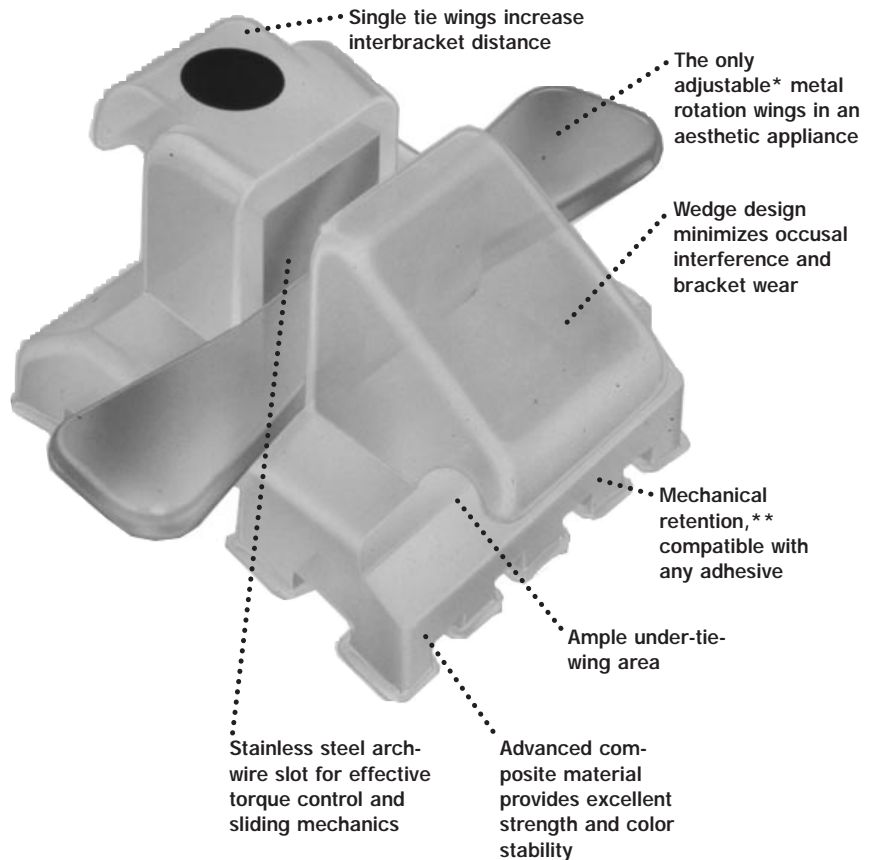
# Our Spirits are Soaring!

## Lift Your Own with Alexander SpiritMB Brackets (now available in .022 as well as .018)

The new Alexander SpiritMB™ brackets are off to a flying start as the first and only aesthetic appliance with metal wings. They offer the strength of an advanced polymeric material and the added integrity of a stainless steel-reinforced slot. Alexander SpiritMB brackets provide effective torque control and the sliding characteristics of metal brackets. The metal rotation wings are easily adjustable and provide the superior rotational control that characterizes the Mini-Wick™ System. The wedge design of the brackets minimizes occlusal interference and bracket wear, and there is ample under-tie-wing area for easy ligating.

The Alexander SpiritMB appliance replicates the Mini-Wick System in providing a completely preadjusted appliance that incorporates Ormco's Diamond™ bracket design and exclusive Face Paint™ System to ensure fast, accurate bracket placement. See page D of this Center Section for order information.

\* U.S. Patent No. 5,618,175  
\*\* U.S. Patent No. 5,622,494



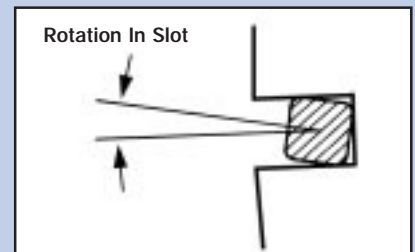
### Eliminate That Creep in Your Practice!

Archwire creep, that is, emergency visits due to poking wires resulting from archwire creep are a costly inconvenience. To help eliminate these nonrevenue-producing appointments, we have added a dimple to our most popular Copper Ni-Ti™ archwires. Now you can increase your appointment intervals without the added risk of an additional emergency visit. Dimpled Orthos™† Arch Form Copper Ni-Ti archwires are available in packs of ten (Kleen™ Paks) in sizes .018 (27°), .016 x .022 (35°) and .019 x .025 (35°). See page D of this Center Section for order information.



### For Easier Early Engagement: New Copper Ni-Ti 35° Square Archwires

New .017 x .017 and .020 x .020 Copper Ni-Ti 35° arches are easier to engage without excessive force in severely rotated teeth due to their ideal combinations of resiliency and cross-section dimensions. They afford greater flexibility and patient comfort compared to rectangular wire alternatives. These new archwires are provided in both Broad and Orthos† arch forms in packs of ten (Kleen Paks). See page D of this Center Section for order information.



†Products identified as "Orthos" are distributed in Europe as "Ortho-CIS."

# Introducing the Alexander Signature Appliance

**T**he Alexander Signature Appliance presents design improvements that facilitate clinical efficiency and predictable, high quality results. This new system combines the finest elements of the Alexander Discipline – a technique rooted in conservative, well-founded principles – with key technological advancements of Orthos.<sup>††</sup> The appliance maintains twin brackets on upper centrals and laterals and winged brackets on cuspids, bicuspids and lower anteriors, affording the superior rotational control of winged brackets, the mechanical advantage of increased interbracket space and the ideal torques and tips for proper root spacing of lower incisors.

Key Orthos Rx refinements were added:

- Reduced torque values in the mandibular posterior segments to aid in molar uprighting.
- Progressive distal tip in the mandibular incisor brackets to prevent “root crowding” and enhance stability for long-term retention, a cornerstone of the Alexander Discipline.
- Distal root tip incorporated into the upper second bicuspid brackets to minimize the height discrepancies between distal marginal ridges of the upper second bicuspids and mesial marginal ridges of upper first molars.
- Thicker maxillary second bicuspid brackets better synchronize with the first bicuspid and molar.
- Rotation of the upper first molars minimizes space requirements and improves interdigitation with lower first molars.
- Adjusted torque and in-out values to ensure a more “finely tuned” clinical result with fewer archwire adjustments.

The patented rhomboidal shape of Mini-Diamond<sup>®</sup> brackets and bonding pads provides ideal visual references for fast, accurate placement. The Mini-Wick low profile is maintained on the lower 3 to 3. Popular Hemi Hooks

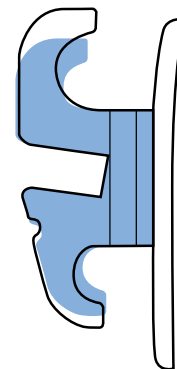


are available as options for upper and lower laterals and cuspids. In response to your requests, the under-tie-wing area of the newly designed bicuspid brackets has been greatly increased to facilitate the use of elastics and auxiliaries. And, of course, Alexander Signature Appliance brackets incorporate the manufacturing and quality control aspects that set Ormco products apart from all others in the industry, including an advanced tumbling process that ensures rounded facial contours, the elimination of burs and rough edges, and a bright finish.

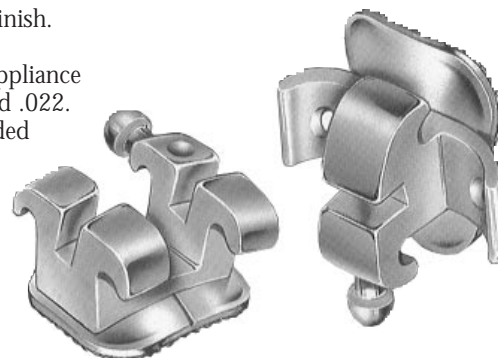
The Alexander Signature Appliance is available in both .018 and .022. Order information is provided on page D of this Center Section

**Sleek Hemi Hooks provide improved utility, patient comfort, and hygiene**

<sup>††</sup>The Diamond™ design is protected under U.S. Patent No. 4,415,330



Newly designed bicuspid brackets feature a much larger under-tie-wing area to facilitate the use of elastics and auxiliaries



Upper lateral

Lower lateral

<sup>††</sup>Products identified as “Orthos” are distributed in Europe as “Ortho-CIS.”

Descriptions and catalog numbers of products introduced or discussed in this issue are provided to facilitate your ordering. Please contact your Ormco representative or distributor for additional information.

Visit Ormco at our new web site at: [www.ormco.com](http://www.ormco.com)

90° Wick Utility Plier – 803-0202

45° Wick Utility Plier – 803-0201

**Triple Flex™**

Packs of ten 14" lengths

.0150 – 264-0150 .0195 – 264-0195

.0175 – 264-0175 .0215 – 264-0215

**Wick Flat Bow Retainer Wire**

Packs of 10

50 mm – 204-0201 54 mm – 204-0202

58 mm – 204-0203

**Alexander SpiritMB™**

Single-Patient Kits	.018	.022
Up/Lo 5-5	740-0238	740-0239
Up/Lo 3-3	740-0240	740-0241
Up 3-3	740-0242	740-0243

**Introducing Dimpled Orthos™\* Arch Form Copper Ni-Ti™ Arches**

(Midline dimple prevents archwire creep) Packs of 10 (Kleen™ Paks)

Wire Size	Trans. Temp.	Upper Arch		Lower Arch	
		Small	Large	Small	Large
.018	27°	219-7210	219-7226	219-7202	219-7218
.016 x .022	35°	219-7311	219-7327	219-7303	219-7319
.019 x .025	35°	219-7315	219-7331	219-7307	219-7323

**For easier archwire engagement with an improved torque/force ratio – New Copper Ni-Ti 35° Square Arches**

Packs of 10 (Kleen Paks)

Arch Form	Wire Size	Upper Arch		Lower Arch	
		Small	Large	Small	Large
Broad	.017 x .017	210-0921	210-0931	211-0921	211-0931
	.020 x .020	210-0927	210-0937	211-0927	211-0937
Orthos*	.017 x .017	219-4209	219-4409	219-4109	219-4309
	.020 x .020	219-4211	219-4411	219-4111	219-4311

**Alexander SpiritMB™**

Tooth	Torq.	Ang.	Bracket	Part Numbers	
<b>Maxillary</b>				<b>.018 R/L</b>	<b>.022 R/L</b>
Centrals	+14°	+5°	Twin, standard base	494-0110/0111	495-0110/0111
Laterals	+7°	+8°	Twin w/hook, thick base	494-1210/1211	495-1210/1211
Cuspids	-3°	+10°	Single, flat adjust. wing	494-3310/3311	495-3310/3311
1st Bicuspid	-7°	0°	Single, curved adjust. wing	494-3514	495-3514
2nd Bicuspid	-7°	0°	Single, curved adjust. wing	494-3514	495-3514
<b>Mandibular</b>				<b>.018 R/L</b>	<b>.022 R/L</b>
Centrals	-5°	0°	Single, curved adjust. wing	494-3055	495-3055
Laterals	-5°	+6°	Single w/hook, curved adjust. wing	494-3062/3063	495-3062/3063
Cuspids	-7°	+6°	Single, flat adjust. wing	494-3342/3343	495-3342/3343
1st Bicuspid	-11°	0°	Single, curved adjust. wing	494-3615	495-3615
2nd Bicuspid	-17°	0°	Single, curved adjust. wing	494-3725	495-3725

**Alexander Signature Line – Primary Prescription**

Tooth	Torq.	Ang.	Bracket	Part Numbers	
<b>Maxillary</b>				<b>.018 R/L</b>	<b>.022 R/L</b>
Central	+15°	+5°	Medium Mini Diamond Twin	348-6110/6111	349-6110/6111
Lateral w/hk	+9°	+9°	Narrow Mini Diamond Twin	348-7210/7211	349-7210/7211
Cuspid	-3°	+10°	Wide Mini Dia. Alexander, thin base	354-3310/3311	355-3310/3311
1st Bicuspid	-6°	0°	Medium Alexander, gingivally offset	354-3510/3511	355-3510/3511
2nd Bicuspid	-8°	+4°	Medium Alexander, gingivally offset	354-3514/3515	355-3514/3515
<b>Mandibular</b>				<b>.018 R/L</b>	<b>.022 R/L</b>
Central	-5°	+2°	Wide Mini Wick Bracket, thick base	350-3072/3073	351-3072/3073
Lateral	-5°	+6°	Wide Mini Wick Bracket, thick base	350-4052/4053	351-4052/4053
Cuspid	-7°	+6°	Wide Mini Dia. Lang, thin base	350-3342/3343	351-3342/3343
1st Bicuspid	-7°	0°	Medium Alexander, gingivally offset	354-3614/3615	355-3614/3615
2nd Bicuspid	-9°	0°	Medium Alexander, gingivally offset	354-3724/3725	355-3724/3725

**Alexander Signature Line – Options**

Tooth	Torq.	Ang.	Bracket	Part Numbers	
				<b>.018 R/L</b>	<b>.022 R/L</b>
Upper Lateral	+9°	+9°	Slim Mini Diamond Twin, thick base	348-6210/6211	349-6210/6211
Up Cuspid w/hk	-3°	+10°	Wide Mini Dia. Alexander, thin base	354-4310/4311	355-4310/4311
Lower Central	-5°	0°	Narrow Mini Wick, thick base	350-3025 Universal	351-3025 Universal
Lower Central	-1°	0°	Wide Mini Wick, thick base	350-3045 Universal	351-3045 Universal
Lower Central	-5°	0°	Wide Mini Wick, thick base	350-3055 Universal	351-3055 Universal
Lo Lateral w/hk	-5°	0°	Narrow Mini Wick, thick base	350-4025 Universal	351-4025 Universal
Lo Cuspid w/hk	-7°	+6°	Wide Mini Diamond Lang, thin base	350-4342/4343	351-4342/4343

\*Products identified as "Orthos" are distributed in Europe as "Ortho-CIS."