ARE YOU DOING YOUR PART?

The MDS leadership has a responsibility to communicate important information to our members, who, in turn, have a responsibility to open their emails and read them. It is a two-way street. You pay your dues, but are you paying due diligence attention?

Every year, there are issues before our state legislature that directly impact the way we practice. Recent legislative sessions have seen bills dealing with such pivotal issues as allowing unsupervised, independent practice by dental hygienists; allowing retired dentists to maintain licensure for the purpose of volunteering their services; expanding the training, certification, and role of dental auxiliaries; and looking at dentistry's relationship with insurance companies.

You must not think that someone else will take care of things and "watch your back." Grassroots participation is essential—the more voices that speak, the more our elected officials pay attention. Any message we want communicated is so much more effective when there is a large number of constituents behind it. Our paid legislative agents plant the seeds, and our collective voice cultivates them. Elected officials pay attention to phone calls and emails. They care if they receive opinions from you, their constituents. When the issue of allowing the independent practice of dental hygiene came before the legislature, hygienists inundated their elected officials with phone calls and correspondence. At that time, dentists were much less involved and almost lost the issue because of lack of input. The message that legislators heard was that hygienists cared more than dentists did about improving access to dental services. We cannot allow such misconceptions regarding the issues that directly affect the practice of dentistry and quality of care we offer our patients.

Here is an example of why participation by all is needed. In this past legislative session, the MDS filed an amendment to stop insurance companies from capping our fees on noncovered services. These caps would directly affect our uninsured patients, who would, in effect, be challenged with higher fees to make up for lost remuneration due to the capped fees on insured patients.

Statistically, the largest uninsured population is people 65 and over. If insurance companies dictate what we can collect for services they don't even cover, then the uninsured will have higher fees because a dental practice has to meet its overhead costs.

The MDS sent out an Action Alert email on this issue to 3,137 members, requesting that a simple, prewritten email letter be sent to our state senators. All that each member had to do was forward the prewritten response—at most, two minutes of effort was required. This is how our membership responded:

- 861 members opened the email
- 160 members accessed Capwiz (the automated email response)
- 55 members contacted their state senators

Sadly, only 1.75 percent of those 3,137 members responded. Your involvement counts. We need our elected officials to pay attention to our legislative causes. We owe it to our patients and our profession to take, at least, a very small amount of our time to be proactive and effective. Our futures, collectively and individually, continue to be in our own hands. ■

David B. Becker

Arthur I. Schwartz

JOURNAL OF THE MASSACHUSETTS DENTAL SOCIETY

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I strongly disagree with Dr. Vincent DeAngelis's article exploring whether orthodontics is heading in the right direction, "A 50-Year Journey from Begg to Straight Wire and Beyond: Is Orthodontics on the Right Course Today?" (Vol.59/No. 2, Summer 2010, pages 38–42). When I first encountered this profession 40 years ago, orthodontics was an arcane specialty. Dental educators were advising their undergraduate students to avoid practicing orthodontics if they felt unprepared to deliver "ideal" orthodontics. But the objectivity of this advice could not be defined, and orthodontic education at the undergraduate level stagnated. Today, unfortunately, not much has improved, and this demagogy still largely influences generalists.

After serving in the U.S. Naval Dental Corps, attaining pediatric specialty certification, and then launching a private pediatric practice, the early orthodontic needs of my patients became increasingly clear—and glaringly obvious.

In 1972, the article "Six Keys to Normal Occlusion" by Dr. Lawrence F. Andrews[1] came across my desk. I have to say, without reservation, that this reading was an epiphany in my dental education. For the first time, a text gave objectivity to orthodontic diagnosis and treatment. I immediately became a continuing student of Dr. Andrews's Straight Wire Appliance and treatment techniques.

The specific point I want to make is the implication made by Dr. DeAngelis in his article that the Straight Wire Appliance directly causes gross root resorption is false. The Straight Wire is an appliance and not a treatment philosophy. It does not preclude the use of other personalized techniques. The Straight Wire Appliance may appear to resemble an Edgewise Appliance, but that is where the similarity ends. The Straight Wire Appliance is a fully programmed appliance when correctly sited with the referents obtained from Dr. Andrews's research and applied in the Andrews treatment mechanics. The Andrews System will allow the operator, if desired, to achieve the Six Keys, plus a mutually protected functional occlusion scheme, efficiently and effectively.[2-4]

The Straight Wire concept and appliance are being taught in most, if not all, North American orthodontic departments and selected pediatric programs. I have actively taught and shared my experience, knowledge, and expertise in the Straight Wire technique with numerous dentists throughout the U.S. and abroad. The Straight Wire technique has allowed the general and pediatric dentist in more than 90 percent of the so-called "normal" malocclusions to deliver an objective quality of orthodontic care within the standard of care of the specialty. Since 1975, I have offered my fully documented Straight Wire cases for review as evidence to support that statement.[5,6] Root resorption has never been an issue or major concern of the Straight Wire Technique. Also, Dr. Andrews has stated in print that it is rare for his patients to have root resorption.[7] This is logical, because the Straight Wire Technique is a direct-vector movement with a minimum of "round tripping" or "jiggling"—both common occurrences in the techniques that Dr. DeAngelis describes.

Root resorption is of multifactorial etiology, and all evidence indicates that 1 to 2 mm of apical root loss, if it does occur, seems inconsequential, particularly in light of the functional and esthetic benefits of orthodontic treatment—the scars of the operation, so to speak.[8,9]

I believe that we are likely to remain in the Straight Wire era for some time, because most of its advantages have yet to be discovered. Most orthodontists don't yet understand the huge differences between a nonprogrammed, partly programmed, and fully programmed appliance, and few are employing Dr. Andrews's major contributions to this area of dentistry.

In trying to chart the course of orthodontics in the 21st century, Dr. DeAngelis promotes his Amalgamated Technique based on a falsehood that is not evidenced by those of us using second-generation Andrews's Techniques into the 21st century.

Leonard J. Carapezza, DMD
Wayland

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Author's Response:

Dr. Carapezza's response to the "50-Year Journey" article is not surprising coming from an advocate of the Straight Wire Appliance. I am quite certain that proponents of the other appliances (Speed, Damon, Tip Edge, and Begg) referenced in the article would be equally vehement in their defenses.

The comments in the article concerning the shortcomings of the Straight Wire Appliance are clear and irrefutable, and need not be repeated in this concise rejoinder. They are also supported by others, such as Dr. James Kaley, adjunct professor of orthodontics at the University of North Carolina School of Dentistry and a Diplomate of the American Board of Orthodontics, et al., in an *Angle Orthodontist* article in which they reported that of their 200 consecutively treated Straight Wire cases, more than 90 percent had root resorption.[1] The authors observed that, statistically, the most severely resorbed apices—greater than one quarter of the maxillary central and lateral incisor roots—were subjected to lengthy rectangular archwire intraslot torque.

Additionally, Wehrbein et al. had the sad but rare opportunity to examine the maxilla and mandible of a deceased teenager who had been in treatment with the Straight Wire Appliance for only 19 months (Kaley's average treatment time was 34 months).[2] Their examination revealed severe root resorption of incisors and molars, fenestrations of the maxillary buccal and mandibular lingual alveolar plates, and perforation of the maxillary sinus by the molar palatal roots. These findings were not discernible radiographically. The authors opined that the action of intraslot torque by the rectangular archwire was directly responsible for this irreversible damage to the roots and paradental tissues. These are objective reports from advocates of the Straight Wire Appliance. It should be noted that my interest in the Amalgamated Technique is strictly educational. Entrepreneurs continue to perpetuate the myth of one-size-fits-all malocclusions by proselytizing the "fully programmed" brackets of Andrews and Roth.

The Andrews's Straight Wire Appliance, as modified by Roth,[3,4] is programmed to deliver intraslot torque, a procedure that Thurow, an expert in biomechanics and engineering in dentofacial orthopedics, warned should be avoided due to its inadvertent, superfluous roundtripping of root apices.[5] Dr. Andrews, unfortunately, ignored that admonition as he developed his appliance. Newton's third law of physics is incontrovertible, even in orthodontics.

Root resorption should not be considered a *sine qua non* for orthodontic treatment. The mentality of "scarring of the operation, so to speak" is no more than a poor excuse for faulty biomechanics. Sadly, the biology in biomechanics is ignored by the clinician who favors perfect dental alignment within the Six Keys to normal occlusion at the expense of damaged root apices and paradental structures over ideal alignment with biologically sound physiologic, nonpathologic results. "Do you want root apices and intact paradental tissues at the end of treatment or ideal occlusion?" The discerning clinician should demand both.

And finally, orthodontic academicians who admonish the undergraduate dental student against treating complex malocclusions without sound, extensive postgraduate education in growth and development and orthodontics provide sage advice for the aspiring orthodontic practitioner who, without formalized training by competent orthodontic instructors in university-based programs, does not comprehend the nuances of orthodontic diagnosis, treatment planning, biomechanics, and growth and development. This is not demagogy; this is prudent advice. Likewise, the orthodontist who is not a surgeon must resist a hankering for performing orthognathic surgery for the patient with a skeletal dysplasia; thus, the need for a specialist in maxillofacial surgery. ■

Vincent DeAngelis, DMD
Woburn

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UNDERSTANDING MUTUAL FUND EXPENSE RATIOS

Every mutual fund must disclose certain costs associated with running the fund. Those costs represent a fund's expense ratio, which is expressed as a percentage of a fund's assets. For example, a fund that has $100 million in assets and annual expenses of $1 million would report a 1 percent expense ratio (1 percent of $100 million = $1 million).

Why is a fund's expense ratio important? First, it can help you gauge how efficiently the fund operates. A high expense ratio reduces the amount that is paid to you as a shareholder. Second, a fund's expenses affect your net returns, particularly over the long term. For example, let's look at a hypothetical illustration (which doesn't reflect the performance of any actual security). Assume you have $10,000 in one stock fund that earns a 5.5 percent return and $10,000 in another stock fund that earns exactly the same return but that costs you an extra half-percent in expenses. The difference between 5.5 percent and 5 percent over 20 years means a $2,645 reduction in your bottom line.

That's not to say that you should automatically reject a fund just because it has a high expense ratio; the fund's performance may be worth the higher cost. However, you do need to take expenses into account, especially if you're investing for the long term.

Some general categories of funds tend to have higher expense ratios than others. For example, a stock fund that specializes in emerging markets may have to spend more on research than a fund that invests only in large-cap U.S. stocks for which a great deal of information is readily available. A fund that is actively managed may have higher expenses than a fund that mirrors an index.

Each mutual fund's prospectus must include a table in the front that you can use to compare the expenses of various funds. The table lists the fund's expense ratio, as well as a breakdown of the costs included in it, which fall into three general areas: management fees, marketing costs, and administrative fees.

Management Fees

Every fund has an investment management or advisor firm that manages the fund and makes investment decisions. Even an index fund, which does relatively little trading and whose investments basically duplicate those of an index, will have a firm or an individual who handles any transactions. Management fees often represent the single largest portion of a typical fund's expense ratio.

Marketing Costs

These costs also are known as 12b-1 fees, after the legal provision that permits them. They were originally designed to let funds recoup costs associated with distribution and advertising, on the theory that attracting new investors and additional assets would help make a fund more cost-effective for each investor. In recent years, there has been discussion regarding whether 12b-1 fees should be eliminated—especially for funds that are closed to new investors and therefore should have little need to market themselves—but they are still very common.

Administrative Fees

This category of fees includes the cost of recordkeeping, custodianship, taxes, and legal, accounting, and auditing services.

What's Not Included in an Expense Ratio

Trading expenses represent the cost of buying or selling securities, and also can have a substantial impact on your net return over time. Trading costs, which include commissions paid by the fund when it buys or sells a security, aren't included in a fund's expense ratio. However, funds are required to report the per-share cost of their annual commissions; this can be found in a fund's annual report or statement of additional information.

Also, not included in the expense ratio is any redemption fee a fund might charge if you sell your shares before a specified time, or any sales charge the fund might impose at the time of purchase or sale.

Before investing in a mutual fund, carefully consider its investment objectives and risks, as well as its charges and expenses. This information is available in the prospectus, which can be obtained from the fund. Read it carefully before investing.

Comparison Shopping

The "Tools and Calculators" section of the Financial Industry Regulatory Authority (FINRA) Web site includes an online Fund Analyzer that lets you compare the impact over time of the fees and expenses of as many as three funds. ■

VIKKI NOONAN, DMD, DMSc
THOMAS OLLERHEAD, DMD, CAGS
SADRU KABANI, DMD, MS

Drs. Noonan and Kabani are oral and maxillofacial pathologists at the Center for Oral Pathology at Strata Pathology Services in Cambridge. Dr. Ollerhead is board certified in the specialty of endodontics and maintains practices in Framingham and Marlborough.

LATERAL PERIODONTAL CYST

The lateral periodontal cyst is a developmental (noninflammatory) cyst that arises in the alveolar bone along the lateral portion of an erupted vital tooth. Such lesions are radiographically indistinguishable from other odontogenic lesions that frequently occur in this location, such as the odontogenic keratocyst, and from lateral radicular cysts that arise secondary to loss of tooth vitality. Typically presenting in adult patients, the lateral periodontal cyst is often asymptomatic and first noted during the course of routine radiographic examination. Although the canine-premolar region of the mandible is the most common location for the lesion,[1] when such lesions arise in the maxilla they typically occur in this same region of the dentition. While most often characterized as a solitary cystic cavity, in some instances the lesion is multicompartmentalized. This multilocular variant is termed the botryoid odontogenic cyst, and a diagnosis of such may portend a higher likelihood of recurrence than its unilocular counterpart.[2]

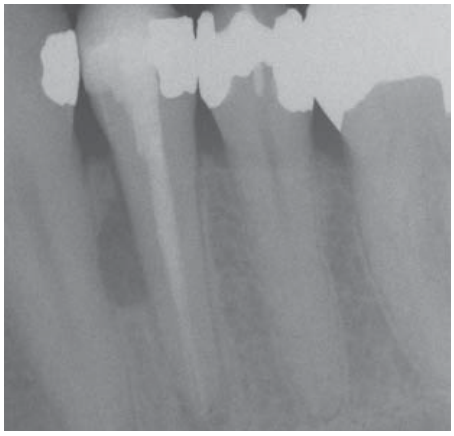

Figure 1. Radiolucent lesion thought to represent a cyst of inflammatory origin. Following enucleation, the lesion was diagnosed as a lateral periodontal cyst.

Though relatively uncommon, a familiarization with this entity is important when forming a differential diagnosis for a radiolucency presenting in a lateral-radicular location. Assessment of tooth vitality is an essential step to avoid unnecessary endodontic therapy and to direct appropriate treatment.

Conservative surgical excision is the standard of care, with submission of lesional tissue for histopathologic evaluation. Given the higher incidence of recurrence in the botryoid variant, patients with this diagnosis may require periodic radiographic follow-up evaluation. ■

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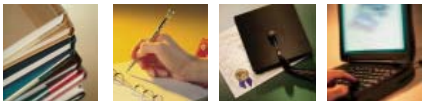


DENTAL EDUCATION

MELISSA CARMAN, MANAGING EDITOR

Highlighting key events taking place in dental education in Massachusetts.

Tufts University

The awards are rolling in for Tufts University School of Dental Medicine's vertical expansion project, including LEED Silver Certification from the U.S. Green Building Council in recognition of its sustainable design.

The Kneeland Street building, which was formally dedicated last November, conforms to LEED (Leadership in Energy and Environmental Design) standards, the nationally recognized green building model. The five-story expansion's 1,700 new windows, designed to bring more light into the building's interior, contribute to its energy-saving profile.

In addition, TUSDM has been acknowleged with a Building of America Award, which recognizes the country's most innovative construction projects; the Boston Society of Architects Honor Award for Healthcare Facilities Design; and the International Facilities Management Association Boston Chapter's Best Practice Award.

Boston University

Dr. Gregory Stoute (right) and Dr. Jean-Marie Betty at one of the clinics.

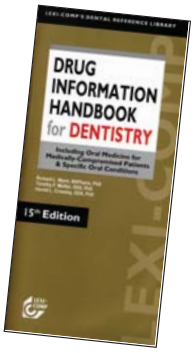
This past June, Gregory Stoute, DMD, traveled to Jamaica as part of an oral health outreach mission organized by the Jamaica Awareness Association of California. Dr. Stoute, an associate professor and director of minority affairs at the dental school, helped provide preventive care, cleanings, and extractions to approximately 130 patients over the course of the five-day mission.

"In Jamaica, even people who have jobs—the working poor—are in many cases unable to afford dental care," said Dr. Stoute. "At one point in the trip, many workers from the hotel we were staying at came in for a dental visit. As in so many nations, including the U.S., and even Massachusetts with the recent MassHealth coverage cuts, working people just do not have access to care."

For the past 30 years, Dr. Stoute has been involved in outreach efforts worldwide, including missions to the Caribbean, South Africa, and South America. ■

NORMAN BECKER, DDS, EDITOR EMERITUS

Drug Information Handbook for Dentistry—15th Edition



RICHARD L. WYNN
TIMOTHY F. MEILLER
HAROLD L. CROSSLEY

Lexi-Comp Reference Library

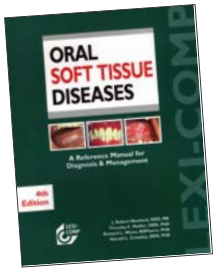
This book should belong in every practitioner's office. Although it includes the caveat that it is "intended to serve the user as a handy reference and not as a complete drug resource," the book contains information on more than 1,600 commonly used drugs.

The cross-references are easy to navigate and explain the specific use of the drugs, including their function, doses, and possible adverse reactions. The book includes drug monographs that list generic names, cross-references, sample prescriptions, brand names, pharmacologic category, and unlabeled/investigational use.

This very useful handbook also details adverse effects, restrictions, dental uses, dosage, mechanism of action, contraindications, warnings/precautions, and drug interactions (e.g., metabolism effect, avoidance of concomitant use, increased toxicity, decreased effect, dietary considerations, duration of action and half-life, and pregnancy and lactation considerations).

There is no doubt in my mind that this handbook has had a positive effect on my prescription-writing habits, and my patients can only benefit from the extra knowledge I have gleaned from this resource.

Oral Soft Tissue Diseases—4th Edition



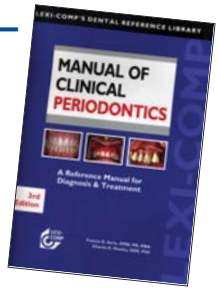
J. ROBERT NEWLAND
TIMOTHY F. MEILLER
RICHARD L. WYNN
HAROLD L. CROSSLEY

Lexi-Comp Reference Library

The fourth edition of this reference manual describes white lesions, red lesions, ulcerated lesions, blistering/sloughing lesions, pigmented lesions, and soft-tissue enlargements in a clear and easily accessible manner. The editors use labeled tabs for clear organization of the topics, making the material easy for the user to navigate. They also utilize clear and precise photographs and text to identify etiology, typical visual clues, useful clinical information, differential diagnosis, diagnostic steps, treatment recommendations, follow-up suggestions, and clinical significance for each of the lesions under study.

A drug section with sample prescriptions, as well as special topics—such as management of the patient undergoing cancer therapy, dry mouth syndrome, fluoride, antibiotic prophylaxis, HIV infection and AIS, and normal blood values—makes this manual a great teaching tool.

Manual of Clinical Periodontics—3rd Edition



FRANCIS G. SERIO
CHARLES E. HAWLEY

Lexi-Comp Reference Library

This book is more than what it claims to be: "A Reference Manual for Diagnosis & Treatment." It is a teaching tool for practitioners and students alike.

Starting with an introduction to health and disease, as well as evidence-based decision making, the authors cover normal anatomy, histology, and physiology of the peridontium, followed by the classification of periodontal diseases, assessment, diagnosis, treatment planning, and therapeutic endpoints.

The tabs allow for an easily referenced manual of all facets of periodontal care, including: prevention and maintenance; nonsurgical therapy; surgical principles; resection and regeneration; periodontal plastic surgery; periodontal emergencies; and implant considerations.

The authors' use of photographs and illustrations, along with a useful bulleted question-and-answer format, makes this manual a valuable addition to any practitioner's library. ■