OURNAI of the

MASSACHUSETTS DENTAL SOCIETY

Spring 2009

10 Ways to Prevent Complaints and Build Your Practice



THE FUTURE IS NOW

We are living in exponential times. The top 10 in-demand jobs in 2010 did not exist in 2004

- One out of eight couples in the United States last year met online.
- There are more than 200 million registered users on MySpace.
- There are 31 billion searches on Google each month; there were 2.7 billion in 2006.
- The first commercial text message was sent in December 1992. Today the number of text messages sent and received daily exceeds the total population of the planet.
- The amount of new technical information is doubling every two years. This means that for students starting a four-year technical degree, half of what they learn in their first year of study will be outdated by their third year of study.
- A fiber-optic cable has been developed that pushes 14 trillion bits per second down a single strand of fiber. That is the equivalent of 2,660 CDs or 210 million phone calls every second. This capacity is currently tripling every six months and is expected to do so for the next 20 years.
- Predictions are that by 2049, a \$1,000 computer will exceed the computational capabilities of the entire human species.

Even the source of the information cited above—a slideshow video presentation on YouTube entitled "Did You Know?" (originally created by Colorado high school teacher Karl Fisch and updated by Iowa State University professor Scott McLeod, JD, PhD)—attests to this phenomenal growth in technology.

No matter at what stage you are in your professional life as a dentist, technology has become an integral part of the provision of dental care. It is here to stay. Yes, there is a learning curve and, yes, it is expensive, but the positives definitely outweigh the negatives. However, you have to be prudent as to which "latest and greatest" advancement you need to purchase. Think about it—go into your basement and look at the number of dental gadgets you have bought over the years and tried for a little while, only to realize they did not live up to the hype. The first generation of a new innovation is just that—first generation. Things change so quickly that it may be worth waiting to see if it is found to be useful. If it is, it will evolve into something even more efficient and practical—and probably less expensive—in a very short span of time.

Dentists are definitely gadget people, so consider what your needs are before you buy:

- Will it benefit my patients and improve the quality of care I provide?
- Will it be a resource that my staff and I can utilize for office management or the delivery of care?
- Will it benefit the way my patients see my practice (e.g., impress them with the bells and whistles)?
- Will it help market my practice?
- Will it make my life easier?

Be especially careful if you are reading about something new or if you see an interesting new device at a meeting. If something is brand new on the market, experience shows that it might be better to wait before buying so that little problems or chinks in the armor can be worked out before you make an investment. You do not want to be



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IMMEDIATE ANNUITIES OFFER A SOURCE OF LIFETIME INCOME

The good news is that we're living longer. But the prospect of a longer life expectancy means we risk outliving our retirement savings. If the thought of receiving a steady stream of income that lasts for the rest of your life appeals to you, a single premium immediate annuity (SPIA) might be worth considering.

How Does it Work?

Unlike a deferred annuity, which is designed for long-term

savings, an SPIA begins to make payments to you immediately. In exchange for a lump sum of money you pay to an insurance company, you'll receive an income that can last for the rest of your life. The amount of income you receive is based on a number of factors, including your age at the time payments begin, your gender, whether payments will be made to you only



or jointly to you and another person, and whether payments will be made for a fixed period of time or for the rest of your life or joint lives.

You Have Options

Most immediate annuities include a number of payment options. The most common payment options are:

- *Life only.* Payments continue during your lifetime, but stop at your death.
- *Period certain.* Payments are made for a fixed period of time (e.g., 5, 10, 15, 20 years). If you die prior to the end of the chosen period, your beneficiary will continue to receive payments for the remainder of the fixed period.
- Life with a period certain. Payments are made for the rest of your life or a minimum period of time. If you die prior to the end of the minimum payment period, the beneficiary you name in the annuity will receive the payments for the remainder of the period certain, but no longer. If you outlive the period certain, payments will end at your death.
- Joint of survivor. Payments are based on the lives of two
 people, typically you and your spouse. When either of
 you dies, payments continue to be made to the survivor.
 This option can also be combined with a period certain
 option, in which case payments will continue until both

- of you have died or for the minimum period of time you select, whichever is longer.
- Installment refund/cash refund. If you die prior to receiving at least the return of your investment in the immediate annuity, your beneficiary will receive an amount equal to the difference between what you invested and what you received. Your beneficiary will receive this amount in either a lump sum (cash refund) or periodic

payments (installment refund.)

The amount of each SPIA payment you get can be affected by the payment option you select. For example, a 60-year-old man who invests \$100,000 in an immediate annuity may receive annual payments of \$7,260 for the life-only option, \$6,696 for life with a period of 20 years, or \$7,920 for a fixed period of 20 years. (This example is for illustration pur-

poses only and does not reflect actual insurance products or performance, nor is it intended to promote a specific company or product.)

Are There Taxes to Pay?

Generally, you pay income taxes on that portion of each payment that represents earnings or interest credit to the immediate annuity. The remaining portion of each payment is considered a return on your investment and is tax free.

Note: Guarantees associated with annuities are based on the claims-paying ability of the annuity issuer.

Other Factors to Consider

While an SPIA can offer a measure of relief for retirement income concerns, as with most investments, there are other factors to consider. Generally, once you invest in an SPIA, your payments are "locked in" with little flexibility, although there may be some exceptions. Normally, you don't have access to the principal unless the annuity provides for it, so be sure the payment option you select will meet your income needs. Also, consider whether there are other investment choices available that may better suit your retirement income goals. Your financial professional may be able to present various options, including an SPIA, for you to consider when deciding how best to meet your retirement income needs.











GEORGE GONSER, CEO

Mr. Gonser is the chief executive officer of MDSIS.

COBRA CHANGES

HERE ARE MYRIAD COMPONENTS TO THE AMERICAN RECOVERY AND Reinvestment Act of 2009 (ARRA) implemented by President Obama in February. This article focuses on one component that has immediate ramifications for all dental offices—COBRA.

Overview—The Consolidated Omnibus Budget Reconciliation Act of 1985 (COBRA) requires companies with group health plans to permit employees and certain dependents who lose coverage due to termination of employment to elect to continue that coverage for up to 18 months while agreeing to pay the entire premium at their former employer's group rate. Most small and large employers in Massachusetts are subject to the federal COBRA law for companies with 20 or more total employees or mini-COBRA for companies with 2-19 total employees. The ARRA doesn't eliminate any existing COBRA employer obligations.

New regulations—Effective March 1, 2009, the ARRA requires employers to comply with a 65 percent federal subsidy of COBRA health insurance premiums to involuntarily terminated employees between September 1, 2008, and December 31, 2009. Mini-COBRA dates of eligibility for the subsidy are March 1, 2009, through December 31, 2009. The individuals are responsible for the remaining 35 percent of the premium. The U.S. Department of Labor is working on a guideline to clearly define "involuntary termination," but initial definitions include those people who were or are involuntarily terminated from employment for any reason other than gross misconduct.

Effective date—For COBRA and mini-COBRA, the subsidy applies beginning with the first period of coverage after February 17, 2009—the date the law was enacted. For example, if a plan requires individuals to pay COBRA premiums on the first of the month, the first period of coverage begins March 1, 2009.

Who's eligible?—Involuntarily terminated individuals with adjusted gross incomes (AGI) not exceeding \$145,000 or joint filers with an AGI not exceeding \$290,000 qualify for the subsidy. The subsidy will be phased out between \$125,000 and \$145,000 for individuals and between \$250,000 and \$290,000 for joint filers. Spouses and dependents on COBRA are also eligible.

Who's ineligible?—Employees involuntarily terminated due to gross misconduct (e.g., theft or fraud) are not eligible. Also, if coverage is terminated involuntarily, but there was no employment termination (e.g., a dependent ages out of a plan or an employee's hours drop below the level to be eligible for health insurance), then the individual is not eligible. If an employee voluntarily leaves a company and/or retires, he or she is not eligible for a subsidy. Also, when an individual becomes eligible for any group-sponsored plan, he or she loses the right to take part in the subsidy.

How long does the subsidy last?—The subsidy is available for nine months or until the COBRA or mini-COBRA benefits end, whichever occurs first. In no event is the subsidy available for coverage periods prior to March 1, 2009, or after December 31, 2009 (unless an extension is granted by the federal government).

Who is responsible for administering the subsidy (e.g., billing the reduced amount and seeking reimbursement from the federal government)?—For employer plans subject to COBRA, the employer is responsible. For insured plans subject to state mini-COBRA laws, the insurance company is responsible.

Special election notice requirements—Individuals who became COBRA eligible on or after September 1, 2008, and who either didn't elect COBRA or elected it and let it lapse will now have a special election period for businesses with 20 or more total employees. The U.S. Department of Labor and the U.S. Department of the Treasury developed a model notice that was made available on March 19 (find it at www.mdsis.org). Notices regarding the special election period were to be sent by April 17, 2009, to all individuals who had a COBRA-qualifying event between September 1, 2008, and February 28, 2009. Individuals have 60 days to elect COBRA, which commenced March 1, 2009. Mini-COBRA-eligible companies are not eligible for the special election notice.

Special transition rule—For involuntarily terminated individuals on COBRA who pay 100 percent of their premium in the 60 days after February 17, 2009, employers and insurers may either reimburse the individual for 65 percent of their paid premiums or provide a credit that can be used to offset future premiums (within 180 days).

How employers or insurance companies will be repaid for the subsidy—Employers are expected to cover the cost of the subsidy for eligible individuals and recover the subsidized amount of the premium by withholding the payment as a credit against federal payroll taxes. Any subsidy an employer already provides will take the form of a refundable payroll tax credit on the employer's employment tax returns (such as Form 941). The employer is permitted to offset any payroll tax liabilities, including employee income tax withholdings, employee FICA tax withholding, and employer FICA tax obligation. If the subsidy exceeds the payroll tax liabilities, the employer will receive a tax refund. Form 941 has been amended by the IRS to take this credit into account.

Tracking subsidies and payroll tax credits—While employers may submit their subsidies as soon as possible, the Treasury Department does not view the tax credit as being earned until the day the individual submits his or her portion of the COBRA premium. Employers will need to be careful about when they claim the tax credit and keep track of the actual date they received the individual's payment.

Get qualified legal advice—COBRA administration just became much, much more complicated. It is essential that employers consult with their own legal counsel regarding their COBRA obligations, procedures, and reporting requirements. MDS Insurance Services, Inc. (MDSIS) will provide updates on www.mdsis.org as they become available.

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TECHNOLOGY TODAY

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TAKING A CLOSER LOOK AT CARIES

N DENTAL SCHOOL, WE WERE TAUGHT Lto search for caries with an advanced instrument. It is a bent wire with a sharp point on the end of it. To this day, it is the standard of the caries exam. We can find occlusal pits, leaking restorations, soft decalcifications, and more. It is not uncommon for the dentist to come into the hygiene room for an exam, with the explorer already sitting in the pit, all by itself, dental hygienist with hands on hips for the drama of the find. Then, if a caries is found, there is the discussion of "Do we fill it? Watch it? Seal it? PRR? Glass ionomer?" and so on. In many situations, if there is no radiographic evidence, the decision is to "watch it." This is to allow it time enough to get "big enough to fill." In the days of G.V. Black amalgam restorations, this might have been valid. Today, with minimally invasive procedures (e.g., air abrasion, laser, mini-burs),

flowable composites, other restorative materials, and even the new MI Paste, we can take care of decay with earlier intervention while saving tooth structure.

Digital radiography has helped a little in discovering smaller lesions with the use of filters or even a clever piece of software from Kodak called Logicon. Still, this does not find incipient lesions that are just breaking the dentin/enamel junction. KaVo entered the marketplace several years ago with the digital explorer called DIAGNOdent. This is a low-wattage diode laser that is placed directly on the suspicious occlusal area, fluoresces the tooth, and gives a digital feedback reading that lets you know if there is a carious lesion. It uses a scale of 0-99 and an accompanying sound; the higher the number, the larger the lesion below the surface. It has been described as being similar to radar or sonar. Each practitioner decides on the number at which a restoration is necessary. Typically, lesions over 30 are found to be carious. Clinical judgment must still be used—a 70-year-old patient with a low caries rate and a 35 reading might yet be a "watch," while a 20-year-old with a Mountain Dew addiction might be better served by restoring a 25. The score for any lesion being watched can be recorded and reviewed at a subsequent recall. If the number is found to be going up, it is time to restore.



DIAGNOdent had an exclusive until recently. NEKS, a Montrealbased company, developed an LEDbased detection system that signals decay both occlusally and interproximally. It uses red and green lights as an indicator but has no numeric reading. The system is now part of Dentsply and is called Midwest Caries I.D. Both of these devices retail at around

Air Techniques is releasing its new detection system called Spectra. According to the company, Spectra identifies cariogenic bacteria based on the fluorescence principle. LEDs project high-energy blue light onto the tooth surface. Light of this wavelength stimulates bacteria to fluoresce red, while healthy enamel fluoresces green. The images of the teeth appear on the computer screen (looking like Doppler weather radar) with numeric values indicating caries activity. These images can be stored and com-

pared to values at subsequent visits if there are any questions.

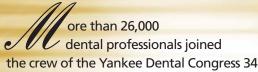
In the wings, a company called Lantis Laser has taken a different approach with a system that we might see later this year. They utilize optical coherence tomography (OCT), which uses a high-intensity light. Information is captured by shining a near-infrared light through a single optical fiber, only .006" in diameter, deep into 3 mm of the tooth. The handpiece is moved over the surface of the tooth and captures reflected light at over 2,000 points. These reflections are analyzed by the computer to form a cross-section image, which is displayed in real time on the screen. The images look like mini-CT slices of the tooth.

Finally, Quantum Dental Technologies, another Canadian company, has developed the Canary Caries detection system. The manufacturer claims that this technology, which uses a laser along with slight heat, can find caries on all surfaces, including around restorations.

All of these high-tech devices still need the practitioner's wisdom, clinical judgment, and intuition. The end result here is that we can continue to "watch" lesions, but now with a quantitative basis. As an old dental school professor used to say to my class, these tools "are a guide to the intelligent and refuge to the stupid."

Smooth Sailing for...





ship that set sail at the Boston Convention and Exhibition

Center (BCEC) from January 28 to February 1, 2009. YDC's second

year in our new home provided a first-rate educational program and numerous opportunities for fun and networking.

Even as snow blanketed the city on Wednesday morning, attendees arrived to participate in the Women's Conference, a day dedicated to learning and making new friends. Later in the evening, some 600 dental students flocked into the Renaissance Hotel to hear Dr. Gordon Christensen talk about the profession as they will come to know it.

Red clown noses and circus hats—on children and adults alike—and cotton candy were abundant at the Big Apple Circus, Circus to Go on Thursday evening. The audience was mesmerized as an acrobat flew through the air and landed on a tightrope. Fantastic prizes were awarded every 20 minutes, while casino-style gambling entertained others throughout the evening at the MDS Foundation Casino Night.

Highlights of the educational program included instruction by several members of the Scottsdale Group, headed by Dr. Gordon Christensen. The Ask the Experts panels on restorative materials and acute pain, featuring such highly renowned international clinicians as Drs. Jeff Hutter, Ron Jackson, Gerry Kugel, Carl McManama, and Dan Nathanson, left the audience wanting more.

Loretta LaRoche once again provided a humorous look at self-improvement. Courses on technology, such as 3D digital scanners, cone beam CT scans, and CEREC, kept attendees up to date.

As always, Yankee attendees had the chance to have a "brush with celebrity" as entertainment options were multiple and varied. Celebrities at YDC 34 included *This Old House* host Kevin O'Connor and Boston Red Sox color analyst Jerry Remy. *Mystic River* author Dennis Lehane, who grew up in Dorchester, proved to be not only a great author but a delightful humorist, as well. He told attendees that his father still lets him know when the civil service exams are scheduled, since he's not convinced that his son will "make it" as a writer. The first-ever YDC Comedy Night, held Friday night, featured comedians Frank Caliendo and Kathleen Madigan and 90 minutes of side-splitting laughter.

The Exhibit Hall floor bustled with activity throughout the conference. People lined up for autographs from Tedy Bruschi and Laurence Maroney. The Harpoon Brewery Beer Tasting on Friday was a big hit as attendees walked the aisles with their free Yankee Dental Congress collectible beer glass. The 9th annual Chowderfest was as popular as ever.

Yankee Dental Congress 34 was a huge success with something for everyone, no matter the age. We hope that those of you who attended found the experience beneficial, and for those of you who could not make it, we hope to see you next year on January 27–31, 2010.

SAVE THE DATES!



TEN UNDER

ince 2005, the Journal of the Massachusetts Dental Society, in conjunction with the MDS Standing Committee on the New Dentist, has been shining a spotlight on the "Ten Under 10"—10 noteworthy MDS member dentists who have been in the profession for 10 years or less. On the following pages, you will meet the 2009 Ten Under 10 honorees and learn more about their thoughts on organized dentistry, challenges they faced (and continue to face), how they balance their professional and personal lives, and more.

To qualify for selection for the Ten Under 10, dentists must have graduated from dental school in the past 10 years, be current MDS members, and have made a significant contribution to the profession, their community, or organized dentistry—or all of the above. A call for nominations was sent to MDS member dentists in the fall and solicited on the MDS Web site and Membership Matters enewsletter. Nominations were reviewed and final selections were chosen by the MDS Standing Committee on the New Dentist in December.

Congratulations to the 2009 Ten Under 10—organized dentistry's future.

Ariel Bales-Kogan, DMD

Current Residence: South Boston Hometown: Petah-Tikva, Israel Office Locations: Beverly, Brockton, Natick Specialty: Orthodontics

Education: Boston University Goldman School of Dental Medicine

Why did you choose dentistry as a career?

It may sound corny, but I really admired my dentist, Dr. Brown, when I was a teenager. Although I had many dental problems growing up, my dentist always made me feel comfortable and at ease. When I spoke with my friends about my experience, they all seemed to have a common opposite experience. There it was, the "ding" moment of my career . . . I, too, could make people feel better about going to the dentist.

Please describe a challenge/obstacle you experienced when you began your professional career.

I think a major obstacle that I faced, and continue to face, and that probably all new dentists face is the overwhelming cost of education. Very few schools offer scholarships for merit or academics for ordinary middle-class families, like the one I came from. When I finished dental school, it was a real tough conversation to have with my parents as to how we would manage my already enormous debt, while continuing schooling for three to four more years.

As you look back on your career thus far, is there anything you would do differently?

It's hard to look back at 12 years of school and not yet two years in practice and find something to do differently. I think I got an excellent education, and I think I chose the right career for my personality and me. I have not yet tired of my day-to-day, and hopefully, I will feel this way for the rest of my career.

You work in three different offices. How challenging is it to transition between these different environments?

Working at three different offices is challenging in many ways. Aside from needing to know where to be on what day, having to deal with so many work environments has been the biggest challenge. I think it's extremely important to recognize when an office just doesn't work for you, from a personal perspective, or you end up sacrificing your own happiness and place undue stress on yourself. Different bosses can be demanding in different ways, and it's important to choose the right location well.

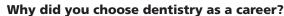
On a very encouraging side, I really love working at so many locations because it has exposed me to so many different techniques, management styles, patient populations, and people that are part of the orthodontic team. I think this insight will be invaluable when it's time for me to open my own practice, as I would not otherwise have had so much exposure to learning experiences about how to run an office and manage my team.

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Edwin S. Brookes, DMD

Current Residence: Hadley Hometown: Wilton, NH Office Location: Hadley Specialty: General Dentistry

Education: Tufts University School of Dental Medicine



I chose dentistry as a career after I had decided not to pursue a career in the arts. I found that I enjoyed all aspects of dentistry, including being involved in small business, interacting with patients, using my hands in my work, having a flexible work schedule, etc. I found that the job of being a dentist fit with my skills and my desires for a career.

Please describe a challenge/obstacle you experienced when you began your professional career.

I can't say that I have found any challenges or obstacles that I did not expect when I began my career. I'm sure that I will be surprised at some point, but so far it's been what I expected.

You actively provide charity work to dental- and nondental-related organizations, such as Project Stretch, Haitian Dental Foundation, and Amherst Committee for a Better Chance. How did you become involved with these organizations? How do you balance the dental charity work with the nondental charity work? And if you were forced to choose only one of these endeavors to be involved with, which would it be and why?

I have been involved with and interested in service work for much of my life; it is something that I grew up around. Over the years, I have learned that it is important to give back what you can based on the skills that you have, as well as the place you hold within your community and the world. As Americans, we don't always realize how lucky we are to live in a comparatively safe country where we have options that people in other nations do not. Most of us can't imagine being someplace where there aren't ambulances, decent hospitals, public education, or police and fire departments.

I became involved in these various service groups through family, friends, school, and community contacts. Regarding dental versus nondental charity work, I have found that the needs of many nonprofit organizations are similar in that they all require leadership, money, and lots of willing people to help along the way. So, following that, it is easy to take the skills and experience that I have gained working with one group and apply them to another group. Quite often, I have learned things working with nondental groups that have in turn helped out the dental groups that I have worked with. All this being said, if I had to choose, I would leave the nondental groups and focus on the dental service. I feel that as a dentist, I have a unique set of skills and am, therefore, able to help more as a dentist than in other capacities.

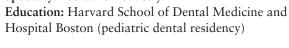
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Cara Donley, DMD

Current Residence: Sudbury Hometown: Dallastown, PA Office Location: Sudbury Specialty: Pediatric Dentistry

Education: Harvard School of Dental Medicine and Children's



Why did you choose dentistry as a career?

When I was a child, I was terrified of the dentist. One time, I actually bit the dentist and ran out of the room! In high school, I spent time shadowing in a dental office and realized how enjoyable and rewarding a dental career could be. As a dentist, you have a unique opportunity to educate and be a positive role model in a career that keeps evolving. I want to make a difference in the lives of children and give them the opportunity to enjoy their dental experiences.

Please describe a challenge/obstacle you experienced when you began your professional career.

My biggest challenge when I began my career was accepting that things don't always go as planned or as I learned in school. Cooperation with patients isn't always there, parents don't always follow or agree with your treatment recommendations, and there is a whole business aspect to dentistry. You need to quickly develop a sense of humor, incredible patience, and a perspective to take each day as it comes and deal with it as best you can. It helps being in a group such as the MDS to realize that I am not alone.

As you look back on your career thus far, is there anything you would do differently?

No, there isn't anything I would do differently. I believe everything happens for a reason. It is how you deal with difficult challenges and frustrations in life that makes you a better person and dentist. Just as I was opening my office four years ago, my father died while he was only in his 50s. I understand that life is too short to focus on the "What ifs" but rather, to continue following my professional dreams. My approach to life is to work hard each day, always learn, and prepare for the future in the present.

What do you do to ensure that you have a balanced professional and personal life?

It is challenging to find a balance, especially as my husband, Jason Boch, is a periodontist. Many dinner conversations end up involving some part of dentistry, but we make an active effort not to focus too much on work. We try to keep weekends for family-only activities and relaxation.

You opened your own practice only a few years after graduating from dental school. What can you tell us about how you came to that decision and the experience of opening your own practice?

When I finished my pediatric residency, I worked in an existing pediatric office, which was an extremely valuable experience. I learned much of the art of dealing with staff, working with fami-

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Sergio Guzman, DMD, MSD

Current Residence: Natick Hometown: Bogotá, Colombia Office Locations: Back Bay and Brookline Specialty: Periodontology

Education: Boston University Goldman School of Dental Medicine

Why did you choose dentistry as a career?

Personally, I had many compelling reasons to choose dentistry as a career. Because almost all of my core family has been involved in dentistry. I had the opportunity to learn all the positive aspects that dentistry has to offer during the different stages of life, even prior to selecting dentistry as my profession. It was always clear to me that dentistry would allow me to have the flexibility to balance my professional and my personal lives and be able to adapt to any lifestyle that I would like to pursue in the future.

Self-employment, as well as the earning potential that dentistry could offer, was also appealing to me. It would allow me, as an independent entrepreneur, to be my own boss and to maintain my own hours. I was also aware that dentistry could provide me with opportunities in a variety of private and public settings. And, of course, the potential for serving others while receiving a great deal of personal satisfaction put it on top of my list. When I added all that to the possibility of being creative at all times while applying my scientific knowledge in the delivery of patient services, it became a great option for me.

Please describe a challenge/obstacle you experienced when you began your professional career.

My biggest challenge appeared when I decided to pursue my professional career in the United States. My original plan when I was finishing dental school for the first time in Bogotá, Colombia, was to go to Boston University to obtain specialty training and a master's degree in periodontology and then return to establish my specialty practice, like my family had done in the past and my brother was in the process of doing at the time.

However, at the end of the year 2000, other great opportunities appeared on the horizon. What I didn't realize at that time was that I was starting on my own, where no one knew who I was and where my family business and prestige were not existent. I had already spent six years in Colombia to obtain my dental license, where I graduated summa cum laude, plus four additional years at Boston University for my training in periodontology, and now I was required to go back to dental school for another two years to homologate my degrees. It takes a certain mental strength to go through that process. Of course, now when I look back, I see that it was a great journey and I would not do it any differently. But it was definitely much more challenging than my original plan.

As you look back on your career thus far, is there anything you would do differently?

I would probably study a lot more. It has always been a goal of mine to teach my students how precious the time

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Eric P. Holmgren, DMD, MD

Hometown: San Diego, CA Office Locations: Pittsfield and North Adams

Specialty: Oral and Maxillofacial Surgery

Education: University of Pennsylvania School of Dental Medi-

cine and Oregon Health & Science University

Why did you choose dentistry as a career?

I previously worked as an engineer and found myself disinterested in working in the corporate world. That experience affirmed my interest in the health care field. I realized how happy most of the dentists I knew were with many facets of their career, including flexibility and control of their work environment, as well as the direct impact they had on patient care. I also liked the aspect of doing surgery and performing procedures.

Please describe a challenge/obstacle you experienced when you began your professional career.

Adjusting to life outside of an academic center was difficult. Even though I am in a wonderful multi-surgeon practice, managing patients and operating by yourself occasionally without professors or attendings guiding you through things was challenging at first.

You've been active with the MDS and organized dentistry since graduation. What made you decide to become involved?

The Berkshire District Dental Society is a great organization. We have stimulating lectures and dinner meetings. I joined because I wanted to help the community and meet all of the local dentists, as well as see what opportunities were available in the MDS.

Are you involved in any other nondental-related pur-

I have a very active family and lovely, young children, so right at this time my life is enjoyable with just work and family.

Did you always plan to become an oral surgeon or was it something you discovered while in school?

I had a feeling that I wanted to go into dentistry before I joined dental school, but I was not quite sure which specialty. During dental school, I became inspired by the oral surgery department and had the opportunity to spend a month volunteering and performing surgery in the now-damaged Charity Hospital in New Orleans. I was hooked, and my decision was quite clear after that experience. Currently, I am very happy with my choice and style of practice, and I make every effort to offer my services to the community.

As you look back on your career thus far, is there anything you would do differently?

No, there is nothing yet . . .

Erin K. Hoye, DMD

Current Residence: Mattapoisett Hometown: Mattapoisett Office Location: Marion **Specialty:** General Dentistry

Education: Tufts School of Dental Medicine and Harvard

School of Dental Medicine (AEGD)

Why did you choose dentistry as a career?

Growing up as the daughter of a dentist and the niece of four dentists, I was obviously exposed to the profession early in my life. I certainly didn't make my career decision until adulthood. Upon weighing the many health care options, I concluded that dentistry would allow me to use my strengths in math and science, as well as my ability to empathize with people and truly make a difference in their lives. I knew that dentistry would allow me to have a great career—as well as a life outside of it.

Please describe a challenge/obstacle you experienced when you began your professional career.

A common challenge of new dentists that I have experienced myself is performing clinical skills quickly and efficiently. Timing can make or break your day as a dentist. Having the confidence to make on-the-spot decisions and diagnoses was also challenging in the beginning. Lastly, working with and leading your staff is a challenging aspect of private practice dentistry.

You've been active with the MDS and organized dentistry since graduation. What made you decide to become involved?

Dentistry can be a very isolating profession if you let it be. I think it is so important to communicate with colleagues and learn from one another. Being involved with the MDS gives you a opportunity to do just that. I also feel that supporting your own state's dental society gives you a feeling of camaraderie in facing the challenges that our profession may have.

Are you involved in any nondental-related pursuits?

I have always been an athlete. I continue to stay active with field hockey, tennis, and running. I also love to travel and hope to visit more destinations in the near future.

As you look back on your career thus far, is there anything you would do differently?

Looking back to the very beginning, during my school clinical years, I wish I took more risks and was less afraid of failure. I am happy that I did a year of residency to improve my clinical skills, timing, and confidence. It helped me to have an easier transition to private practice.

You work in a practice with your father. What can you tell us about that experience?

I feel very fortunate to work with my father. It is a special

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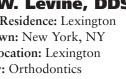






Sam W. Levine, DDS, MS

Current Residence: Lexington Hometown: New York, NY Office Location: Lexington **Specialty:** Orthodontics



Education: New York University College of Dentistry and University of Maryland Dental School

Why did you choose dentistry as a career?

I wanted to be a dentist for as long as I can remember. In addition to pursuing dentistry, I studied economics and art history. As an orthodontist, all of these aspects are combined each day. I get to make a difference in patients' lives by improving their function and esthetics, while deriving personal satisfaction from running a small business.

Please describe a challenge/obstacle you experienced when you began your professional career.

I purchased a well-established, highly respected practice in the community. Not having to start from scratch, I was able to focus on differentiating the practice by implementing and utilizing the latest technologies. Upgrading the systems took a tremendous amount of time and effort. Putting in digital radiography, paperless management software, and new hardware requires one to take on the role of IT professional. Also, using the latest technologies (i.e., soft-tissue laser, TADs, and self-ligating braces), requires a commitment to attending a lot of CE to stay on the forefront of what's new in orthodontics.

Are you involved in any other nondental-related pursuits?

Playing the drums has been a lifelong passion. While the dreams of rock stardom have faded, I still love sitting behind my drum set. I also teach drums to local children in the William Diamond Fife and Drum Corps. My other interests include skiing, scuba diving, cooking, and traveling. Recently, I learned how to sail. It's important to try new activities that keep the mind challenged.

You recently served as chair of the Middlesex District Dental Society. What can you tell us about that experience?

Serving as district chair has been a tremendous experience and honor. Having the responsibility of running such an organization has helped me develop personally and professionally. I've gained increased leadership, time management, and interpersonal skills, just to name a few. And I get all these benefits while supporting my profession. I view my service to the Middlesex District Dental Society as a privilege.

What can you tell us about your work with Operation

Being part of an organization such as Operation Smile that makes such a difference in peoples' lives is extremely rewarding. I have been involved with Operation Smile for about six years. Over that time, I helped organize a dental mission to Vietnam an amazing opportunity to travel to a foreign country to pro-

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Patrick D. McCarty, DDS

Current Residence: Cambridge Hometown: Wilmington, MA Office Location: Mobile office-based anesthesia throughout Massachusetts and



Education: University of Southern California School of Dentistry and Mount Sinai School of Medicine (anesthesiology residency certificate)

Why did you choose dentistry as a career?

My experiences as a dental patient have always been positive. When considering career paths, dentistry offered an opportunity to interact with people on a personal level. In addition, I enjoy the clinical application of physiology and pharmacology through direct patient care.

Please describe a challenge/obstacle you experienced when you began your professional career.

Due to the unique nature of my dental anesthesia practice in New England, I have been faced with the challenge of gaining exposure and creating awareness of what the services of a dentist anesthesiologist can offer. Initially, when I returned here, I had a working relationship with four offices. Currently, I work in conjunction with more than 35 practices in Greater Boston. This is the tip of the iceberg for a practice like mine, and my goal is to continue to expand awareness amongst students, residents, and practicing dentists.

As you look back on your career thus far, is there anything you would do differently?

Since my practice is limited to anesthesia, I often consider the need to maintain my clinical dental skills. This is something I intend to address in the future.

What do you do to ensure you have a balanced professional and personal life?

Fortunately, my practice model allows for a very flexible schedule. I can honestly say that I am able to schedule my work around my personal life and always make time for the outdoors, sporting events, and traveling.

You worked in Northern California after graduation. Why did you decide to move back to New England?

I am a Massachusetts native and Boston College graduate and have always loved New England. Having attended dental school in California, I was aware of what opportunity existed in the western states for dental anesthesia. There are more than 50 dentist anesthesiologists in California. The progressive nature of California and the neighboring states has resulted in an increased awareness and understanding of what advanced levels of anesthesia can offer to dentists and their patients. After working in San Francisco for a year, I was excited to aid in creating the same atmosphere of access to care and practice enhancement in Massachusetts. As more dental anesthesia residencies

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George A. Orfaly, DMD

Current Residence: Marblehead Hometown: Wilmington, MA Office Location: Salem, MA **Specialty:** General Dentistry

Education: Tufts University School of Dental Medicine

Why did you choose dentistry as a career?

As I do with all important decisions, I put a lot of thought into what my career would be. Dentistry has all the attributes I was looking for in a profession. It involves helping people, applying science, using my hands, and being able to see the results of my work. I think dentistry is the greatest profession and I feel tremendously blessed to be a part of it.

Please describe a challenge/obstacle you experienced when you began your professional career.

For the first few years of my career, I practiced in two separate offices, and each office required my being there two Saturdays a month as well as evenings, so I was working six days a week and then some. It was a challenge to balance both my personal and my professional lives.

Another issue I had to deal with at the beginning of my career was to become comfortable with getting involved in organized dentistry. As many of us probably felt in the beginning, it was intimidating entering a meeting with many established, older dentists.

As you look back on your career thus far, is there anything you would do differently?

I would have to say "No." Everything that has happened in the first nine years of my career has made me who I am today. Even the negative experiences have made me become more focused and dedicated to my profession.

What do you do to ensure that you have a balanced professional and personal life?

My wife, Sharon, and I have been married for nine years and we have two little boys (Andrew, 6, and Jason, 3). My family and my practice are the most important things in my life. I make a conscious effort to dedicate a majority of my free time to my family. Sharon does a terrific job at home, which allows me to focus on my practice when I am at the office.

You've been active in your local district dental society. What impact do you think the local dental society has on the state profession?

I'm a firm believer that grassroots help perpetuate the efforts of a group of people. Local dental societies are the backbone of our profession. These local districts help highlight issues that are important and necessary to the overall well-being of the Massachusetts Dental Society. At local meetings, members have an opportunity to discuss issues that they feel are important. And as more lines of communication are opened, more issues are addressed and resolved.

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Rebecca L. Paglia, DMD

Current Residence: Boston Hometown: Marlborough

Office Locations: Marlborough and Boston

Specialty: General Dentistry

Education: Tufts University School of Dental Medicine

Why did you choose dentistry as a career?

I grew up in the dental world, as my dad and grandfather were both dentists. During school breaks, I spent my time working in the office doing various jobs. I always admired the relationship my dad had with his patients. He really loves and cares for his patients, and the relationship is clearly mutual. When it came down to what it was I wanted to do for the rest of my life, the choice became clear, and I have never looked

Please describe a challenge/obstacle you experienced when you began your professional career.

I think learning to manage the business part of the career has been the biggest challenge.

As you look back on your career thus far, is there anything you would do differently?

I think every day there are ways I could handle things differently or better. There are so many decisions you need to make in dealing with patients, staff, and finances. I do the best I can and maintain a positive attitude even in the face of mistakes. I think we learn a lot more from what goes wrong in life than what goes right. Aside from that, I would have started wearing loupes earlier because I am now having some neck issues.

You work with your father in a practice that was founded by your grandfather. As a third-generation dentist, what can you tell us about the experience of working in the family business?

It has been an honor and pleasure to work with my dad every day. I have learned an immeasurable amount from him. I feel blessed every day to work with my family, a staff I care deeply about, and patients I love.

What do you do to ensure that you have a balanced professional and personal life?

I lost my husband suddenly several years ago. There is nothing that puts life into perspective more than that. At the end of your life, you never look back and wish you had worked more. I appreciate the importance of family and friends more than ever. Travel has been a very important part of my life from very early on, as well. I make time to get away either to relax or to help those in need abroad. Most recently, I went to Vietnam and Nepal and provided dental care to the kids in the local schools. The experience was priceless, and I will never forget it. It helped to lift my spirits at a time when nothing else could. In the end, I am sure I got more out of it than even the children and families I was helping.

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Ariel Bales-Kogan, DMD continued from page 15

You were active in the American Student Dental Association while in dental school. How do you envision yourself getting involved in organized dentistry?

I have always enjoyed organized dentistry and hope to continue my involvement throughout my career. Immediately after graduation, I really wanted to take some time off to focus on my transition to private practice, in fairness to all my employers. Now that I believe I have found some good equilibrium, I have started to venture out again and get involved in organized dentistry. I have become a member of the Massachusetts Association of Orthodontists, and I am hoping to get more involved with the MDS Standing Committee on the New Dentist in the near future.

What do you do to ensure that you have a balanced professional and personal life?

I think that of all the challenges I have faced academically in pursuit of my career, none has been as personally challenging as balancing life in general. It's so easy to get completely immersed in work or school to the point that you forget to take care of yourself. Eventually, it takes a toll on your health. It's important to be specific and set goals and timelines for work and dedicate time to "live"—time to be healthy, involved in sports or the gym, and time to socialize not only through career networking, but also with close friends and family. I truly believe a person cannot be fulfilled without a true balance of work and play. My wake-up call? When I felt so tired from work that I collapsed to sleep as soon as I got home, I knew I had to make some changes in my priorities. Once you make a decision to do something different, you can't treat it like a New Year's resolution and forget about it after a few weeks.



Edwin S. Brookes, DMD continued from page 15

You received your undergraduate degree in art. How and why did you make the leap to dentistry?

After looking into the art and museum field as a career, I learned that I was not heading in a direction where I was going to be satisfied with the day-to-day work environment that I would be in. I left my options open, and through working in a dental lab, I met several dentists and thought that I would enjoy their job. So, art became more of an avocation than my vocation at that point, and dentistry became my focus. I completed the prerequisites that I needed, applied to school, and here I am.

As you look back on your career thus far, is there anything you would do differently?

I'm pretty content where I am right now, so no, I wouldn't change anything.

What do you do to ensure that you have a balanced professional and personal life?

Of course, spending time with friends and family helps keep a balance in my life. As well as simply spending time with them, I stay pretty active with cycling, hiking, and running. Last summer, I completed two century bike rides, as well as a 150-mile, one-day ride from the Harpoon Brewery in Boston to their brewery in Windsor, VT; one half-marathon; and quite a few of the weekly 5K races in Northampton. Currently, I'm spending time swimming so that I can add some triathlons next summer. Staying active helps me to keep a good perspective on life.



Cara Donley, DMD continued from page 16

lies, and time management. At the same time, it can be difficult and frustrating to practice your own vision in another person's office.

Opening my office from scratch required a tremendous amount of planning, patience, and determination. I prepared a written business plan and, after doing the research, decided to open my practice in the same town in which I live. I received vital support from my family and other colleagues and professionals.

What can you tell us about your experience in dental education? Do you envision a future in dental academia?

Giving lectures, teaching students in the clinic, and being in an academic environment are some of the rewarding aspects of our profession. The learning process works both ways and never ends. The amount of inspiration, knowledge, and experience I was given by outstanding educators is a reason I want to give back in the same way. I hope as my practice matures, I can give more time to Children's Hospital (the location of my pediatric residency) and the dental school.



Sergio Guzman, DMD, MSD continued from page 16

at school is. There is no better time to learn, since you usually have zero additional responsibilities and all the time to dedicate to your studies. However, I have not always been successful in transmitting that message, and I think it has to be related to different stages of life and maturity levels. The more mature one gets, the more one realizes how important it is not only to have a strong scientific core, but also to be knowledgeable about many other relevant aspects of life. Even though I did study a lot, there were always times that I could have done more. Nowadays, I don't have the same time available to learn everything I wish to, such as other languages, other cultures, business in general, management skills, marketing, etc., and, why not, maybe some more dentistry.

What do you do to ensure that you have a balanced professional and personal life?

We all know that finding that balance has been a challenge from the beginning of time, and I'm not sure I'm that successful at it, but I try. This is important especially at the stage that I am currently at, because I have to focus to build up a very strong career in periodontics for many years to come. Therefore, it's sometimes hard not to work a little too much and let slide what really is important in life—my family. But I have an incredible wife and a beautiful child who are so supportive that at least they make me think that there is a good balance. We are a good team and I see them happy all the time. As I see it, if you find happiness, you have somewhat of a good balance between your professional and personal lives.

You've been active with the MDS and organized dentistry since graduation. What made you decide to become involved?

For that I have to thank my former mentor, boss, and good friend. He always insisted that it was important to be involved in the community in which one works. If there is ever something that you don't like 100 percent and you think that you can do better, get involved. Don't condemn or criticize, just become part of it and attempt to fix it or put the people together to do so.

Are you involved in any other nondental-related pursuits?

I am always open to good opportunities, and I have tried not to miss important chances that have presented themselves. I'm always on the lookout for new journeys and side trails while going up the ladder. So I usually try to be involved in everything I can learn or benefit from. We'll see if, in a few years, I'll be able to share successful stories of some of my potential projects.



Eric P. Holmgren, DMD, MD continued from page 17

What do you do to ensure that you have a balanced professional and personal life?

A mentor I have, whom I respect greatly, always said that he felt lucky having his career as his hobby. I look at my practice and my continued learning as fun and as a hobby. I also make sure I spend quality time with my family as much as possible. Taking that attitude helps me keep things balanced.



Erin K. Hoye, DMD continued from page 17

experience that allows me to work with someone I respect 100 percent and to learn from a great dentist who has 41 years of experience. Experience is priceless, and to have my father as my mentor has given me an immeasurable level of wisdom and knowledge. It is also pretty neat when I can teach him a thing or two.

What do you do to ensure that you have a balanced professional and personal life?

The best part of dentistry is that you are able to have a balanced life. I feel we all have to find time for work and find time for play. Exercise, family time, and alone time are all important. My weekends are dedicated to pursuing personal interests, such as shopping, dining, traveling, resting, and spending time with my family.



Sam W. Levine, DDS, MS continued from page 18

vide dental care for children. While there, I also arranged a dental symposium for Vietnamese dentists to learn some of the latest dental techniques. Currently, as a member of the Operation Smile Speakers Bureau, I give lectures about my experiences and share the organization's mission of providing care to those in need.

You've been active in your local district dental society. What impact do you think the local dental society has on the state profession?

The relationship between the local and state societies is one of mutual support. The state dental society helps local members by setting an agenda for the betterment of the profession and the care that we all provide. The local organization provides an environment for dentists to get together and discuss issues, implement grassroots efforts, and communicate back to the MDS on the needs of the membership. It's great to see the cycle work harmoniously. Each member's participation, whether in a leadership role or by simply attending the local meeting, is significant.

As you look back on your career thus far, is there anything you would do differently?

Pay more attention to those practice management classes. Also, visit as many dental offices as possible. The more exposure you have to a variety of practice styles, the easier it is to develop your own style.

What do you do to ensure that you have a balanced professional and personal life?

Admittedly, it's a work in progress. I'm fortunate to have a wonderful wife who, in addition to being involved in the practice, shares many of the same interests I have outside of the office. We make sure to set aside time for ourselves to do the things that we enjoy.



Patrick D. McCarty, DDS continued from page 18

are created (three new programs launched within the last year in New York), the resources will be there to educate students at the predoctoral level. There is a real need for dentist anesthesicontinued on page 22

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ologists in the Northeast. It is almost an uncharted territory for dental anesthesia and pain/anxiety control for dental patients. Nearly 50 million Americans avoid dental care because of pain, fear, and anxiety. The availability of dental anesthesia will help address the access-to-care problem facing dental patients. I will enjoy being a part of that process and currently have initiated it with the Boston University pediatric dental residents through Franciscan Children's Hospital.

How has dental anesthesiology changed over the last 10 years to improve the treatment of patients?

Our profession has come a long way in our ability to provide pain and anxiety control. Most dental educators recognize the importance of sedation education; however, alternative perceptions exist about the extent of sedation training that is suitable for the dental school curriculum. There are issues of logistical feasibility at some schools with a limited number of patients and also issues related to the number of faculty available to provide close supervision. Enteral (oral) and nitrous oxide sedation should be taught to all dental students.

Traditionally, the practice of dentistry has a prevailing connection with fear and apprehension. Fear of painful dental procedures is magnified in young patients, emotionally and physically disabled people, and those who have become phobic as a result of unpleasant dental or medical procedures. People with dental fear and special needs are more willing to see a dentist if a form of sedation/anesthesia is offered; consequently, the use of this modality is becoming progressively important as a technique of dental treatment. Dentist anesthesiologists complement all the developments in the profession in the areas of pain and anxiety control. They are a growing group of dentists who improve access to dental care through patient and practitioner awareness of what is available to them.



George A. Orfaly, DMD continued from page 19

Are you involved in any other nondental-related pursuits?

I am a member of the Salem Rotary Club. This past year, I became involved with the Muscular Dystrophy Association in the capacity of raising money for this wonderful organization. My wife and I have been very active in our children's school fundraisers. Last year, we organized a fashion show that raised a significant amount of money for our son's preschool. Recently, I became involved in a men's basketball league.

You've been very active in the MDS Foundation Mobile Access to Care (MAC) Van. What can you tell us about that experience? What would you say to a colleague to encourage him/her to volunteer time for the MAC Van?

Not to sound overly dramatic, but the experience has been life altering. Being fortunate enough to be in the position to treat children on the MAC Van, I have become more thoughtful and empathetic with the underserved population of our state. The experiences I've had on the MAC Van have inspired me try to get involved in other charitable organizations. Sometimes I think

the MAC Van has done more for me than I have done for the MAC Van. I think it has made me a better person, and for that I am grateful. I would tell any of my colleagues that if they agreed to be on the Van when asked, the next time they would be the ones asking when they can volunteer again.

I will recount one of many stories that I have from my time on the MAC Van. In September, I saw two brothers. They were polite and gentle. The older brother was extremely attentive to his little brother's dental needs. All questions were answered with "Yes, sir" and a smile. After they left, I learned that they had been homeless for three years. That information stimulated deep thought. It makes you feel a broad range of emotions. I was saddened by this information, but it also made me see the beauty and innocence in children.



Rebecca L. Paglia, DMD

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In addition to that experience in Vietnam and Nepal, are you involved in access-to-care programs in Massachusetts?

Yes, I am the president of Operation Healthy Smile, which is an organization that provides dental care to the underserved community in Marlborough, where I work.

Making a Big Difference by Starting Small



Combining Access with Reduced Expense

What is MassDentists CARE?

MassDentists CARE (Combining Access with Reduced Expense) is a program to help children from income-eligible families receive quality dental care through volunteers of the Massachusetts Dental Society who agree to provide selected services at a reduced fee.

Who is eligible to participate?

Low-income children through the age of 18 who do not have either dental insurance or MassHealth dental coverage are eligible to participate. Once approved by the MDS, children can participate in the program for two years. After that, their parents/guardians must reapply for the program.

How do I become a MassDentists CARE provider?

Any member of the Massachusetts Dental Society can become a provider simply by filling out an enrollment form. For more information on the program and to access the enrollment form, log on to **www.massdental.org** and click on the Members Section. Or call the Massachusetts Dental Society at (800) 342-8747, ext. 253, or email Bethann Dacey at bdacey@massdental.org





The MDS wants you to know that it is worth your time to get involved.

The Massachusetts Dental Society (MDS) is a volunteer-driven Society dedicated to supporting the needs of organized dentistry and improving the oral health of the community. More than 84 percent of all dentists in the Commonwealth participate in the MDS and, together, help to make it one of the most distinguished state dental societies in the country. This success is not by accident. It is a result of members' active involvement, passion, participation, and leadership. There are a variety of ways for you to get involved in **your** professional organization.

Your Time Is Precious

Let's face it, we know you are a busy professional juggling a practice and family, but with all the legislative changes and insurance regulations on the horizon, it is critical that we keep the momentum of our dental professionals moving forward. The more members we can get involved in active roles, the stronger our voice will be. Take an active role in your professional association and help the MDS and organized dentistry continue to succeed. Opportunities for participation vary and you can choose based on your availability and interest.

Virtual Meeting Option

Because we value your time, the MDS has introduced a new virtual meeting option where participants can connect "virtually" to a meeting. This option allows you to "attend" a meeting from the comfort of your home or office. You will be able to see participants via Webcast and interact with live dialogs.

The secret of volunteerism is to get involved in something that you are passionate about.

For more information on volunteer opportunities, contact Ellen Factor at efactor@massdental.org or call (800) 342-8747, ext. 228.

10 Ways to Prevent Complaints and Build Your Practice

DAVID LEADER, DMD

Dr. Leader is the state chair for the Peer Review Committee of the Massachusetts Dental Society and an assistant clinical professor of oral diagnosis at Tufts University School of Dental Medicine. He can be reached at david.leader@tufts.edu.



entists practice prevention and live prevention as no other profession does. Just as brushing, flossing, and fluoride are important, so are the many techniques for improving and maintaining patient satisfaction. As patient satisfaction improves, the practice grows.

With that in mind, here are 10 practices that the Massachusetts Dental Society (MDS) Peer Review Committee recommends for dentists to adopt, if they haven't already.

1. Careful Application of New Techniques and Materials

Practicing on the cutting edge of dentistry is important to many dentists and dental hygienists. However, it is essential to prepare for the introduction of any new product, material, or technique. Different materials may require more or less study to add to the armamentarium. For example, a new dental cement may require practice to mix to the correct consistency. A new temporization material might set faster or slower than the material the dental assistant normally uses. There is no standardization in dental adhesives. Pulling out the instruction manual during an appoint-

ment does not improve the patient's view of the procedure. If the cement sets more quickly than expected, that might ruin an otherwise perfect restoration.

Some procedures require extensive practice on extracted teeth prior to *in vivo* use. Endodontic techniques involving mechanical preparation and nonstandard obturation commonly cause difficulty in inexperienced hands. Even well-established techniques such as electrosurgery require training and practice.

Many peer review complaints begin with a statement by the patient explaining that the dentist seemed rushed or unprepared. New techniques always take more time than expected. Plan for that. Even new computer equipment or programs will take more time to use at first. Consider the extra time part of the cost of the new equipment.

2. Attention to Detail

Attention to detail is important to patient satisfaction. There are more complaints made to peer review regarding fixed prosthetic procedures than any other treatment. Exposing a radiograph to check the fit of a crown may be time consuming, but that image is the first line of defense in creating and maintaining satisfaction. Many crown and bridge complaints surface when the patient visits a subsequent dentist for an examination. The new dentist may not know that it is best to refer a patient with an open margin back to the dentist who provided the crown. Additionally, the patient may not wish to return to a dentist whom he or she believes provided inadequate treatment.

Is the color of the porcelain right? Is the midline where it should be? How are the interproximal contacts? Treatment that does not represent one's best effort is an invitation to dissatisfaction, disaffection, and complaints.

3. Communication Without Insulation

Patients who call the office with concerns must be able to consult directly with the dentist. Certainly, professional office staff may be better prepared to answer some questions about appointment policy, insurance, and other matters. However, patients want to know that the doctor is aware of their concerns and that the doctor cares. Many times, a quick statement by the dentist of solidarity with both the

patient and the office staff will help the patient understand that the staff member is working in the patient's best interest. Once the patient knows firsthand that the dentist is aware of the issue and concerned about it, he or she will be more cooperative with the office staff. Conversely, many peer review complaints result when office staff overinsulate their doctors from concerned patients.

4. Follow-Up

It may seem a simple courtesy, but asking patients how they feel when leaving the office or how they fared after earlier treatment provides clues and opportunities for the dentist to catch problems before the patient has the opportunity to complain.

Many patients appreciate a quick call after long, difficult, or challenging procedures. Such calls are a practice builder. Be assured that patients who receive such calls will report to their friends that their dentist is the most considerate dentist they know.

5. Emergency Coverage

Proper emergency coverage is essential. The American Dental Association's Principles of Ethics and Code of Professional Conduct, Chapter 4.B, obliges dentists to make reasonable arrangements for emergency care for their patients of record. Today, emergency coverage is easier than ever. Most of us carry our cell phones at all times. An answering-machine message referring patients of record to that number or to another dentist who is covering for the office is more than adequate. Some dental offices post an emergency number for patients of record. Patients should be able to expect a return call from a dentist within a few hours.

Most emergency problems may be solved with a few understanding words from the dentist. When the patient's problem requires firsthand intervention, either make arrangements to see the patient or refer the patient to another dentist, clinic, or emergency room that can see the patient. Courtesy and professionalism demand that the referring dentist call ahead of the patient to provide the treating doctor with any available information. It is never acceptable to leave a message referring patients of record to a clinic or another dentist who is not aware that they are covering for the office.

6. Written Policies

Present patients with written policies for payment, insurance acceptance, and appointment attendance. Preserve signed copies in the patient record. Refer to written policy when patients express concerns

7. Treatment Plans

Always work from a written treatment plan. Include the name of the procedure, the procedure code, and the fee. Ask the patient to sign the treatment plan.

8. Informed Consent

Keep well-documented records of discussions with the patient covering properties of recommended procedures, alternate procedures, and the expected results, including the result should the patient refuse treatment. Written informed consent is not a legal requirement. However, using written informed consent, complete with copies in the patient's chart, is a great technique to help ensure future satisfaction.

9. Diagnosis

Dentists base treatment decisions on diagnosis of disease and conditions. Be sure to always document diagnoses.

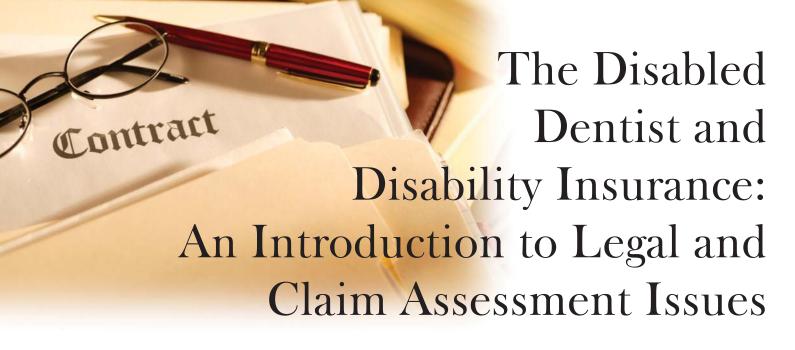
10. Apologize When Necessary

Doctors are human, and humans make mistakes. The measure of a doctor is not in his or her attainment of impossible perfection, but in how he or she handles imperfect results. Patients appreciate the dentist who responds to the discovery of an error with understanding and action. Denial and obfuscation are never well received.

Certainly, any dentist with a few years' experience has his or her own favorite techniques for increasing patient satisfaction. Every one is a practice builder.

When systems break down, and the patient is uncooperative, refer the patient to the Peer Review Committee. Peer review is a complaint resolution system staffed by volunteer members of the Massachusetts Dental Society. Peer Review will solve patient complaints at a low cost without involving lawyers and without a report to the National Practitioner Data Bank. Access the Peer Review Committee through the MDS Web site, www.massdental.org, in the Member Benefits section.

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Editors' Note: This article is intended to be educational and informative and is not to be construed as legal advice to any individual. Please consult your legal representation should you require specific attention.

Introduction

entists frequently purchase individual disability insurance (IDI) with the understanding that if they cannot perform their occupation as a dentist or a specialized form of dentistry, such as pediatric dentistry, they will receive a total disability benefit from the IDI policy. Although many insurance carriers sell disability insurance, the definitions utilized for the phrases "total disability" and "your occupation" are fairly similar. For instance, it is not unusual to see the phrase "total disability" defined as "the inability to perform the material and substantial duties of one's occupation" and the phrase "your occupation" defined as "the occupation you are engaged in at the time of disability." Not

all states and courts, however, rigidly limit their analysis of the particular words in those phrases. For example, a federal court judge in Massachusetts concluded that when assessing total disability for a health care practitioner, the insurer must give credence to the individual's ability to perform his or her occupation in a "usual and customary manner with reasonable continuity"—language that did not appear at all in the insurance policy. Many disability insurance policies also contain a provision allowing for a reduced disability benefit if a dentist is partially or residually disabled. The purpose of this article is to illustrate a fairly common individual disability claim submitted by a dentist and its associated issues.

The Case

Dr. Shapiro became a licensed dentist in 1981, and in 1988 he opened his own practice and quickly purchased three other practices in different offices. As both a dentist and the owner of the multioffice practice, Dr. Shapiro performed dentistry and engaged in some management, hiring staff, hygienists, and other dentists for a total of 12 individuals. He also employed an office manager. Some of the individuals retained by Dr. Shapiro were actually employees of a medical services company of which Dr. Shapiro was a part owner with his brother-in-law. Dr. Shapiro typically treated patients over the course of 35 to 50 hours a week and performed his administrative and managerial functions between one to four hours a week.

In 1996, Dr. Shapiro stopped practicing dentistry because of progressive osteoarthritis and spondylosis. After he stopped performing dentistry, Dr. Shapiro would visit his offices two to three times a week, remaining there for less than five hours. When he submitted his claim for total disability benefits, the claim was eventually denied by the insurer, which concluded that, at worst, Dr. Shapiro was partially disabled because he continued to exercise some management responsibility over his multiple clinics. In short, the insurer concluded that Dr. Shapiro's occupation was administrator, manager, and dentist. Dr. Shapiro sued the insurer for breach of contract.

The ultimate issue for the trial court to decide was whether dentistry understood to be the hands-on treatment of patients—was the occupation that Dr. Shapiro was engaged in at the time of his disability, or was he also a clinic practice manager, as well? The trial court judge concluded that Dr. Shapiro's occupation was that of a dentist who regularly engaged in the treatment of his patients, and the fact that the dental practice continued to function and he continued to act as owner and administrator after he gave up treating patients did not alter the result. The judge found it significant that Dr. Shapiro consistently saw approximately seven to nine patients a day, spent 95 percent of his workweek treating patients, and consistently performed an average of 275 procedures a month, up to the day he had to stop seeing patients.

The insurance company appealed. The appeals court affirmed the victory for

Dr. Shapiro, characterizing his chair dentistry work as "material and substantial" and his administrative work as "incidental." The appeals court further stated that: "At some point, a medical entrepreneur's administrative and managerial responsibilities may well become material and substantial duties of the insured's occupation. . . [Dr.] Shapiro was a dentist. . . . Because his disability prevents him from performing the material and substantial duties of that occupation, he is entitled to total disability benefits. . . . "

What Can Be Learned from the Shapiro Case?

As illustrated above, disabled dentist insurance claims and lawsuits will turn on an intensive examination and analysis of the facts surrounding the claim; the particular words, phrases, and language in the insurance policy purchased; and the law applied by the court hearing any dispute between the dentist and his disability insurance carrier. In regard to the factual analysis, regrettably for the owners of disability insurance policies, there is no single clear bright-line test that applies to all professional health care providers in all situations who believe they are disabled.

As was the case with Dr. Shapiro, the ability of the dentist claiming disability to portray a detailed factual snapshot of his practice prior to his stopping patient treatment is crucial. Items such as insurance code billing records, appointment books, and descriptions of one's dental practice in a malpractice application will be of critical importance and likely requested by the disability insurance company claim examiner. Similarly, statements from fellow employees and

staff as to who did what and for how long are extremely relevant. The more facts that a dentist can marshal to demonstrate that the core function of his work was "hands-on" chair dentistry, the greater the likelihood there will be of a total disability claim being paid if the individual can no longer treat patients.

The significance of the facts about the dental practice setting will be shaped by the particular language utilized in the disability insurance policy. For example, does the policy use the word "substantial" or "significant" in qualifying the phrase "important duties"? Is the phrase "your occupation" defined singularly or in the plural as "your occupation or occupation(s)"? Although not commonplace, there have also been cases where the actual language used in a particular disability insurance policy was not compliant with the specific insurance language regulations of a particular state. Similarly, a dentist submitting a disability claim should strive to discover whether the courts of the state he or she lives in have, in effect, interpreted the policy language from a practical or functional perspective. In other words, instead of applying a rigid contractual analysis that could lead to an absurd result, is there law in that particular state that imports a rule of reason into the application of the policy language?

Finally, although not stated in Dr. Shapiro's disability policy, the vast majority of states—including Massachusetts—have a body of case law and statutes that impose a duty of good faith on insurance companies to act reasonably, to first look for a basis to pay the claim, and to timely and responsibly communicate with the claimant.

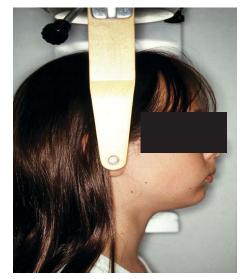


The Headgear:

An Effective Functional Appliance Adjunct to Treatment of the Common Class II Malocclusion in the Adolescent—A Clinical Perspective

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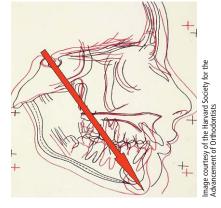




Introduction

ecause general dentists observe several treatment modalities as they follow their patients' progress during the course of orthodontic treatment, this article is designed to discuss some popular current alternative methodologies.









Figures 1a-1f. A 12-year-old female treated for 20 months for a severe Class II Division 1 malocclusion. A maxillary headgear was worn at night while class 2 elastics to fixed appliances worked in tandem to stimulate the favorable downward and forward mandibular growth response depicted by the cephalometric tracing (AT treatment).

The ubiquitous Class II Division 1 malocclusion is successfully treated without extraction of permanent teeth in most instances if treated at the appropriate developmental horizon. When a maxillary headgear orthopedic force of 300 to 400 grams is applied at nighttime to the permanent first molars as the maxillary first premolars emerge (not earlier), the mandible characteristically responds in months with a downward and forward growth vector resolving the Class II relationship of the mandibular/maxillary apical bases (see Figures 1a–1F).

The mechanism of this occurrence is the disruption of the maxillary first molar/mandibular first molar intercuspation. Since the distalization force on the maxillary molars upsets this intercuspation, the patient attempts to achieve better dental interdigitation for more efficient mastication by posturing the mandible forward, since posturing backward is impossible due to temporomandibular jaw (TMJ) anatomical constraints. This subtle shift stimulates the downward and forward growth of the mandible (see Figures 2a-2d and 3a-3d). Subsequently, 2 to 3 ounces of light class 2 elastic force is applied to the archwires of the fully installed fixed appliance after several months of headgear force application (see Figures 3a-3d). These vertically curved archwires employed in the amalgamated technique (AT) level the curve of Spee, and simultaneously open the commonly existing deep overbite in these patients and, in turn, free the mandible to fully express its growth potential.^{1,2} There is no evidence from orthodontic literature that skeletal Class II malocclusions spontaneously correct without orthodontic intervention.

The author, after comparing several other commonly used functional appliances and studying the results of these alternative devices reported in the orthodontic literature and in practice, is convinced that the mandible need not be propelled forward by any device directed specifically to the mandible such as the popular fixed Herbst appliance (see Figure 4).3,4 This device is cemented to the teeth by bonding or banding of attachments to propel the mandible forward into a skeletal/dental Class I relationship of the dental arches. This cumbersome appliance remains fixed to the patient's dentition for six to 12 months or longer.

Another popular functional appliance, the removable bionator, is designed to also forcibly posture the mandible forward (see Figure 5). This apparatus must be remade several times in small anteroposterior-advancing increments until the full effect is realized. Evidence is lacking that these or other mandibular propulsion appliances, although often effective, produce better results than the less onerous nighttime headgear wear.

Simple headgear application to the maxillary first molars at bedtime, along with subsequent 2 to 3 ounces of class 2









Figures 2a-2d. A 13-year-old female treated for 18 months with maxillary headgear nighttime wear and fixed appliances (AT treatment).

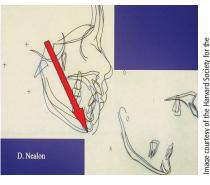
elastic force to the fixed appliances (braces), suffices to induce a favorable mandibular response that corrects the Class II skeletal relationship of the jaws in most patients in six to nine months.

The headgear type and direction of force is determined by the skeletal pattern—divergence between the maxillary and mandibular bases. If a normal divergence to hypodivergence exists, a cervical pull headgear is indicated (see Figures 6a and 6b), while a hyperdivergence between the maxilla and mandible requires an occipital force application to avoid









Figures 3a-3d. A 12-year-old male treated for severe Class II Division 1 malocclusion for 22 months. Note the excellent mandibular growth response to headgear wear (AT treatment).

maxillary molar extrusion with resultant adverse bite opening from inadvertent backward rotation of the mandible (see Figures 7a and 7b).

The fixed appliances act in tandem in the vertical plane to correct commonly existing deep overbites, allowing the mandible to advance from its often locked Class II relationship. Total treatment time for the typical patient is 18 to 24 months with the AT. Some mandibles do not respond well to these therapeutic procedures for various reasons. The patient must be compliant,

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Figure 4. Example of a Herbst fixed appliance.



Figure 5. Example of the bionator removable appliance.

the mandible must be inherently able to respond favorably (relatively normal divergence to the maxillary base), and the treatment must be timely. When the Class II skeletal dysplasia does not respond to this mechanotherapy, either masking of the dentofacial skeletal dysplasia with dentoalveolar compensations is considered, or orthognathic surgical intervention is required when growth has ceased. It is unlikely that a mandibular fixed or removable advancement appliance (i.e., a Herbst device or bionator) will produce a more functional and esthetic result than the headgear treatment in the typical cases shown in this clinical perspective.

Conclusion

The patients presented here demonstrate correction of Class II Division 1 non-extraction malocclusions with part-time headgear wear and concomitant class 2 elastic/fixed-appliance treatments without removable- or fixed-appliance orthopedic force applied directly to the mandible. These mandibular functional appliances, in contrast to the headgear, are superfluous, cumbersome, speechaltering, more costly, uncomfortable, and patient-unfriendly contraptions. The following is one patient's unsolicited evaluation of Herbst treatment:

"Okay, I have braces, meant to correct the spaces that were in between my teeth, and also to move my lower jaw forward. I've had them for... five years! Needless to



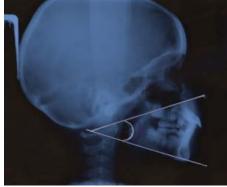


Figures 6a and 6b. The cervical headgear (6a) and normal divergence cephalogram (6b).

say, they just finished closing most of the gaps (again, after five years), and are working on moving my jaw forward. So, like almost every person I see with braces, I got rubber bands. I actually had a choice between them and the Herbst appliance. I picked the Herbst-y thing, but they didn't have a part ... so, long story short, I got rubber bands until the part came in. The part came in today, and I went for them to put it on, and after about an extremely boring hour, they were on. Anyway, it wasn't until then that I realized what [edited] things these were. I can't eat (more specifically, chew), talk (clearly), or even fully close my mouth! I hate them."

Conversely, and paradoxically, in the treatment scenario described here, the mandible responds favorably by the indirect influence of maxillary headgear force upon mandibular growth. The treatment regimen described in this paper has been extremely effective. A preponderance of recent orthodontic research supports the opinions described in this clinical perspective.⁷⁻⁹





Figures 7a and 7b. The occipital headgear (7a) and hyperdivergent cephalogram (7b).

References

- 1. DeAngelis V. Begg-edgewise, an amalgamated technique. AJO-DO. 1976;69(3):301-317.
- DeAngelis V. The amalgamated technique, a mechanically and biologically efficient method for controlled tooth movement. Angle Orthod. 1980;50(1):1-15.
- Pancherz H. The mechanism of Class II correction in Herbst appliance treatment: a cephalometric investigation, AJO-DO. 1982;82(2): 104-113.
- Bock N, Pancherz H. Herbst treatment of Class II Division 1 malocclusions in retrognathic and prognathic facial types. Angle Orthod. 2006;76(6):930-941.
- Almeida Mercio R, et al. Treatment effects produced by the bionator appliance. Comparison with untreated Class II samples. Eur J Orthod. 2004;26(1):65-72.
- Rawji A, Parker L, Prativa D, Woodside D, Bryan T, Colin S. Impact of orthodontic appliances on sleep quality. AJO-DO. 2008;143(5):606-614.
- Ghafari J, King GJ, Tulloch JF. Early treatment of Class II Division 1 malocclusions: comparison of alternative treatment modalities. Clin Orthod Res. 1998;1(2):107-117.
- Livieratos FA, Johnson Jr. LE. A comparison of one-stage and two-stage non-extraction alternatives in matched Class II samples. AJO-DO. 1995;108(2):118-131.
- Efstradiadis S, Baumrind S, Shofer F, Jacobsson-Hunt U, Laster L, Ghafari J. Evaluation of Class II treatment by cephalometric regional superimpositions versus conventional measurements. AJO-DO. 2005;128(5): 607-618.



Dr. Frederick McKay: Father of Communal Fluoridation

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It is something that we almost take for granted today. It is in many of the water sources from which we drink. Dentists prescribe it in various forms for their patients. Most toothpaste products contain it. It is provided in multiple forms to the public on a daily basis, and its use has greatly decreased tooth decay throughout the world. Fluoride has affected the lives of millions of people worldwide.

Frederick S. McKay, DDS, dedicated his life's work to studying the relationship between fluoride and the decreased incidence of caries. He is known as the "Father of Communal Fluoridation." Born on April 13, 1874, in Lawrence, Massachusetts, Dr. McKay attended Boston Dental College but graduated from the University of Pennsylvania School of Dental Medicine in 1900 and later moved to Colorado Springs, Colorado, to practice dentistry. Dr. McKay also graduated from the Angle School of Orthodontia in St. Louis, Missouri, in 1903. Ill health forced him to return to Colorado Springs in 1908.

During his initial stay in Colorado in 1901, Dr. McKay became fascinated with a permanent brown stain on the teeth of many of his patients that the locals called "Colorado Stain." He started keeping records about this strange phenomenon. Upon his return to Colorado in 1908, Dr. McKay started lecturing on the subject in order to try to interest other dentists in this stain.

He corresponded with Dr. G. V. Black of Northwestern University about the problem of the puzzling stain.² Dr. McKay and Dr. Isaac Burton examined 2,945 children enrolled in the public schools of Colorado Springs.² It was discovered that 87.5 percent of the children who were native to the Colorado Springs area had mottled enamel, and for the next 22 years, Dr. McKay studied this condition.¹

While doing a survey of children in Minonk, Illinois, in 1928, Dr. McKay noticed that dental caries was relatively rare in the children who exhibited the mottled enamel. This led him to believe that there was something in the water which inhibited the activity of dental caries, although he did not yet fully see the connection between the dental caries and mottled enamel.¹

In February 1916, Drs. Black and McKay published a paper in *Dental Cosmos* describing the histological aspects of mottled teeth and the results of their field investigations.³ Dr. Black believed that the causative factor of the mottled enamel was present and effective only during the growth and development of the teeth. Dr. McKay complemented Dr. Black's hypothesis by stating that the mottling was limited to certain geographic areas while affecting only those born and living in these geographic areas during the years of tooth formation. He also stated that there was a possibility that there was something in the drinking water that might be the cause of the mysterious stain.

During his research, Dr. McKay received very minimal funding, so he would mostly use his own money for traveling and to conduct his research. In 1910, he received a grant for \$300 from the city of Colorado Springs, and in 1911, he re-

ceived \$150 while serving as president of the Colorado Dental Association. He also received an \$800 research grant from the National Dental Association.⁴

Dr. McKay became more convinced that the cause of the mottling was some agent in the drinking water that was undetectable by conventional methods. In 1917, he summarized his research results, which were conducted under the auspices of the American Dental Association's Research Institute. He stated that there was an urgent need for chemical, physical, and histological studies on mottled teeth. He then published his evidence in an issue of Water Works Engineering⁵ in the hope of gaining support for conducting analyses of water by other means than the usual tests. One response he received was from Canadian chemist Frank Hannan, who suggested a possible connection with fluorine.5 Hannan thought a lack of fluorine was the basic cause of the mottling.

A routine survey of mottled teeth in the children of Bauxite, Arkansas, was conducted by the U.S. Public Health Service in 1928. Dr. Grover Kemph was sent to Bauxite to study the high incidence of mottled teeth, and he asked Dr. McKay to accompany him. It was learned that the town had changed its water supply

source in 1909, and all the people born after 1909 had mottled enamel while those born before 1909 did not. Again, nothing was revealed in a standard water analysis.¹

Bauxite was a mining town with commercial connections to the Aluminum Company of America (Alcoa). H. V. Churchill, the chief chemist at Alcoa, ordered a special analysis of Bauxite's water, which revealed a very high concentration of fluorine—13.7 ppm (parts per million). Churchill related his findings to Dr. Mc-Kay, who sent water samples from other areas with mottling problems. All of the samples had concentrations of fluorine between 2 ppm and 13 ppm.1 Many studies concerning the benefits of fluoride followed. It was later determined that 1 ppm of fluoride reduced tooth decay up to 65 percent.4

In addition to his fluoride research, Dr. McKay was a practicing dentist. The bulk of his active years in private practice were spent in New York City (1917–1940).⁶ In 1940, Dr. McKay returned to Colorado Springs to continue his research.⁴ Although in retirement, Dr. McKay soon resumed dentistry in Colorado, where he practiced until his death on August 21, 1959, at the age of 85.⁴

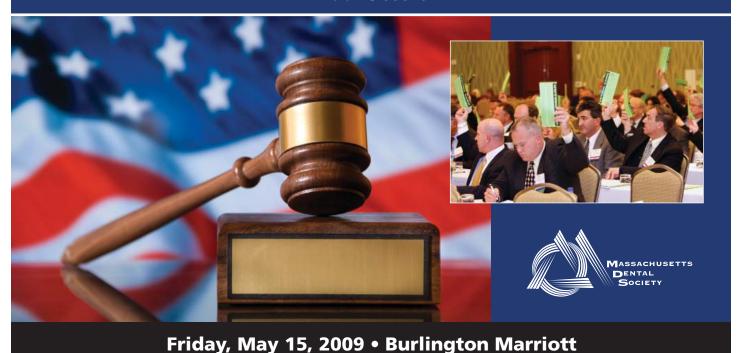
Dr. McKay published more than 50 articles⁴ and received numerous awards and distinctions during his lifetime. Among these awards were the Jarvie Medal from the New York State Dental Society in 1945 and the Lasker Award from the American Public Health Association in 1952.⁶ He was inducted into the Pierre Fauchard Academy International Hall of Fame of Dentistry in 2004.

The life and work of Dr. Frederick McKay remain an inspiration today. Through the persistence of his research spanning a period of decades, a discovery was made that benefits millions of people worldwide many years after his death.

References

- 1. Dietz G. The case of the Colorado stain. The Dental Assistant. 1977;46(1):16-20.
- 2. Peterson J. Solving the mystery of the Colorado brown stain. J Hist Dent. 1977;45(2):57-61.
- Herschfeld JJ. Frederick S. McKay and the "Colorado brown stain." Bull Hist Dent. 1978;26(2):118-122.
- Pierre Fauchard Academy. Pierre Fauchard Academy Hall of Fame. 2008. Available from: www.fauchard.org/awards/fame15.htm.
- Meiers P. Dental fluorosis (mottled teeth).
 2008. Available from: www.fluoride-history.de/mottledTeeth.htm.
- Downs R. Orthodontic profiles—Frederick Sumner McKay. Amer J Orthod. 1960;46(9):695-699.

Massachusetts Dental Society House of Delegates Annual Session



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A Clinico-Pathologic Correlation

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Case Presentation

referred to our department for evaluation and biopsy of a swelling of the anterior floor of the mouth. The patient stated that she first noted the lesion approximately three weeks prior and that there had been no change in the lesion's characteristics or size since then. The area was tender to palpation, and the patient complained of a sore throat and pain in her submandibular and neck region. On clinical examination, she presented with a firm, indurated mass approximately 3.0 cm x 1.5 cm in the region of the left sublingual gland (see Figure 1). There was no appreciable drainage from the gland. Tender lymphadenopathy was noted in the left submandibular region.

At the time of initial consultation, an incisional biopsy was taken that was representative of the lesion. The sample was fixed in formalin and submitted to the Tufts University Department of Oral and Maxillofacial Pathology for histopathologic review. The patient tolerated the procedure well and experienced no complications.

Differential Diagnosis

Mucous retention phenomenon (ranulas) Sialolithiasis Salivary gland tumor (pleomorphic adenoma) Subacute necrotizing sialadenitis Necrotizing sialometaplasia



Figure 1. Intraoral photograph of mass approximately 3 cm \times 1.5 cm in the region of the left sublingual gland.

Histopathologic Review

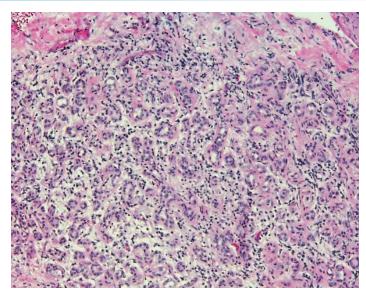
Histopathologic evaluation of the submitted specimen revealed parakeratinized stratified squamous epithelium. The lamina propria consisted of fibrovascular stroma containing minor salivary glands exhibiting diffuse acute and chronic inflammation, including numerous eosinophils. Minimal ductal atrophy with squamous metaplasia was noted, and the lumen contained cellular debris, acute and chronic inflammatory cells, and numerous eosinophils. In addition, an identical mixed inflammatory cellular infiltrate was present in the connective tissue surrounding the duct (see Figures 2 and 3).

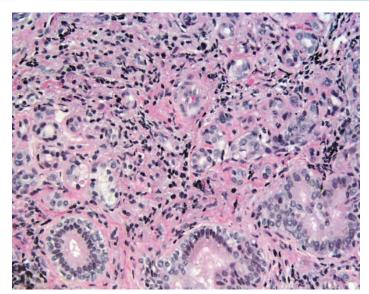
Diagnosis

Subacute necrotizing sialadenitis

Discussion

Ranulas are typically extravasation of mucin from one of the various ducts of the sublingual gland. The saliva will drain into the floor of mouth in the area of the anterior portion of Wharton's duct. These lesions are typically 3 cm to 6 cm in diameter and appear bluish in color. At times, ranulas may herniate through the mylohyoid muscle and can present in the submental triangle as a soft-tissue mass (i.e., plunging ranula). Because of their density, ranulas may be firm to palpation but painless, and, depending on tissue depth, the bluish color may not be visible. Ranulas are treated by total excision of the lesion and the fibrous capsule surrounding the lesion.





Figures 2 and 3. Low- and high-power views, respectively, showing the lamina propria, which consists of fibrovascular stroma containing minor salivary glands exhibiting diffuse acute and chronic inflammation, including numerous eosinophils.

Sialolithiasis can develop in both major and minor salivary glands. The most common gland associated with salivary stones is the submandibular gland. This is due to both its tortuous salivary gland ducts and the viscous glycoprotein consistency of the gland's secretion. Whenever sialoliths form, they may obstruct the duct and then lead to painful swelling of the gland, infection with suppurative exudate from the duct, fever, and leukocytosis. ¹ These patients will complain of pain and swelling when eating. Upon clinical examination, the gland will be firm and painful to palpation. Also, stones may be seen upon radiographic examination.

Pleomorphic adenoma is a benign neoplasm that has a high recurrence rate if not completely excised. Lesions of this type are not common in either submandibular or sublingual glands but account for approximately 20 percent to 30 percent of all tumors in these glands. These are freely movable, firm, well-circumscribed masses that may be painful. Pleomorphic adenomas are common in the fourth to sixth decades of life and have a slight prevalence in females. ¹

The histopathologic evaluation of the biopsy specimen in our patient was consistent with subacute necrotizing sialadenitis. This is a self-limiting inflammatory condition typically developing in the minor salivary glands. The etiology of this lesion is still unknown; however, there is a male-to-female ratio of 3:1.²⁻³ Most symptomatic patients complain of recurring episodes of pain, tenderness, and enlarged salivary glands, as was the case with our patient. The typical presentation also includes erythematous, nonulcerated swellings that exhibit a rapid increase in size.

Subacute necrotizing sialadenitis is histologically characterized by subacute inflammation in the affected minor salivary glands. This infiltrate is composed mostly of neutrophils, lymphocytes, histiocytes, and eosinophils. There may also be loss of acinar cells and an absence of mucus extravasation and ductal squamous metaplasia.

It is believed by some pathologists that subacute necrotizing sialadenitis is a subtype of necrotizing sialometaplasia; however, others refute this, stating that there are sufficient differences clinically and microscopically to separate the two entities. Both

subacute necrotizing sialadenitis and necrotizing sialometaplasia share similar site and sex predilections; however, their duration, symptoms, and length of healing time are different. Subacute necrotizing sialadenitis usually presents for less than one week, is commonly painful to touch, and presents with an erythematous swelling. In the majority of cases, subacute necrotizing sialadenitis will be self-resolving within two weeks. On the other hand, necrotizing sialometaplasia typically develops rapidly and will persist for approximately three weeks as a variably painful ulceration. Like subacute necrotizing sialadenitis, necrotizing sialometaplasia is also self-limiting; however, average healing time is five to six weeks.

Our patient's course was uneventful and consistent with the diagnosis. The floor of the mouth edema and submandibular gland swelling gradually resolved over a period of two weeks, and on follow-up eight months later, the problem had completely resolved and the patient was asymptomatic.

Conclusion

Subacute necrotizing sialadenitis is a disease of the minor salivary glands of unknown etiology. These lesions, which present clinically with acute pain and nonulcerated erythema, are self-limiting. Some consider subacute necrotizing sialadenitis to be a variant of necrotizing sialometaplasia due to their close histological and clinical relationship. Others believe that there are sufficient differences clinically and microscopically to separate the two as different entities.

References

- Neville BW, Damm DD, Allen CM, Bouquot JE. Oral and maxillofacial pathology. 2nd ed. Philadelphia (PA): W.B. Saunders Company; 2002.
- Fowler CB, Brannon RB. Subacute necrotizing sialadenitis: report of 7 cases and a review of the literature. Oral Surg Oral Med Oral Pathol Oral Radiol Endod. 2000; 89(5):600-609.
- Werning JT, Waterhouse JP, Mooney JW. Subacute necrotizing sialadenitis. Oral Surg Oral Med Oral Pathol. 1990;70(6):756-759.
- Brannon RB, Fowler CB, Hartman KS. Necrotizing sialometaplasia. A clinicopathologic study of 69 cases and a review of the literature. Oral Surg Oral Med Oral Pathol. 1991;72(3):317-325.

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PATHOLOGY SNAPSHOT

VIKKI NOONAN, DMD, DMSC NEGAR NASSERIPOUR, DDS, DMD GEORGE GALLAGHER, DMD, DMSC SADRU KABANI, DMD, MS

Dr. Noonan is assistant professor of oral and maxillofacial pathology, Dr. Nasseripour is clinical assistant professor of general dentistry, Dr. Gallagher is professor of oral and maxillofacial pathology, and Dr. Kabani is professor and director of oral and maxillofacial pathology at Boston University Goldman School of Dental Medicine.

DENS EVAGINATUS

ENS EVAGINATUS REPRESENTS A DEVELOPMENTAL TOOTH ANOMALY characterized by the presence of an accessory cusplike tubercle projecting from the crown surface. Distinct from dens invaginatus (dens in dente), in which an enamel-lined occlusal invagination is seen, dens evaginatus is characterized by an exophytic projection from the tooth surface composed of enamel and dentin with or without pulpal tissue. While the occlusal surfaces of mandibular premolar teeth are most frequently involved, this anomaly is occasionally reported on the occlusal surfaces of molar teeth and the lingual surfaces of anterior teeth (talon cusp), and often exhibits a bilaterally symmetric distribution. The strongest prevalence for this anomaly is found in the Native American, Asian, and Inuit populations. Due to occlusal interference, pulpal exposure is common, with pulpal necrosis and periapical inflammatory disease the end results.

Numerous management strategies for dens evaginatus have been employed with variable success. In teeth with vital pulp, elimination of opposing occlusal interferences with application of light-cured resin to the tubercle for reinforcement until pulpal recession and apex maturation are complete, along with subsequent removal of the tubercle, has been successful. In teeth with irreversible pulpitis, the maturity of the apex dictates treatment. Conventional root canal therapy is indicated for teeth with mature apices, whereas pulpotomy and apexification procedures, followed by endodontic treatment once apical root formation has been completed, have met with some success in teeth with immature apices.¹

Reference

 Levitan ME, Himel VT. Dens evaginatus: literature review, pathophysiology, and comprehensive treatment regimen. J Endod 2006;32(1):1-9.





Figure 1. Bilateral cusplike projections located in the central groove of the mandibular second premolars. (Image courtesy of Dr. John Giunta.)



Figure 2. Radiograph from a similar case involving the mandibular first premolar showing an associated periapical radiolucency. (Image courtesy of Dr. Negar Nasseripour.)

JOURNAL Archives Available Online

Looking for an article you saw in a past issue of the Journal of the Massachusetts Dental Society? All issues of the Journal from the last several years are archived on the MDS Web site and available 24/7 to all MDS members. Please visit **www.massdental.org/publications/journal** and click on Past Issues. Please note that you will need to log in with your MDS member ID to access the Journal.









JOHN CHANG, DMD

Dr. Chang is a prosthodontist in Belmont.

CAD/CAM DIRECT-DESIGNED ZIRCONIA ABUTMENTS

Can/CAM DIRECT-DESIGNED ZIRCONIA ABUTMENT DESIGN IS QUICK and limits the amount of lab time and labor required. A dentist can go online and directly prescribe how to design the abutment, where to put the margin for the crown, or any other instructions, without having to communicate with technicians

An example of this type of design is shown in Figures 1–4. Such a situation was required because the implants had been placed too shallow so that there was no room for the abutments. The gingival line appeared lower than the adjacent tooth, making the appearance esthetically unattractive. Since this restoration was going to be placed in the anterior region, the patient



Figure 1. Transfer copings in place.



Figure 2. Zirconia abutments made according to specifications.

chose ceramic abutments, as well as all-ceramic crowns. With this direct-designed CAD/CAM abutment, the tissue was pushed from the fixture to create a natural shape. This small design detail was achieved without communication between the clinician and the technician. The dentist simply went online and drew to scale the necessary measurements that were required of the abutment. This information was then fed into the CAD/CAM production of the abutment.

At present, there are a variety of CAD/CAM systems from which similar results can be derived. This is a new area for CAD/CAM technology in the development of esthetically natural-looking implant restorations.



Figure 3. Ceramic restorations placed within 24 hours.



Figure 4. Ceramic restorations in place after three weeks. Note the tissue adaptation.

About Clinical Case Study

A Clinical Case Study is defined as a written and visual assessment of a clinical case wherein the author presents before-and-after radiographs and/or photographs as a means to discuss the diagnosis, treatment plan, and actual treatment of a particular situation. The purpose of this study is to encourage Journal readers to contribute a clinical response to the cases presented.

Please address your correspondence to Clinical Case Study, Journal of the Massachusetts Dental Society, Two Willow Street, Suite 200, Southborough, MA 01745. Include your name, address, and phone number or email address so that we may contact you for follow-up. Responses may be published in a future issue of the Journal.



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DENTAL EDUCATION

MELISSA CARMAN, MANAGING EDITOR

Highlighting key events taking place in dental education in Massachusetts.

Boston University

N March 14, 2009, Dr. Judith Jones, Boston University Goldman School of Dental Medicine (BUGSDM) professor and chair of general dentistry, was honored by the ADEA Gies Foundation for her outstanding innovation in support of global oral health and oral health education. Dr. Jones received the William J. Gies Dr. Judith Jones Awards for Vision, Innovation, and Achieve-



ment at the Gies Awards celebration held in conjunction with the 86th ADEA Annual Session in Phoenix. The William J. Gies Awards for Vision, Innovation, and Achievement recognize contributions to and support of global oral health and education initiatives. Dr. Jones was nominated for the award based on her work over the past seven years as the inaugural chair of the BUGSDM Department of General Dentistry.

"Dr. Jones embodies the leadership and commitment to excellence and innovation that we value strongly at the Boston University Goldman School of Dental Medicine," says Dean Jeffrey Hutter. "She is an innovative educator and much respected by her students and colleagues. She truly embodies the concept of this William J. Gies Award for Innovation."

BUGSDM's first-year DMD curriculum has been expanded to include service learning as part of the Introduction to Dental Practice course. The service program brought BUGSDM students to local schools, where they taught oral health education, observed sealant placement using portable dental equipment, and provided services such as screenings and fluoride varnish applications. Participating schools included William Blackstone Elementary School, Orchard Gardens K-8 School, Joseph J. Hurley K-8 School, John Winthrop Elementary School, Patrick O'Hearn Elementary School, David A. Ellis Elementary School, Paul A. Dever Elementary School, and William Monroe Trotter Elementary School.

"Service learning was added to the first-year curriculum in order to give the students more hands-on experience in their first year," says Dr. Michelle Henshaw, professor and assistant dean for Community Partnerships and Extramural Affairs. "It also provides the opportunity for students to learn firsthand about the high level of unmet dental needs in populations that may not make it to dental care."

The students were excited about service learning, especially because they spend most of their first year in the classroom.

"This program was nice because it allowed us to go outside the classroom," says student Lindsey Jackson. "Actually seeing the screenings and treatment was much different than looking at examples on slides."

Forsyth Institute

ESEARCHERS FROM THE FORSYTH INSTITUTE HAVE DISCOVERED A link between obesity and gum disease. Published online in the Journal of Clinical Periodontology in January, the study was led by Dr. Anne Haffajee, head of Forsyth's department of periodontology. The research found a connection between overweight and obese subjects and a particular oral bacterium, termed Tannerella forsythia, which occurs in the bacterial plaque of individuals with otherwise healthy mouths and whose overgrowth may put these individuals at risk for gum disease in the future.

This is the first study to examine the relationship of obesity to the composition of the mouth's bacterial plaque, and whether microbial shifts in obese individuals might be associated with increased risk of developing severe gum disease.

Dr. Haffajee found that subjects, particularly younger females who were overweight or obese, were at greater risk for periodontitis than subjects with a normal body mass index. The periodontal pathogen, T. forsythia, was present in greater proportion in periodontally healthy subjects who were obese and could potentially increase their risk of developing periodontitis.

"This increased risk for developing periodontal disease in younger, obese individuals provides an important opportunity for prevention," said Dr. Haffajee. "These individuals should be monitored and provided with aggressive preventive measures and/or treatment to prevent initiation or progression of periodontitis."

Tufts University



Dr. Erling Johansen

rling Johansen, DMD, the late dean Lemeritus at Tufts University School of Dental Medicine (TUSDM), was honored posthumously with the 2008 Gavel Medal at the 15th Annual Dr. J. Murray Gavel Clinical Research Lecture, held on November 3, 2008, at the Forsyth Institute. The Gavel Medal "commemorates the achievements of a medical or dental researcher, educator, or practitioner

who has made lasting and innovative contributions to mankind. The recipient also represents the qualities on which Dr. Gavel stood." Dean Lonnie H. Norris accepted the Gavel Medal on behalf of the school. Dr. Johansen, who passed away on February 29, 2008, served as TUSDM's dean from 1979 through 2005.

Maria Papageorge, DMD, professor and chair of oral and maxillofacial surgery, has been accepted as a fellow of the 2009–2010 ADEA Leadership Institute. Dr. Papageorge joins 21 of the nation's most promising dental educators as a part of the Institute's tenth class. The four-phase program covers self-assessment, peer assessment, leadership and management theory, team building, analysis of issues critical to the dental health profession and higher education, administrative competency development, and other leadership application experiences.

BOOK REVIEWS









TOOTHPICK

FATAL GAMBLE: A NOVEL J. P. O'DONNELL

iUniverse

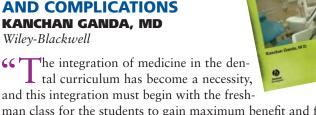
he character of private eye Daniel Gallagher is the vehicle by which MDS member Dr. Joe O'Donnell shows that his creative talents lie not only in dentistry. While there are 77 chapters in this 227-page novel, don't let those numbers scare you.



This novel, in which Gallagher attempts to track down the murderer of three doctors from a small town in Massachusetts, came as a holiday gift. It took me a while to thank the sender because I needed to catch up on my sleep. I started to read it at bedtime, with the intent of reading only one or two chapters and then, lights out. The author sidetracked that plan. His imaginative storytelling was so vivid, it became quickly "Just one more chapter . . . " Each of the chapters had its way of promising more to come, and, as the plot thickened, I was never disappointed with the expanded reading time.

Joe, tell me ahead of time when Gallagher is coming back so that I can store some premeditated sleep time.

DENTIST'S GUIDE TO MEDICAL CONDITIONS AND COMPLICATIONS



man class for the students to gain maximum benefit and for the chance to also gain credibility." With this introduction, Dr. Ganda practices what she preaches. Do not be deceived into thinking that this is a text aimed only at dental students. The experienced clinician will also benefit from the teachings presented within the book.

While reading the contents, I often felt that I was back in the classroom being taught by a well-organized and knowledgeable instructor. In all cases, the lessons are well-organized, straightforward, and thorough. During my review of the text, I was forced to realize that much that I had taken as rote and routine needed to be rethought and updated. This text does that.

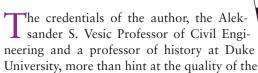
It is a book all dental students and dental practitioners will appreciate for its chairside value. It covers information on epidemiology, physiology, pathophysiology, laboratory test evaluation, pharmacology, and dental alerts, as well as possible deviations in the use of anesthetics, analgesics, and antibiotics.

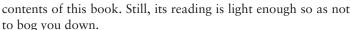
When a relatively recent graduate saw the author's name, he noted to me how much his class had appreciated and learned from her lectures. After studying the organization of the material within the text, I have to say that I agree with his praise.

NORMAN BECKER, DDS, EDITOR EMERITUS

THE TOOTHPICK— **TECHNOLOGY AND CULTURE HENRY PETROSKI**

Vantage Press





The story of "the earliest currently known nonlithic tool used by hominids" does not begin with "The toothpick was first used in the United States at the Union Oyster House. Enterprising Charles Forster of Maine first imported the picks from South America. To promote his new business, he hired Harvard boys to dine at the Union Oyster House and ask for toothpicks." (From "The History of the Union Oyster House," available from www.unionoysterhouse.com.)

Professor Petroski tells the international story of the toothpick, with chapters set in prehistoric Africa, ancient Greece and Rome, medieval Portugal and modern Brazil, China, Japan, Sweden, and the United States. "The story of the toothpick is the story of Everyone and Everything at Everytime," he writes. The chapters describe the toothpick's functions and applications from use as a substitute for tongues, fingers, grass stalks, wood splinters, or even animal parts.

When discussing artifacts of toilet sets made of silver, copper, or bronze, which contained toothpicks, tweezers, earspoons, and even some tongue scrapers, in use as early as 3500 BC, Petroski points out that the earliest dental hygienists may have been the Roman slaves who specialized in cleaning the noblemen's teeth using these devices. In addition, he describes the jewelry and artifacts made from toothpicks that have become archaeological treasures.

In some instances, the manufacture of toothpicks was so secretive that visitors were not allowed into the factories. Forster's challenge went beyond manufacturing and into distribution: the "making of millions of toothpicks by machine was one thing; selling them by the box to individuals was another."

This was a fun book to read, and I was surprised and pleased by the many historical facts pointed out by an author who has written other books about everyday objects we take for granted.

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ART OF DENTISTRY

ERIC K. CURTIS, DDS, MAGD, ELS

Dr. Curtis is past president of the American Association of Dental Editors. In 2006, he received the American Dental Association's Distinguished Editor Award.

TRUTH OR CONSEQUENCES

As an idealistic dental student in the pediatric clinic, I took to heart the earnest advice of my instructors: Never lie to your pint-size patients. If you tell the truth, they counseled, the people in your care will trust and accept you. The first time I had a six-year-old in the chair, she asked, "Is this going to hurt?" I reflected and forthrightly answered, "Yes, a little." That was all. Theoretically, a bond of trust should have then been forged, immediately cemented

by my honesty. I was prepared to be gentle and caring, and even funny. The topical anesthetic, the wiggling of the cheek, and the warmth of my personality would erase the tiny pinch and sting that was coming. But I never even unsheathed the needle. What happened next was something my handlers never primed me for: The little girl immediately screamed and kicked, and had to be assigned to a senior student.

Is honesty always the best policy? The truth about truth is that while the world demands it, you don't necessarily get rewarded for candor. "I don't want any yes-men around me," the famed film mogul Samuel Goldwyn once said. "I want everybody to tell me the truth even if it costs them their jobs." Dentists are very sensitive to the honesty issue. Even before Painless Parker was barred from advertising "painless dentistry," that phrase made the profession wince. Dental truth should be immovable and absolute, and polishable into platitudes with punning punchlines. Be true to your teeth, we say, or they will be false to you. But like Goldwyn's movie minions, dentistry has suffered for centuries from tension between honesty and . . . the second-best policy.

Honesty is vulnerability. The truth shall make you free, but first it will make you angry. Accordingly, fibbing apparently was once the standard of care. An ancient saying about sidestepping the facts evokes dentistry: "He lies like a toothpuller." In Spanish, a "sacamuela" (toothpuller) is a fast-talker. Several early names for dentists reflect the conflict between telling it straight and dissembling a bit. In some areas of 16th-century Europe, dentists were known bluntly as "toothbreakers." In other areas, they put a softer spin on their activities by calling themselves "kind hearts."

That's not to say that dentistry's reputation for fiction was isolated. Much earlier in the history of health care, medical doctors had invented an elaborate system of filtering reality with such ploys as placebos, Latin, and the time-honored tradition of lying to sick patients about their true condition—as well as the time-

honored tradition of lying when they simply didn't know the patient's true condition. So when Ambrose Bierce described the dentist as "a prestidigitator who, putting metal in your mouth, pulls coins out of your pocket," he could have just been echoing his contemporary Hilaire Belloc, who wrote:

"Physicians of the utmost fame / Were called at once. But when they came / They answered as they took their fees / 'There is no cure for this disease.'"

Even now, to "doctor" facts means to distort truth.

Truth attracts ambivalence. But Sisela

Bok, in her book Lying: Moral Choice in Public and Private Life, lists several situations in which lying might be the right thing to do, including lying to protect patients or clients, lying for the public good, and lying in a crisis. In war, politics, and commerce, competition encourages what Winston Churchill called "terminological inexactitude." Entertainment demands it: Writers everywhere know you never tell a good story because it is true—you tell it because it's a good story. Humanity requires it: "The aim of the liar is simply to charm, to delight, to give pleasure. He is the very basis of civilized society," said Oscar Wilde. Even etiquette often is just polite deceit. "In its natural state," Miss Manners explains, "the child tells the literal truth because it is too naive to think of anything else. Blurting out the complete truth is considered adorable in the young, right smack up to the moment that the child says, 'Mommy, is this the fat lady you can't stand?' "

In a skeptical world, the truth may be perceived as prevarication. If you want to be thought of as a liar, always tell the truth, especially an unpleasant one. "There are a terrible lot of lies going about the world," said Churchill, "and the worst of it is that half of them are true." What's more, for dentistry as well as the rest of medicine and science, the truth may actually be a lie. On both sides of the dental chair, personal observations of disease and healing, which healers call "empiricism" or "anecdotal evidence," and which patients call "my brother-in-law told me his root canal was horrible," can mislead.

After my traumatic dental school experience with the naked truth, I was wary about how I presented it to the next kid in my chair. "Will this hurt?" he demanded to know. He wanted the truth, but only one version of it. So I chose the most generous truth I could afford. I answered with great optimism, "Nope. Not a bit." It should have done the trick. But he kicked and screamed anyway, and had to be assigned to a senior student.