The New York State Dental Journal

Volume 87 | Number 2 Article 1

3-1-2021

N Y State Dent J March 2021

UV Systems and PPE: **What's Right for Your Office?**

THE NEW YORK STATE DENTAL JOURNAL

NYSDJ

Volume 87 **Number 2**
March **2021**

ORTHODONTICS AND THE GROWING PATIENT

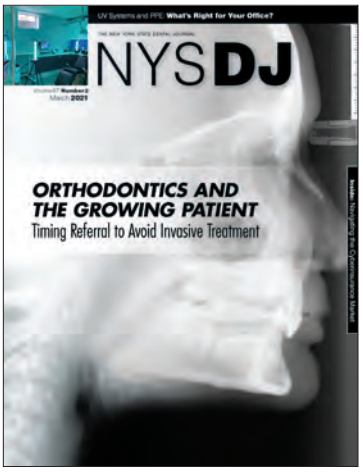
Timing Referral to Avoid Invasive Treatment

Inside: Navigating the Cyberinsurance Market

THE NEW YORK STATE DENTAL JOURNAL

NYSDJ

Volume 87 **Number 2** March **2021**



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Practitioners are being pressured to purchase all manner of personal protective devices to reduce transmission of COVID-19. The costs can be high, as is the uncertainty about making these purchases. The authors have combed the literature to aid dentists in making better-informed decisions about what to buy.

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A Report of Two Cases and Review of the Literature
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Solitary median maxillary central incisor syndrome comprises several midline defects, many of which are evident in the head and neck. Patients present with multiple anomalies that may include congenital nasal obstruction and short stature. The two cases presented here involve very young females with congenital abnormalities and other unique characteristics.

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The Expert "Pair of Docs" Paradox

How reliable is the testimony of expert witnesses in malpractice cases? Dentists would be better served resolving disputes outside of the courtroom.

The Expert "Pair of Docs" Paradox describes the self-contradictory phenomenon where two qualified professionals draw exactly opposite conclusions from the same set of facts. Dentists disagree in many areas of professional discourse, including research, education and clinical decision-making. Differences of opinion as part of spirited debate in a collegial forum can advance scientific inquiry. Conversely, in the world of dental malpractice litigation, drawing opposite conclusions from the same set of facts, injects additional confusion and unpredictability into a system already filled with uncertainty.

The adversarial process, by definition, requires a contest that gives rise to paradoxical opposing opinions regarding the same conduct. Theoretically, allowing both sides to advocate for their positions will uncover the truth and resolve civil disputes. However, problems arise when we force lay decision-makers to solve complex medical issues based upon conflicting opinions. Judges and jurors, in search of consensus on the evidence, paradoxically find dispute. As practicing dentists, we can both limit non-meritorious suits and bring some certainty to this bewildering dispute resolution process when we put our ethical and legal responsibilities into gear in all situations when we comment upon another practitioner's clinical performance.

Walking a Fine Line

Dentists provide "expert" opinions in three separate and distinct circumstances. The first occurs informally when a subsequent treating dentist examines a patient and comments regarding a prior dentist's treatment, often long before a patient ever contemplates litigation. Practitioners walk a fine line here between objectively recording and informing the patient of existing findings and subjectively postulating on the quality of prior decision-making and services.

Section 4C of the ADA Principles of Ethics and Code of Professional Conduct ("Code"), Justifiable Criticism,[1] requires that dentists inform patients of their oral health status without disparaging comments regarding prior services. The legal standard of care mandates that, armed with the appropriate information, we accurately diagnose and inform patients of their current condition. Neither ethics nor law requires dentists to make judgments or conclusions regarding past care without firsthand knowledge of the circumstances under which the treatment was rendered. Only a judge or jury, after their review of all the relevant evidence, including records, reports, radiographs, tests and relevant testimony, can legally determine whether any past conduct rises to the level of malpractice.

Dentists should make no assumptions based solely on a patient's account of his or her treatment history, since such recollections can often suffer from inaccuracies and technical misunderstandings. When appropriate, and with the patient's authorization, we can consult with the prior dentist to discover the relevant history. We must also ensure, in treatment planning, to not allow the potential financial remuneration of redoing the existing treatment bias our clinical judgment.

Subjective conclusions that disparage prior care confuse patients, especially if their previous dentist had evaluated and/or treated the same conditions and, in an apparent paradox, arrived at different conclusions. When lacking key facts, such commentary can anger, mislead and incite the patient

to pursue redress for a potentially meritless matter. Although rarely initiated, the Code states that unjustified comments regarding prior services "can be the basis for the institution of a disciplinary proceeding against the dentist making the statements."[2] When dentists meet their ethical and legal duty to diagnose and inform, and avoid unjustified comments, we reduce the chances that conflicting opinions will generate unfounded lawsuits.

Does the Case Have Merit?

The second circumstance involves the legal requirement in New York State that attorneys attach a Certificate of Merit to all dental professional liability complaints.[3] In the Certificate, the plaintiff's attorney must attest that he or she reviewed the facts of the case and consulted with at least one licensed dentist to determine whether a "reasonable basis" for such an action exists. Here, the law requires that attorneys seek the expert opinion of dentists before proceeding with a suit against a dentist. Makes sense. This requirement offers dentists the opportunity, albeit minor, to function as formal gatekeepers in allowing only potentially meritorious dental malpractice suits to proceed.

However, the bar is low here for the prosecuting attorney, especially if the Expert "Pair of Docs" Paradox operates in high gear. For example, if the first dental expert contacted emphatically saw no reasonable basis for a malpractice claim, but the second, third or fourth expert opined much less emphatically that a reasonable basis existed, technically, the action could still proceed. Regardless, we should not underestimate the effect on the parties involved and the system, of any opinion we render at this level. We must not let financial remuneration sway our opinion, and we must make legal conclusions only with a thorough review of the facts and necessary records.

Finally, the third circumstance involves a dentist's testimony as an expert witness during dental malpractice litigation. The Code, Section 40, Expert Testimony, states dentists may provide expert testimony when that testimony is essential to a just and fair disposition of a judicial or administrative action.[4] While justice and fairness seem attainable, the definition of dental malpractice and the standard of care in specific cases remains an elusive concept in the civil litigation arena. The instructions to the jury provide the guidance on the law applicable to the facts of the case at hand; however, they offer limited help. They contain such broadly worded concepts and requirements that they often raise more questions than they answer.

Battle of the Experts

Despite the highly technical nature of oral healthcare diagnosis and treatment, our legal system requires non-dentist jurors and judges, as triers of fact, to evaluate dentists' conduct. These lay decision-makers must then rely upon the testimony of experts who routinely disagree about errors and the standard of care. Here, the adversarial system sanctions the Expert "Pair of Docs" Paradox. Money can't buy you love, but, in civil litigation, it can sure produce hired gun witnesses to advocate for opposing sides. Regretfully, if this battle of the ex-

THE NEW YORK STATE DENTAL JOURNAL
NYSDJ

PRINTER
Fort Orange Press, Albany

NYSDJ (ISSN 0028-7571) appears four times a year in print: January. March, June/July and August/September. The April and November issues are available online only at www.nysdental.org. The Journal is a publication of the New York State Dental Association, 20 Corporate Woods Boulevard, Suite 602, Albany, NY 12211. In February, May, October and December, members have online access to the NYSDA News. Periodicals postage paid at Albany, NY. Subscription rates $25 per year to the members of the New York State Dental Association; rates for nonmembers: $75 per year or $12 per issue, U.S. and Canada; $135 per year foreign or $22 per issue. Postmaster: Please send change of address to the New York State Dental Association, Suite 602, 20 Corporate Woods Boulevard, Albany, NY 12211. Editorial and advertising offices are at Suite 602, 20 Corporate Woods Boulevard, Albany, NY 12211. Telephone (518) 465-0044. Fax (518) 465-3219. E-mail info@nysdental.org. Website www.nysdental.org. Microform and article copies are available through National Archive Publishing Co., 300 N. Zeebe Rd., Ann Arbor, MI 48106-1346.

perts plays out in dental malpractice cases, even the checks and balances of various rules of admissibility of evidence and cross-examination often cannot eliminate all confusion. Scientifically opposing views of the same set of facts fly directly in the face of the evidence-based dentistry principles the experts may espouse and which reasonable judges and jurors would expect to lead to consensus.[5]

Expert opinion ranks low, in the levels of reliability of scientific evidence, when compared with meta-analyses, systematic reviews and other studies with less likelihood for bias.[6] Unfortunately, the probability of expert witness bias remains high due to, among other factors, financial remuneration and frequency of testifying. Confused judges and jurors often make decisions based merely upon a witness's appearance and appeal. Regretfully, this unreliability sets inconsistent precedents regarding standards of care for the dental community.

The dental profession has the opportunity to improve the dental malpractice dispute resolution process. We can limit the initiation and progress of non-meritorious suits when we meet our ethical and legal duties in our comments regarding other practitioners' prior care at all levels. We can also advocate for alternative dispute resolution models, such as mediation and arbitration, with practicing dentists involved in the decision-making process. Fairness and justice will be best served if we reduce the incidence of the Expert "Pair of Docs" Paradox and facilitate a dialogue leading to consensus.

D.D.S., J.D.

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Yes. There is Insurance against Cyberattacks

Writing and purchasing effective coverage is challenging. Fortunately, there are guidelines.

With the occurrence of the massive SolarWinds cybersecurity breach (see the NYSDA blog post, "Lances's Corner," from Dec. 15, 2020; it can found under Publications on the NYSDA website, www.nysdental.org), cybersecurity insurance has risen to the forefront as a business necessity. However, the limitations of insurance and the murkiness of risk definition in this evolving area of technology have caused enough concern to prompt the New York State Department of Financial Services (DFS) to issue significant guidance on how cyber insurance policies need to be designed. This guidance will affect both insurers and insureds in deciding what cyber insurance policies to offer and which to consider purchasing. Read on for a description of that guidance for both insurers and insureds.

As cybercrime becomes more common and costly, cyber risk increases for all organizations. The novel coronavirus (COVID-19) pandemic has shifted more of our work and lives online, and this has introduced new vulnerabilities that cybercriminals are aggressively exploiting. From the rise of ransomware to the recently revealed SolarWinds-based cyberespionage campaign, it is clear that cybersecurity is now critically important to almost every aspect of modern life—from healthcare to consumer protection to national security. This is why DFS took the lead by promulgating the nation's first cybersecurity regulation for financial services in 2017 and by creating its Cybersecurity Division in 2019.

Cyber insurance plays a key role in managing and reducing cyber risk. This is a relatively new area of insurance for most insurers, but one that has grown rapidly. In 2019, the national cyber insurance market was $3.15 billion. This includes both standalone cyber insurance coverage, as well as endorsements to non-cyber insurance policies. It is estimated that by 2025, it will be over $20 billion. And these numbers understate insurance coverage of cyber risk, as many insurance claims arising from cyber incidents are submitted under non-cyber insurance policies. As the insurance regulator for New York State, DFS sees its role as facilitating the continued growth of a sustainable and sound cyber insurance market.

A robust cyber insurance market that effectively prices cyber risk will also improve cybersecurity. By identifying and pricing risk created by gaps in cybersecurity, cyber insurance can generate a financial incentive to fill those gaps to reduce premiums. By driving improved cybersecurity and cyber risk management, cyber insurance can also benefit consumers who entrust their sensitive data to these organizations.

To foster the growth of a robust cyber insurance market that maintains the financial stability of insurers and protects insureds, DFS has created a Cyber Insurance Risk Framework (CIRF) that

outlines best practices for managing cyber insurance risk. The CIRF is based on extensive DFS consultation with industry, cybersecurity experts and other stakeholders. The CIRF applies to all authorized property/casualty insurers that write cyber insurance. However, property/casualty insurers that do not write cyber insurance should still evaluate their exposure to "silent risk" and take appropriate steps to reduce that exposure (more on that silent risk aspect below).

The Cost is High

As cyber risk has increased, so, too, has risk in underwriting cyber insurance. The damage done by many types of cybercrime—such as business e-mail compromises—continues to rise. But the biggest driver is an increase in the frequency and cost of ransomware attacks. A 2020 survey by DFS revealed that from early 2018 to late 2019, the number of insurance claims arising from ransomware increased by 180%, and the average cost of a ransomware claim rose by 150%. Moreover, the number of ransomware attacks reported to DFS almost doubled in 2020 from the previous year.

Costs continued to rise in 2020 as ransomware attacks increased in frequency and scale. The average dollar amount in costs of ransomware was $783,000 in 2020, an increase of $280,000 from 2019. The global cost of ransomware was approximately $20 billion in 2020. The cyber insurance industry has reported that escalating costs are creating pressure to increase rates and tighten underwriting standards for cyber insurance.

DFS recommends against making ransom payments. Ransom payments fuel the vicious cycle of ransomware, as cybercriminals use them to fund ever more frequent and sophisticated attacks. An October 2020 guidance by the Office of Foreign Assets Control (OFAC) stressed the national security risk posed by ransom payments, and stated that intermediaries—including insurers—can be liable for ransom payments made to sanctioned entities. Given the problem of identifying the attacker at the time of a ransomware incident, insurers and their policyholders risk violating OFAC sanctions when paying a ransom.

Similarly, the Federal Bureau of Investigation (FBI) warns against paying a ransom, because it fails to guarantee that an organization will regain access to all of its data or that its data will not be released publicly, and also because paying a ransom emboldens criminals to target other organizations. In 2020, data extortion became a common feature of ransomware attacks, but experts have noted that in many cases, even when victims paid, their data was subsequently leaked.

Many insurers still have work to do to develop a rigorous and data-driven approach to cyber risk. And experts

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have expressed concerns that insurers are not yet able to accurately measure cyber risk. The decision to offer and price cyber insurance for specific organizations should be based on a careful assessment of that organization's risk. Cyber risk is driven in large part by the caliber of an organization's cybersecurity program, and so can vary considerably from one organization to the next. Insurers that do not effectively measure the risk of their insureds also risk insuring organizations that use cyber insurance as a substitute for improving cybersecurity, and pass the cost of cyber incidents on to the insurer. Without an effective ability to measure risk, cyber insurance can, therefore, have the perverse effect of increasing cyber risk—risk that will be borne by the insurer.

Urgent and Daunting Challenge

Managing this growing cyber risk is an urgent challenge for insurers. In addition to overall rising costs, insurers must account for the systemic risk that occurs when a widespread cyber incident damages many insureds at the same time, potentially swamping insurers with massive losses. This systemic risk is illustrated by the massive supply chain compromise in the SolarWinds Orion enterprise network management software. Orion was widely used by critical infrastructure entities, private sector organizations, service providers and government agencies. As a result of the compromise, thousands of organizations had malware backdoors installed in their networks. DFS has been assessing the impact of this compromise and appreciates the engagement of industry in this process. Although this cyber campaign appears to have been focused on espionage and not destructive attacks, given the number of impacted organizations, the total remediation costs are likely to be substantial.

In addition to overall rising costs, insurers must account for the systemic risk that occurs when a widespread cyber incident damages many insureds at the same time, potentially swamping insurers with massive losses.

Moreover, insurers often incur losses from cyber incidents in insurance policies that do not explicitly grant or exclude cyber coverage—so-called "non-affirmative" or "silent" risk. Because silent risk can reside in many different types of policies, even insurers that write little or no cyber insurance need to measure and manage silent risk in their non-cyber insurance policies. While the industry has taken steps to address silent risk in recent years, it remains a significant problem for many insurers. According to a global survey, in the second quarter of 2020, 65% of underwriters were concerned about cyber coverage exposure in property/casualty policies that do not explicitly cover cyber risks. Firms almost all agreed that a number of traditional lines of business have considerable exposure to non-affirmative cyber risk.

These challenges—systemic risk and silent risk—are exemplified by the 2017 NotPetya incident, where malware unleashed by the Russian government caused damage across the globe. The incident led to $3 billion in insurance claims, of which $2.7 billion in claims was made under property/casualty policies that were silent about cyber risks.

The CIRF is a result of ongoing DFS dialogue with the insurance industry and experts on cyber insurance. Over the past year, DFS had dozens of meetings with insurers, insurance producers, cyber experts and insurance regulators across the United States and Europe. In July 2020, DFS hosted a cyber insurance roundtable with representatives from five global insurance groups. Also in 2020, DFS collected survey data from 49 insurers on cyber insurance and ransomware. DFS continues to welcome input from industry and other interested parties on challenges facing the cyber insurance market.

Insurers play a critical role in mitigating and reducing the risks of cybercrime. DFS commends the progress many insurers have made in managing their cyber insurance risk to date and looks forward to continuing to work with the industry to address challenges in the cyber insurance market. Therefore, DFS recommends all authorized property/casualty insurers that write cyber insurance employ the practices identified below to sustainably and effectively manage their cyber insurance risk. Based on DFS engagement with industry and experts, certain best practices have emerged that are incorporated into these recommendations. Each insurer's cyber insurance risk will vary based on many factors, including the insurer's size, resources, geographic distribution, market share and industries insured. Each insurer should take an approach that is proportionate to its risk.

Cyber Insurance Risk Framework

Establish a Formal Cyber Insurance Risk Strategy

Insurers that offer cyber insurance should have a formal strategy for measuring cyber insurance risk that is directed and approved by senior management and the board of directors, or the governing body if there is no board. All DFS-regulated insurers also must address their own cybersecurity and comply with the cybersecurity regulations set forth in Part 500 of Title 23 of the Official Compilation of Codes, Rules and Regulations of the State of New York (23 NYCRR 500). The strategy should include clear qualitative and quantitative goals for risk, and progress against those goals should be reported to senior management and the board,

or the governing body if there is no board, on a regular basis. The strategy should incorporate the six key practices identified below.

Manage and Eliminate Exposure to Silent Cyber Insurance Risk

Insurers that offer cyber insurance should determine whether they are exposed to silent or non-affirmative cyber insurance risk, which is risk that an insurer must cover loss from a cyber incident under a policy that does not explicitly mention cyber. A "cyber incident" occurs when an unauthorized user gains access to, disrupts or misuses an organization's information system or gains access to or misuses information stored on that system that is of value to the organization, including, but not limited to, patient records, nonpublic information, intellectual property and customer information.

An "information system" is a discrete set of electronic information resources organized for the collection, processing, maintenance, use, sharing, dissemination or disposition of electronic information, as well as any specialized system, such as industrial/process controls systems, telephone switching and private branch exchange systems, and environmental control systems. Even property/casualty insurers that do not explicitly offer cyber insurance should evaluate their exposure to silent risk and take appropriate steps to reduce their exposure. Silent risk can be found in a variety of combined coverage policies and standalone non-cyber policies, including errors and omissions, burglary and theft, general liability and product liability insurance. Cyber risk likely has not been quantified or priced into these policies, which exposes insurers to unexpected losses.

Ultimately, insurers should eliminate silent risk by making clear in any policy that could be subject to a cyber claim whether that policy provides or excludes coverage for cyber-related losses.

Ultimately, insurers should eliminate silent risk by making clear in any policy that could be subject to a cyber claim whether that policy provides or excludes coverage for cyber-related losses. Elimination of this risk will take some time, given the many existing policies that can contain silent cyber risk. Insurers should, therefore, also take steps to mitigate existing silent risk, such as by purchasing reinsurance.

Evaluate Systemic Risk

As part of their cyber insurance risk strategy, insurers that offer cyber insurance should regularly evaluate systemic risk and plan for potential losses. Systemic risk has grown in part because institutions increasingly rely on third-party vendors, and those vendors are highly concentrated in key areas, like cloud services and managed services providers. Insurers should understand the critical third parties used by their insureds and model the effect of a catastrophic cyber event on such critical third parties that may cause simultaneous losses to many of their insureds. Examples of such events could include a self-propagating malware, such as NotPetya, or a supply chain attack, such as the SolarWinds trojan, that infects many institutions at the same time, or a cyber event that disables a major cloud services provider. A catastrophic cyber event could inflict tremendous losses on insurers that may jeopardize their financial solvency. A systemic event continues to be the top threat to cyber insurers' solvency.

Insurers also should conduct internal cybersecurity stress tests based on unlikely but realistic catastrophic cyber events. Accurate stress testing requires accounting for both silent and affirmative risk. Moreover, because exposure to catastrophic cyber events varies across business industries and by type and size of the insured, insurers should track the impact of stress test scenarios across the different kinds of insurance policies they offer, as well as across the different industries of their insureds. The cyber insurance risk strategy should account for possible losses identified in stress tests.

Rigorously Measure Insured Risk

Insurers that offer cyber insurance should have a data-driven, comprehensive plan for assessing the cyber risk of each insured and potential insured. This commonly starts with gathering information regarding the institution's cybersecurity program through surveys and interviews on topics, including corporate governance and controls, vulnerability management, access controls, encryption, endpoint monitoring, boundary defenses, incident response planning and third-party security policies. The information should be detailed enough for the insurer to make a rigorous assessment of potential gaps and vulnerabilities in the insured's cybersecurity. Third-party sources, such as external cyber risk evaluations, are also a valuable source of information. This information should be compared with analysis of past claims data to identify the risk associated with specific gaps in cybersecurity controls.

Educate Insureds and Insurance Producers

Insurers that offer cyber insurance have an important role to play in educating their insureds about cybersecurity and reducing the risk of cyber incidents. Insurers should strive to offer more comprehensive information about the value of cybersecurity measures and facilitate the adoption of those measures. Insurers should also incentivize the adoption of better cybersecurity measures by pricing policies based on the effectiveness of each insured's cybersecurity program.

Several leading insurers already offer their insureds guidance, discounted access to cybersecurity services, and even cybersecurity assessments and recommendations for improvement (like providing insureds tools to manage their cybersecurity risk). DFS commends these initiatives, and insurers should continue to expand the type, scope and reach of such offerings.

Insurers should also encourage and assist with the education of insurance producers who should have a better understanding of potential cyber exposures, types and scope of cyber coverage offered, and monetary limits in cyber insurance policies (including things like recommending training and certification for those in the insurance industry, emphasizing that in order for underwriters to effectively evaluate and analyze risk in a given industry, they must understand it). Ensuring that the need for, benefits of, and limitations to cyber insurance are well-understood and conveyed to insureds and potential insureds will facilitate the growth of a robust cyber insurance market.

Obtain Cybersecurity Expertise

Insurers that offer cyber insurance need appropriate expertise to properly understand and evaluate cyber risk. Insurers should recruit employees with cybersecurity experience and skills and commit to their training and development, supplemented as necessary with consultants or vendors.

Require Notice to Law Enforcement

Cyber insurance policies should include a requirement that victims notify law enforcement. Some insurers that offer cyber insurance already engage in this best practice. Based on a DFS survey, 36 percent of insurers required their cyber insurance insureds to notify law enforcement of a cyber incident. Notice to law enforcement may be beneficial both to the victim/insured and the public.

For ransomware incidents, the Office of Foreign Assets Control (OFAC) will consider contacting law enforcement as a mitigating factor in case sanctions laws are violated. Law enforcement often has valuable information that may not be available to private sources and can help victims of a cyber incident. Law enforcement can help recover data and funds that were lost. For instance, when funds are stolen through a business e-mail compromise, law enforcement can sometimes block or reverse wire transfers if alerted of the incident promptly. Notice to law enforcement also can enhance a victim's reputation when its response to a cyber incident is evaluated by its patients, shareholders, regulators and the public. Finally, information received by law enforcement can be used to prosecute the attackers, warn others of existing cybersecurity threats and deter future cybercrime.

Choose Carefully

NYSDA members have already suffered ransomware attacks, and several New York hospitals were victims of the SolarWinds cybersecurity attack. Healthcare practices of all types are going to want to review the DFS guidance carefully to be sure they are purchasing a cyber insurance policy that follows the six best practices outlined in it. Obviously, the guidance is very technical for members to digest, but NYSDA will also be carefully reviewing that guidance in choosing an endorsed cyber insurance provider for members (and for NYSDA, itself).

It would have been nice if something was totally simple for a change, but DFS found that not even insurers, much less insureds, were all properly figuring out how to intelligently offer or purchase cyber insurance. A DFS guidance does not have the force of law and is just a recommendation of a set of best practices but, as with all government recommended guidelines, especially in the era of the COVID-19 pandemic, departing from recommended best practices is not without risk—and in this case, cyber risk.

The material contained in this column is informational only and does not constitute legal advice. For specific questions, dentists should contact their own attorney.

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LETTERS

Embracing Teledentistry Comes with Risk

I read, with great interest, Lance Plunkett's "Dentistry Goes Remote" article in the January *NYSDJ* regarding teledentistry. Mr. Plunkett recognizes and discusses in depth what looks to be a growing and permanent fixture of dentistry for the foreseeable future, for better or worse. Having begun my career as a practicing oral and maxillofacial surgeon, and then becoming an attorney who, for the better part of the last decade, has defended dentists in malpractice cases, peer review inquiries and disciplinary actions, I view this new aspect of dentistry with some true concerns about potential liability. Whether my concerns come to fruition remains to be seen.

Mr. Plunkett is exactly right in seeing dentistry as a "hands-on" profession, so any departure from that description must contemplate and account for all that might reasonably occur in situations where it is no longer hands-on. A clear example that comes to mind is a circumstance in which a dentist on a teledentistry session diagnoses a garden-variety aphthous ulcer and suggests local palliative measures for management until the lesion resolves on its own. But while that situation resolved uneventfully and positively, the dentist did not see an erosive squamous cell tongue carcinoma that was also present at the time, either because the patient did not direct the dentist's attention to it, or because camera resolution was not adequate for visualization, or because it was located beyond camera view.

If that dentist were later to be sued for failure to diagnose the malignancy, the dentist's defense might well be tied to whether the session was recorded and saved—either by the dentist or patient—and what can be seen on that recording—whether the dentist suggested an in-person appointment, which was refused by the patient and how that was documented, or the extent to which a medical/social history was obtained, to state just a few variables.

Unfortunately, the concept of the need to adhere to the "standard of care" is vague and unhelpful. New York State defines the standard of care as essentially that which a reasonably prudent dentist would or would not do under similar circumstances (New York Pattern Jury Instructions 2:150). Its practical application is that which a trial dental expert tells a jury it is. As there inevitably are trial experts for the plaintiff and the defendant with competing and opposing versions of what that standard is, a lay jury is often left to determine what that standard is and whether it was met, sometimes, regrettably, based upon which expert appeals personally better to the jury or which expert has better communication skills.

So, the fact that the new law governing teledentistry in New York State requires dental telehealth services to adhere to the standards of appropriate patient care is irrelevant from where I sit; and the fact that the law also requires that such standards comport with those in other dental healthcare settings—often an impossibility, as set forth in the above example—places the dentist in a potentially precarious liability posture.

Finally, that the new law does not permit a dentist to (attempt to) waive liability for teledentistry services is, in my opinion, a nonissue because under New York law, even the most robust and comprehensive of informed-consent processes do not shield the dentist from liability as to the performance of the procedure that is the subject of the litigation. But when this new statute, or a version of it, is read to the jury, its members may easily interpret it to mean that the dentist is specifically not protected from liability, that is, the dentist is affirmatively liable for errors, in teledentistry settings, which places a pro-plaintiff slant on jury deliberations.

So, while many patients may be helped through teledentistry sessions, potential liability is a different story altogether. In the end, each dentist will need to decide that risk-benefit analysis for himself or herself. As with much in practice, progress is often accompanied by unanswered questions.

Marc R. Leffler, D.D.S., Esq.
Pomona, NY

the Smilist

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Foundation Participates in Matching Program for Veterans

THE NEW YORK STATE DENTAL FOUNDATION was proud to help match a veteran in need of dental care with a NYSDA dentist, who volunteered his time and expertise to restore the patient's oral health. The foundation did this via a partnership it has established with Everyone for Dentists (E4V), a service organization that seeks to provide dental care to combat veterans (and their spouses) who are having a tough time transitioning back home.

NYSDA Vice President James Galati, who is the dentist who treated the needy veteran, said, "I think it's a great program and has the potential to help many veterans."

E4V screens low-income veterans who were deployed to combat or imminent danger areas, and then contacts dentists to find out if they will provide comprehensive care to qualified individuals. Most states have some programs for veterans, but there may be limitations in terms of age, location or sliding scale fees that are still unaffordable. E4V hopes to complement existing programs and, in the process, increase volunteerism.

E4V founder Theresa Cheng, who received the 2021 ADA Humanitarian Award for her outreach efforts, is thankful for the foundation's involvement. "E4V needs more dentists to help veterans in New York State," she said. "The foundation's ability to connect our veterans with NYSDA dentists for the care they need is enormously helpful, and is a win-win for everybody."

Theresa Cheng

NYSDF Executive Director Laura Clark Stedman said the Foundation Board and staff are only too happy to do whatever possible to give back to our country's veterans: "As with NYS Veterans Smile, E4V gives dentists a manageable way to volunteer, as each participant is assigned only one veteran, who can be accommodated within the dentist's office and schedule."

The ultimate goal of E4V is to provide treatment to restore health and establish adequate function and esthetics. To volunteer, or for more information, go to https://www.everyoneforveterans.org/dentists.html.

DATES TO REMEMBER

Council on Peer Review/Quality Assurance
April 9 • *Zoom*

Council on Dental Practice
April 16 • *Zoom*

Council on Dental Benefits
April 26 • *Zoom*

Council on Dental Health Planning
April 30 • *Zoom*

Chemical Dependency Committee
May 14 • *Location TBD*

NYSDA House of Delegates
August 13-15

For more information about NYSDA-sponsored events, call the State Association at (800) 255-2100.

Council Calls for Nominations

DEADLINE EXTENDED

THE NYSDA COUNCIL ON NOMINATIONS will meet on Wednesday, May 19, at 1 p.m. to make its selections for President-Elect, Vice President and Secretary-Treasurer of the Association in 2021. In addition, the council will qualify candidates and declare them eligible to run for ADA Trustee-Elect.

Nominees for President-Elect must be members of the Fourth District Dental Society. Nominees for Vice President must be members of the Ninth District Dental Association. Nominees for Secretary-Treasurer may be members of any NYSDA component. ADA Trustee-Elect candidates may be members of any NYSDA component.

Members wishing to submit nominations for any of these positions must do so no later than May 15. Nominations should be sent to Dr. Payam Goudarzi, Council on Nominations, NYSDA, 20 Corporate Woods Blvd., Suite 602, Albany, NY 12211.

Dentists Invited to Apply for Grant to Treat Special Needs Patients

THE NEW YORK STATE DENTAL FOUNDATION is looking for dentists whose practices are open to special needs patients and who could benefit from a monetary award, provided through the foundation's Gold Fund.

The Gold Fund was established to help provide dental treatment to individuals of all ages with special needs and in serious need of such care who cannot receive assistance through established providers, such as private insurance, Medicaid and Child Health Plus, and are not able to access routine or specialized services. These people have fallen through the cracks of the healthcare system and often need expensive care. Mostly, they are reliant upon volunteer dentists and limited operating room availability.

Funding Priorities

The major goal of the Gold Fund is to make grants to facilitate the oral healthcare treatment of disadvantaged and/or at-risk people in New York State. Interested dentists must show in their application to the fund what they intend to do with the money. If a dentist's request for funding is approved, he or she must provide a six-month follow-up review with specifics of how fund monies were used to provide dental treatment to someone who would not have received treatment any other way.

The grant must be applied exclusively to actual clinical dental treatment services. Applications to the fund must include a specific breakdown of how funding would be used.

Any misuse or misapplication of the grant will warrant the return of such funding to the New York State Dental Foundation.

Funding Restrictions

The Gold Fund cannot be used for promotional items, including, but not limited to, toothbrushes, toothpaste or other dental products; educational materials; or any other non-clinical, non-direct patient care product or service. Any grant recipient who misapplies or misuses grant money will be liable for and required to return such grant money to the fund.

Grant Size and Duration

Gold Fund awards will range between $1,000 and $5,000, although exceptions may be made upon approval by the New York State Dental Foundation Board of Trustees.

Procedure

Dentists wishing to apply to the Gold Fund must provide the following:

- Information about their practice or organization: name, year established, EIN if applicable, address, contact person, phone, fax, email, website address.
- Total organizational budget; project budget.
- Amount of funding being requested.
- What will funding be used for (cite treatment plan).

Completed applications should be saved as "[Your Organization Name] Gold Fund Application" and emailed as an attachment to Laura Clark Stedman at lbleon@nysdental.org. NYSDF trustees and staff will acknowledge all applications.

EDPAC Fills its Board

The Empire Dental Political Action Committee has announced its slate of Board members for 2021. All have been approved by the NYSDA Board of Directors. Serving as officers in the coming year are: Michael R. Breault, chair; Richard Andolina, vice chair; Raymond Flagiello, secretary; and Joseph R. Caruso, treasurer.

Chairs of their components are: Robert Peracchia, New York County; Valerie Venterina, Second District; Geoffrey Gamache, Third District; G. Kirk Gleason, Fourth District; James Wanamaker, Fifth District; Howard J. Warner, Sixth District; and James Soltys, Seventh District.

Also: John Tibbetts, Eighth District; Duraid Sahawneh, Ninth District; Michael Shreck, Nassau County; Prabha Krishnan, Queens County; Dimitrios Kilimitzoglou, Suffolk County; and Joel Friedman, Bronx County.

At-large Board members are: Betsy Clark-Fortier, Sixth District; Robert Doherty, Ninth District; Chad Gehani, Queens County; Steven Gounardes, Second District; Maria Maranga, Suffolk County; Edward Miller Jr., Ninth District; John Nasca, Eighth District; and Lawrence Volland, Eighth District.

NSS Selects Board; Imposes Term Limits

NYSDA SUPPORT SERVICES has put together its first Board whose members will be serving under NSS's newly enacted term limits requirement. The following, all of whom were approved by the NYSDA Board of Directors, were named to new first terms:

Chairman Joseph Caruso (one-year term); President Michael Herrmann (exempt); Treasurer Mark Weinberger (two-year term); Robert Doherty (one-year term); Donald Fager (one-year term); Lawrence Volland (one-year term); Minerva Patel (two-year term); Roxene Gascoigne (two-year term); Dimitrous Kilmitzoglou (three-year term); Trica Quartey (three-year term); Amrita Patel (three-year term); NYSDA Secretary-Treasurer Frank Barnashuk (exempt); and NYSDA Executive Director Mark Feldman (exempt).

Ethics Council Issues Rulings

On Jan. 8, 2021, the NYSDA Council on Ethics issued an order for no further action against Dr. Michael Christopher Kacalski (License No. 046471). After a full hearing on Dec. 9, 2020, the council found that Dr. Kacalski had been disciplined for professional misconduct by the New York State Education Department Board of Regents and, as such, was in violation of Paragraph B of Section 20 Chapter X of the NYSDA Bylaws. Dr. Kacalski did not appeal the council's decision within the requisite 30-day timeframe to the American Dental Association (ADA). The decision of the NYSDA Council on Ethics thereby became final and effective as of Feb. 7, 2021.

On Jan. 8, 2021, the NYSDA Council on Ethics issued an order to suspend Dr. Eliaz Kaufman (License No. 049860) from membership for two years, with said suspension completely stayed and a two-year probation. After a full hearing on Dec. 9, 2020, the council found that Dr. Kaufman had been disciplined for professional misconduct by the New York State Education Department Board of Regents and, as such, was in violation of Paragraph B of Section 20 Chapter X of the NYSDA Bylaws. Dr. Kaufman did not appeal the council's decision within the requisite 30-day timeframe to the American Dental Association (ADA). The decision of the NYSDA Council on Ethics thereby became final and effective as of Feb. 7, 2021.

In Memoriam

NEW YORK COUNTY
Jason Lee
New York University '67
28 Rebel Run Drive
East Brunswick, NJ 08816
April 30, 2020

Brian Webber
Columbia University '77
40 Hemlock Lane
Roslyn Heights, NY 11577
August 9, 2020

SECOND DISTRICT
Martin Fisher
New York University '66
33 8th Avenue
Brooklyn, NY 11217
August 8, 2020

Alan Kratenstein
New York University '82
21 Iris Circle
Manalapan, NJ 07726
April 13, 2020

Stuart Levy
New York University '59
300 Diplomat Parkway, #811
Hallandale Beach, FL 33009
August 1, 2020

Joseph Taitelbaum
Marquette University '71
169 Washington Avenue
Staten Island, NY 10314
June 7, 2020

THIRD DISTRICT
Peter Collins
McGill University '73
91 23rd Street
Troy, NY 12180
November 27, 2020

Frederick Fischer
Fairleigh Dickinson University '76
939 Augusta Pointe Drive
Palm Beach Gardens, FL 33418
January 12, 2020

William Healey
Georgetown University '58
10 Naples Court
Troy, NY 12180
January 16, 2020

FOURTH DISTRICT
Reinald Chutter
University of Pennsylvania '54
440 Monticello Ave #2200
Virginia Beach, VA 23454
April 24, 2020

Raymond Dilzer
University of Maryland '55
14 New Hampshire Road
Plattsburgh, NY 12903
June 8, 2020

Harold Gilbert
New York University '53
2150 Mountainview Avenue
Schenectady, NY 12309
November 24, 2020

Roy Oyangen
Fairleigh Dickinson University '86
113 Saratoga Road, #101
Glenville, NY 12302
November 27, 2020

FIFTH DISTRICT
Henry Geidel
University of Pennsylvania '50
1230 Wildewood Downs Circle
Columbia, SC 29223
January 4, 2020

Richard Mayne
University of Pennsylvania '66
8476 Marco Lane
Baldwinsville, NY 13027
March 5, 2020

SIXTH DISTRICT
George Haeseler
Tufts College '51
6100 W. Friendly Avenue, #3312
Greensboro, NC 27410
January 26, 2020

SEVENTH DISTRICT
Joseph Bonafede
University of Buffalo '46
32 Orchard Lane
Fairport, NY 14450
August 8, 2020

Robert Dolan
Georgetown University '57
39 Burr Oak Drive
Pittsford, NY 14534
July 30, 2020

Kjellaug Gilda
Tufts College '49
100 Hahnemann Trail, Apt 240
Pittsford, NY 14534
November 13, 2020

EIGHTH DISTRICT
John Asaro
University at Buffalo '73
44713 Longfellow Avenue
Temecula, CA 92592
May 24, 2020

Steven Braunstein
University at Buffalo '75
267 Pearl Street, #101
Buffalo, NY 14202
May 30, 2020

Guy Raimondi
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60 Deer Valley Drive
Nesconset, NY 11767
March 26, 2020

Robert Sippel
Georgetown University '55
232 Cerromar Way S
Venice, FL 34293
April 24, 2020

Robert Watson
University of Pittsburgh '61
4538 Hidden Hollow Road
Hamburg, NY 14075
July 17, 2020

NINTH DISTRICT
Trevor Bavar
New York University '60
1915 Central Park Avenue
Yonkers, NY 10710
March 30, 2020

Joseph Camillo
Seton Hall University '63
30 Berkley Drive
Rye Brook, NY 10573
January 27, 2020

Vincent De Somma
New York University '57
1190 Highland Greens Drive
Venice, FL 34285
November 8, 2020

Gunther Goldsmith
University of Pennsylvania '56
66 Eisenhower Drive
Middletown, NY 10940
April 7, 2020

Leonard Newman
New York University '48
92 Ringgold Street, #H214
Peekskill, NY 10566
July 5, 2020

Daniel Rosenberg
New York University '63
6 Barnett Drive
Monroe, NY 10950
April 12, 2020

Edward Schwanderla
Temple University '62
499 N. Broadway, #7I
White Plains, NY 10603
November 21, 2020

NASSAU COUNTY
Vito Cardo Jr
Georgetown University '67
81 Nassau Boulevard
Garden City, NY11530
November 16, 2020

QUEENS COUNTY
Alan Benjamin
University of Pennsylvania '45
10 Eastgate Drive
Boynton Beach, FL 33436
April 1, 2020

Richard Boguslaw
Washington University '73
14 Heather Ridge Lane
Montvale, NJ 07645
July 29, 2020

Thomas Gorman
University at Buffalo '92
21 Cliff Drive
Bayville, NY 11709
October 6, 2020

Burton Wasserman
New York University '57
3438 Bertha Drive
Baldwin, NY 11510
April 15, 2020

SUFFOLK COUNTY
Herbert Jacklyn
Columbia University '50
10951 Johnson Boulevard, #707
Seminole, FL 33772
March 8, 2020

John Pierce
University at Buffalo '67
1070 Locust Avenue
Bohemia, NY 11716
July 9, 2020

Alfred Sforza
New York University '65
44 W. Neck Road
Huntington, NY11743
March 31, 2020

Lawrence Weinberg
New York University '52
68 Sutton Place
Islandia, NY 11749
December 31, 2020

Lewis Zagon
Temple University '66
9 Gilford Court
Melville, NY 11747
July 9, 2020

Skeletal Changes in Non-invasive Orthodontic Treatment in Growing Patients

Daniel A. Kuncio, D.D.S.

ABSTRACT

General and pediatric dentists often refer teenage patients to the orthodontist around the time of exfoliation of the last remaining primary tooth in the dentition. Unfortunately, many times, that timing tends to be past the peak of growth of the patient, which hinders the orthodontist's ability to successfully treat the occlusion without using more invasive supplemental procedures, such as extraction of teeth, placement of mini-implants or surgery. This case report describes three situations where the referral to the orthodontist was made well in advance of tooth exfoliation and the patient's growth was able to be manipulated using non-invasive orthodontic techniques.

The American Association of Orthodontists (AAO) recommends referral to the orthodontist by age 7.[1] Many parents and dentists disregard this guideline, probably feeling it unwarranted with so many primary teeth in the mouth that do not need to be aligned since they will soon exfoliate. In a high percentage of cases they are correct. The orthodontist will take a panoramic radiograph to ensure a proper eruption pathway of the remaining unerupted permanent teeth and recommend a follow-up visit in one to two years.[2] However, in those instances where the orthodontist can use the patient's growth to their advantage, those months can be invaluable.

Peak growth in children usually occurs in the 10-to-12-age range in girls and 12-to-14-age range in boys. It can be timed fairly accurately using the cervical vertebral maturation (CVM) index from a standard 2-D cephalometric radiograph taken at the orthodontic office.[2,3] The orthodontist will use this information as a guide when certain appliances, particularly mandibular functional appliances, should be inserted. Certain skeletal malocclusions, such as a negative overjet from a hypoplastic maxilla, should be treated well before peak growth.[2]

Described here are three malocclusions that were treated using only fixed appliances (braces) and other non-invasive orthodontic appliances, all of which were removed upon completion of the case. It is hoped that this information will assist general and pediatric dentists diagnose those skeletal conditions when an early referral to an orthodontist should be made.

Skeletal Class II from Retruded Mandible

Many skeletal Class II patients can be easily spotted by dentists and parents presenting as a large overjet ("buck teeth" or "weak chin" in layman's terms). Sometimes, however, as in this case, retruded maxillary incisors can mask a retruded mandible. Only when the maxillary incisors are uprighted into a normal position is the extent of the underlying skeletal issue uncovered (Figure 1).

In such situations, my favorite appliance is the Herbst (Figure 2). It consists of a cemented palatal expander, with telescoping rods connected to a cantilever off of the mandibular first molars to hold the lower jaw forward at all times. The Herbst has been well studied for decades and has been shown to increase mandibular length, protract the mandibular basal bone, distalize maxillary posterior teeth, remodel the condylar area and increase pharyngeal airway width.[4,5,6] The classic criticism of the Herbst, as well as other functional appliances, has been that long-term studies have shown that, on average, the length of the mandible (measured from con-

dylion to pogonion) was not affected by the appliance. However, these studies did not consider the other benefits of the Herbst appliance, including mesial movement of the mandibular basal bone and distalization of the maxillary dentition.[5]

My philosophy is to always give the patient a chance to attempt to fix the occlusion non-invasively. Other techniques, such as extraction of permanent teeth to mask the skeletal problem, placement of mini-implants for anchorage to move entire dentitions, and corticotomy and orthognathic surgical procedures are always available later should the Herbst appliance fail, but there is little chance a functional appliance will succeed once the patient is well past peak growth.[5] There are many functional appliances used by orthodontists, with differing levels of clinical research performed on them, so please discuss this with your referring orthodontist.

In this case, once the maxillary teeth were uprighted, the Herbst was inserted and left in the mouth for a year and a half. The appliance was then removed, and standard metal brackets and bands were bonded on the remaining teeth. Bite turbos (ramps) were placed on the lingual of the maxillary central incisors to allow for eruption of the posterior teeth to increase the lower vertical facial height. Final records and superimposition show good downward and forward growth of the mandible, an increase in the mandibular plane angle and maintenance of the incisor angulation after initial uprighting, significantly increasing the incisor show upon smile.

The final CBCT scan shows the condyles normally positioned in the glenoid fossa and ample cross-sectional airway (Figure 3). Although there is as yet no published data on the effects of the Herbst appliance on sleep apnea patients, this is an avenue of treatment our office is pursuing. Standard braces and elastic wear in cases like this tend to procline the mandibular dentition, masking the overjet, but often leaving the patient with a retruded chin and unstable mandibular anterior teeth that have less bone and gingival support.[7,8]

Skeletal Class III from Hypoplastic Maxilla

Due to the late growth of the mandible, many skeletal Class III cases will evolve into surgical cases no matter what the orthodontist does. But using a protraction facemask off of a palatal expander is a powerful appliance has been shown to greatly reduce the need for surgery later.[9,10,11] Because the orthodontist is distracting the maxillary sutures in order to bring the maxilla forward, and the younger the patient the more malleable the sutures,[2] the general rule we use is to get these patients into the appliance as soon as they can tolerate it. The expander is cemented to the maxillary first molars or in some cases, primary second molars, the maxilla is expanded as much as is required for transverse correction, and the facemask is attached to hooks coming off of the expander with elastics (Figure 4). It needs to be worn 10 to 12 hours a day to be effective, so the patient can wear it while sleeping and at home only.[2,9]

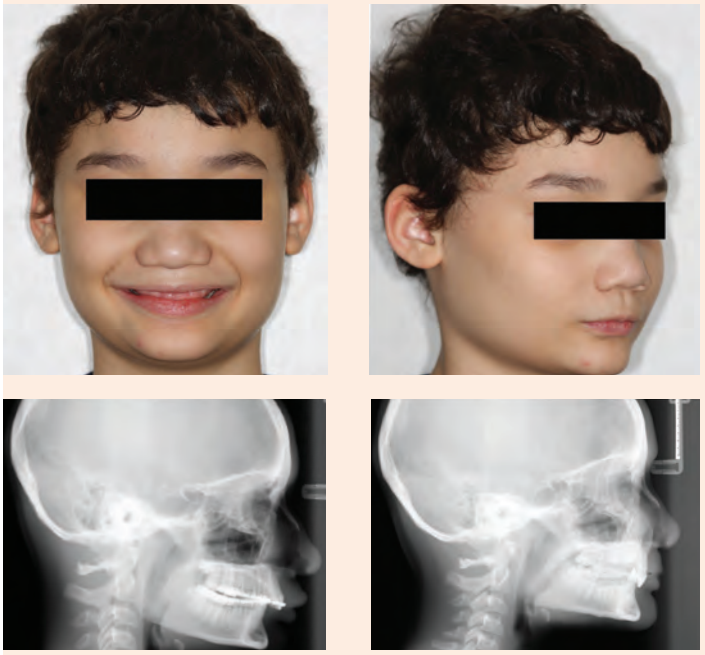


Figure 1. Pre-treatment records and pre-Herbst cephalometric radiograph for Case One.

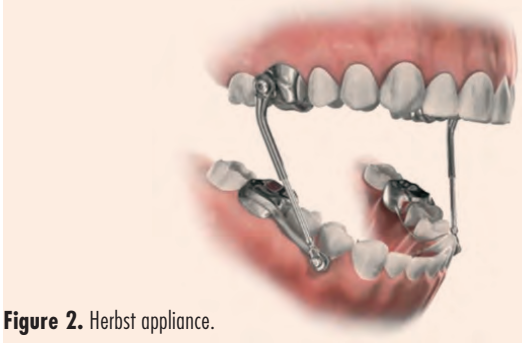


Figure 2. Herbst appliance.

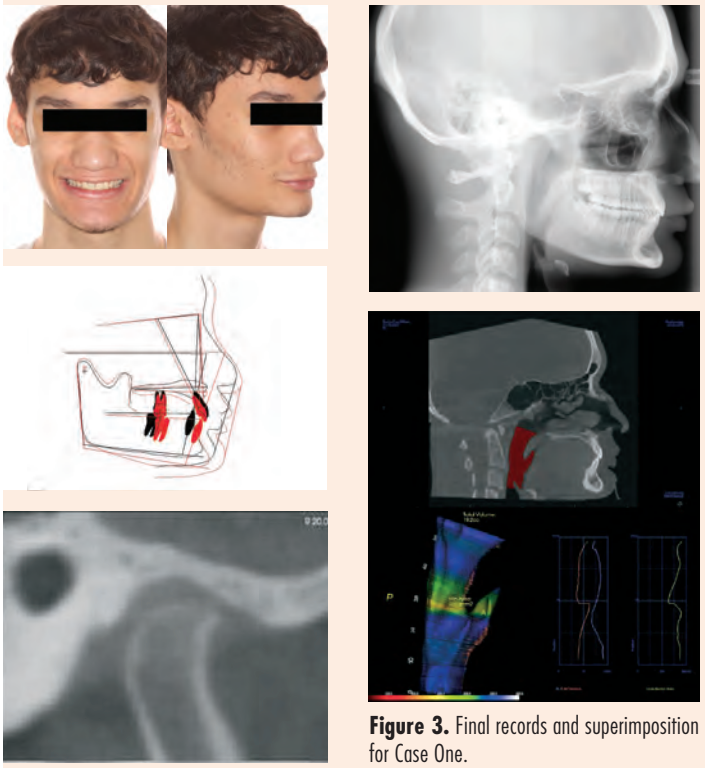


Figure 3. Final records and superimposition for Case One.

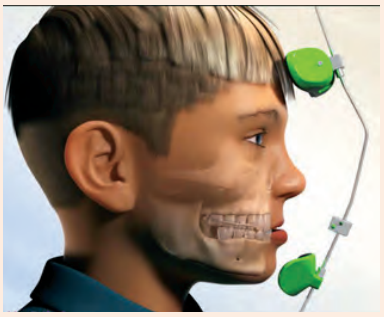
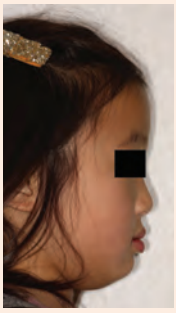


Figure 4. Protraction facemask appliance (Dolphin Imaging®).



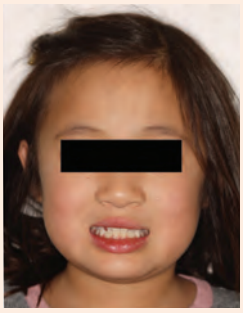
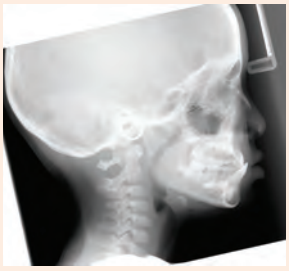
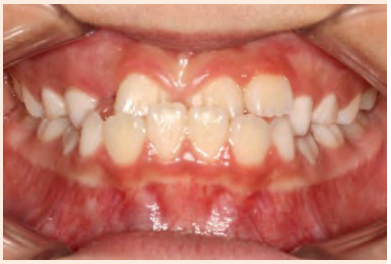


Figure 5. Pre-treatment records for Case Two.



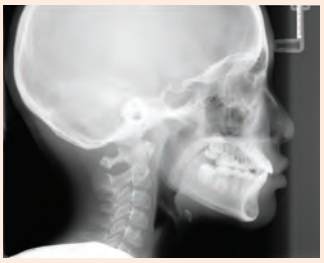


This patient presented with an obvious hypoplastic maxilla, as evidenced by the negative overjet and lack of malar support in the midface (Figure 5). She wore her facemask well for one year, and was then bonded into full fixed appliances and Class III elastics. The superimposition shows the dramatic forward movement of the maxilla (which needed to keep up with the natural mandibular growth) and relatively subtle changes to the incisor angulation (Figure 6). There are exceptions, but as a general guideline in orthodontics, minimal anterior-posterior movement of the mandibular incisors is preferred for case stability.[2] This patient was almost certainly destined for orthognathic surgery had the dentist not referred her to our practice at age 6 and a half.

Open Bite from Vertical Maxillary Excess

These cases are very challenging for the orthodontist, especially when the parent declines the use of mini-implants to intrude maxillary posterior teeth. But if the dentist is keen to recognize the open bite early enough, a classic high-pull headgear can many times do the job (Figure 7).[12,13] Vertical skeletal malformation cases often require different treatment plans from open bites arising from a finger sucking or tongue trust habit, but regardless of the etiology, these patients should be referred to the orthodontist as soon as it is evident that the permanent anterior teeth are almost fully erupted out of the gingival and there is no overbite.[14]

This patient presented a little older than we would have liked (CVM is IV, indicating peak growth was at least two years prior).[3] But, fortunately, there was enough growth left to treat the case nonsurgically (Figure 8). She had a posterior crossbite that needed to be corrected with a palatal expander first, followed by the high-



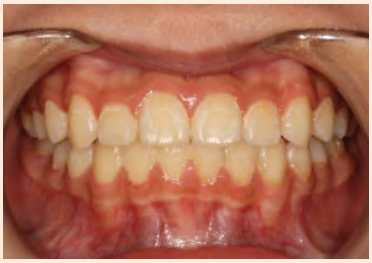


Figure 6. Final records and superimposition for Case Two.

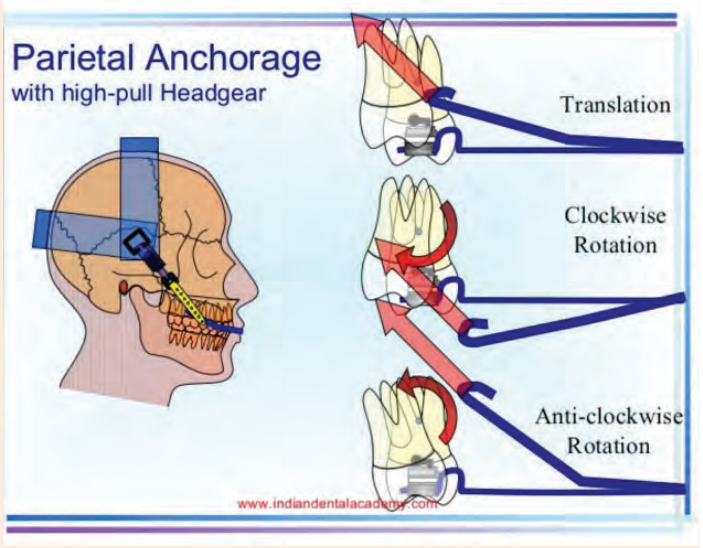


Figure 7. High-pull headgear (www.indiandentalacademy.com).

pull headgear to be worn 10 to 12 hours a day. The patient was motivated by the fear of surgery and wore the appliance well for over a year, followed by full fixed appliances and vertical elastics.

The superimposition shows about 1 mm of maxillary posterior intrusion, which is all it takes to close the wedge on a 3 mm anterior open bite (Figure 9). Some uprighting and extrusion of the anterior teeth are also evident. We saw this patient recently after several years in retention and the overbite is holding stable. Recently, we have been treating many cases requiring posterior intrusion using Invisalign, but that would have been difficult in this case given the skeletal posterior crossbite, as well as the required extrusion of anterior teeth to improve the incisor shown.[15]

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Figure 8. Pre-treatment records for Case Three.

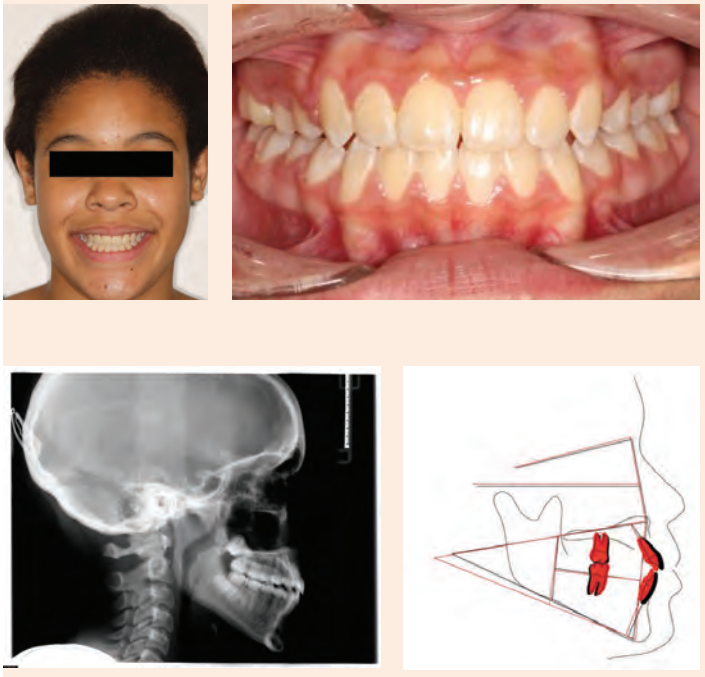

Figure 9. Final records and superimposition for Case Three.

Read, Learn and Earn
CE CONTINUING EDUCATION

Treating Severely Worn Dentition in a Medically Compromised Patient

A Clinical Report

Dana Marzocco, D.M.D.; Steven Pigliacelli, CDT, MDT; Kenneth S. Kurtz, D.D.S.

ABSTRACT

A patient who displays a severely worn dentition seeking restorative therapy can present a challenge to the dentist. When the patient has a complex medical status and dental surgery is not possible, the dentist must rely upon traditional procedures.

A patient with severely worn dentition seeking restorative therapy can present great difficulty to the restorative dentist. In an era that provides dental therapeutics with a combination of implant therapy and outstanding esthetics, practitioners have the ability to fabricate highly advanced restorations. When a patient presents with a complex medical history that includes poly-pharmacy, the application of advanced technology can be limited, due to confounders of medical limitations to treatment.

There exists a subset of patients presenting with challenging and special requirements who cannot be treated with dental implants. They may not be candidates for procedures involving digital dentistry. There is a widening gap between practitioners who offer "cosmetic and digital dentistry" and those who are willing to utilize traditional skills. The practitioner must still, sometimes, rely upon traditional procedures and innovative thinking to treat what can be referred to as "the lost patient."

Clinical Report

Patient Medical History

A 76-year-old Caucasian male presented to a private prosthodontics practice for consultation. The patient's chief complaint was "My grandchild said my teeth look like a jack-o-lantern. I am embarrassed, and I want to fix my teeth" (Figure 1).

On initial examination, it was noted that the patient was being treated by multiple medical disciplines: cardiology, electrophysiology, proctology, gastroenterology, dermatology, orthopedics, urology, neurology, otolaryngology and ophthalmology.

A review of the patient's medical history included the following: aortic valve replacement, triple bypass surgery, placement of a pacemaker, a history of two heart attacks, heart murmur, high blood pressure, blood transfusions, arthritis and bronchitis. He presented with a regimen of 23 prescribed daily medications and vitamins, including nitroglycerin, furosemide, metolazone, warfarin sodium, ferrous sulfate, magnesium-oxide, potassium, benzonatate, lipitor, alprazolam, amlodipine, metoprolol, alprazolam, amoxicillin, cephalexin, glucosamine, selenium, vitamin C, multivitamin, famotidine, colace, B12 and folic acid. The patient reported no known drug or food allergies and denied any history of drug use, smoking or a sugary diet. He reported alcoholic intake on a social basis only.

The most complicating factor was non-medical clearance for any dental surgical procedures on an indefinite basis by his cardiology group.

The cardiology team was consulted with regard to management of the patient. They informed the surgical provider that unless an oral abscess or existing infection was present, extractions and dental surgery should be avoided. Extraction, crown lengthening and dental implants were contraindicated indefinitely. A maximum of two carpules (3.6 cc) of mepivacaine would be permitted at one sitting. The patient was also instructed to take 2.0 g of amoxicillin one hour prior to any dental procedure.

Clinical Examination

A clinical exam revealed Kennedy Class III partial edentulism, loss of vertical dimension of occlusion, uneven smile line, multiple tooth fractures, attrition and severely worn dentition. The patient displayed an uneven occlusal plane both anterio-posteriorly and medio-laterally (Figures 2, 3).

The remaining teeth were assessed for decay, mobility and periodontal disease. The periodontal examination showed no pocket depths over 3 mm and no mobile teeth. Radiographs displayed good bony support for the remaining teeth (Figure 4).

The patient displayed a low smile line, no facial asymmetry and good lip competency. There were no symptoms of TMJ disorder. He denied any history of bruxism or clenching. The patient was diagnosed with Class IV partial edentulism, according to the American College of Prosthodontic's diagnostic index classification.[1]

The patient reported a history of having removable partial dentures and an inability to wear them. His prostheses were adjusted, but "they never fit properly."

The patient did not want to wear complete dentures, and there were not enough viable teeth present for predictable fixed prosthodontic treatment. Root canal therapy with crown extension surgery was contraindicated, as per the patient's physician request.

Traditional treatment with combination fixed-removable prostheses was discussed with the patient. Risks of treatment were reviewed, and the patient consented to begin treatment.

Treatment

Interim Restoration

Preliminary impressions were made with irreversible hydrocolloid *(Jeltrate Plus Alginate; Dentsply, York, PA)* and cast in Type IV dental stone. Custom trays were fabricated with Triad material *(Dentsply, York, PA)*. Green stick compound *(Kerr, USA)* was used to adapt borders. A secondary impression was made using a 50:50 mixture of light and heavy-bodied polyether material *(Impregum; 3M, Germany)* and cast in Type IV dental stone. Occlusal rims were fabricated. A facebow transfer was accomplished with a Hanau facebow *(Hanau, Teledyne, Waterpik)* and mounted on a Hanau H2 semi-adjustable articulator *(Teledyne, Waterpik)*. Interocclusal

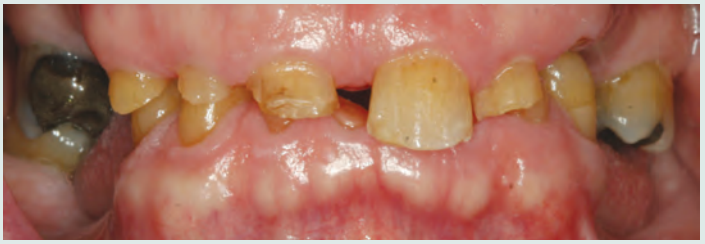

Figure 1. Pretreatment; intraoral view.

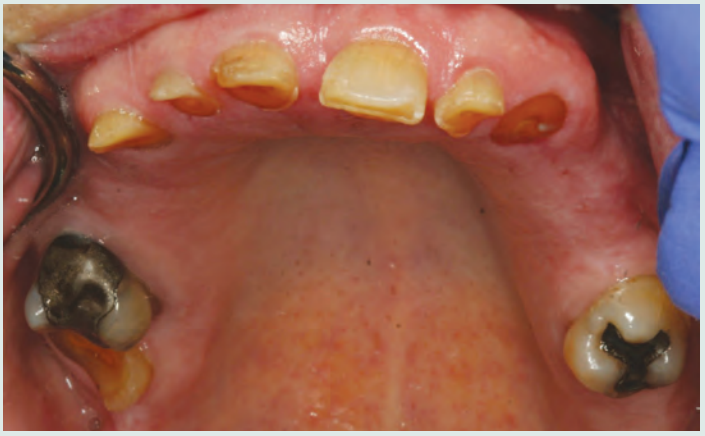

Figure 2. Pretreatment view of maxillary arch.

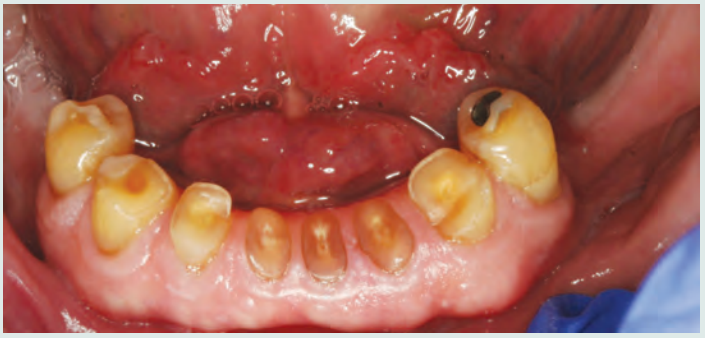

Figure 3. Pretreatment view of mandibular arch.

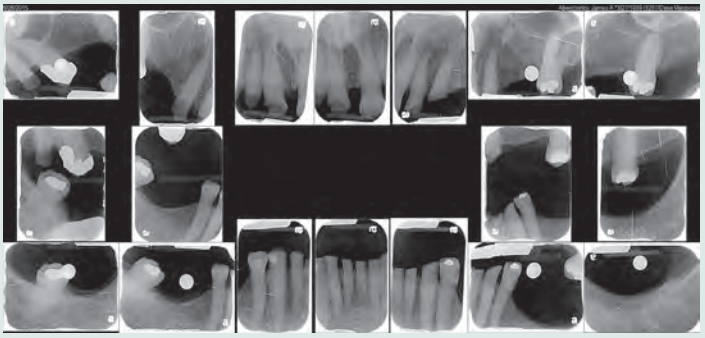

Figure 4. Preoperative radiographs.

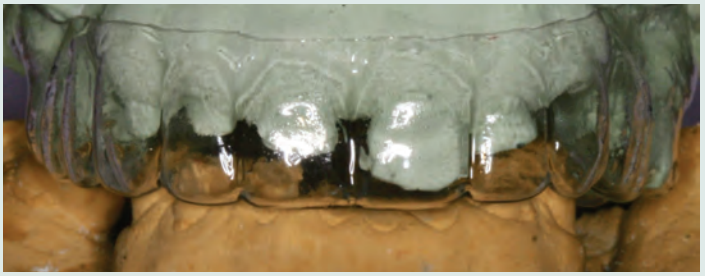

Figure 5. Matrix of artificial tooth arrangement.

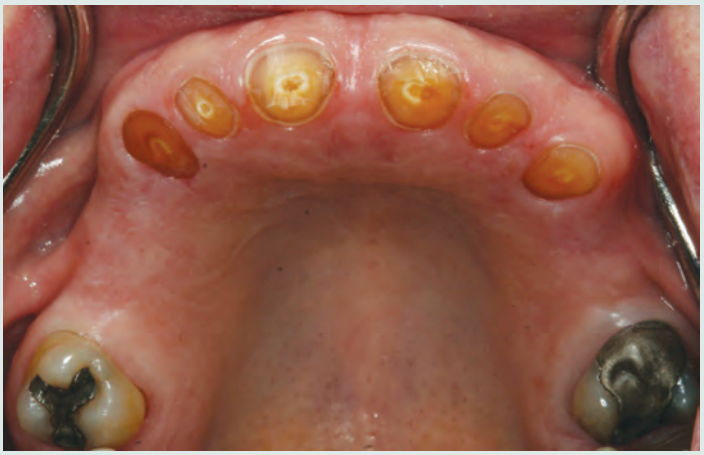

Figure 6. View of decoronated maxillary anterior teeth.

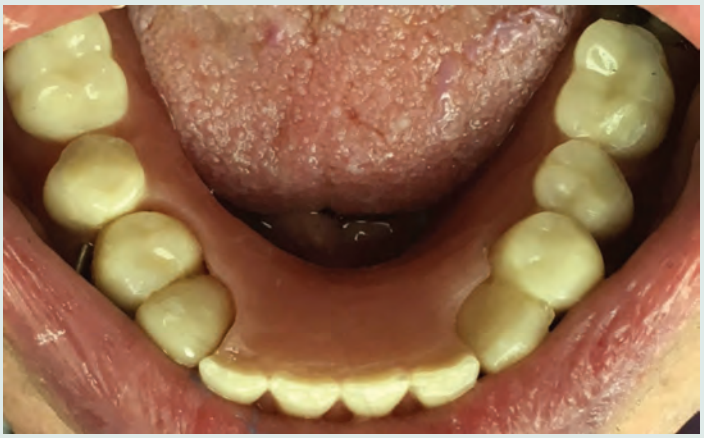

Figure 7. Mandibular provisionals and interim prosthesis.

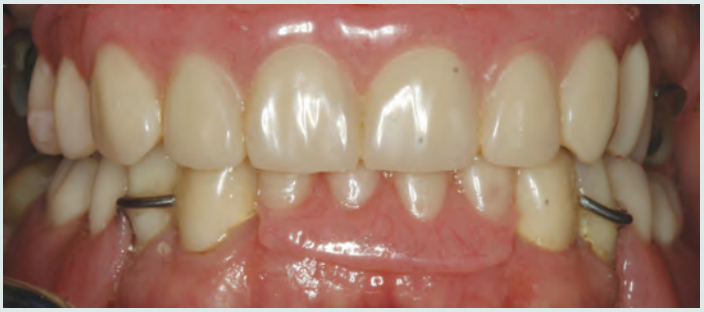

Figure 8. Maxillary and mandibular interim restorations.

Figure 9. Maxillary chromium cobalt framework.

records were accomplished with poly vinylsiloxane *(Blu-Mousse; Dentsply)* at an increased vertical dimension of occlusion. The master casts were articulated.

Analysis of the articulated casts revealed insufficient interocclusal space for restorative at the patient's current vertical dimension of occlusion. The articulator pin was increased 3 mm to facilitate placement of teeth for a trial artificial tooth arrangement. The final artificial tooth arrangement was completed, and duplicated with irreversible hydrocolloid. A vacuform was fabricated, and a try-in was performed to verify speaking space, esthetics, facial-lingual position and lip competency (Figure 5). The patient was pleased with the esthetics of the proposed replacement dentition. The use of a diagnostic matrix is useful in helping to assess the purposed esthetics among other parameters in a difficult clinical situation.[2,3]

Teeth #2, #15, #21, #22, #27 and #28 were retained on the casts, and model surgery was performed by "decoronating" the remaining teeth on the cast. Maxillary and mandibular interim removable acrylic partial dentures were processed and finished, along with acrylic provisionals for teeth #21-#22 and #27-#28.

Teeth #6-#11 and #23-#26 were decoronated intraorally (Figure 6). Teeth #21, #22, #27, #28 were prepared for full-coverage provisionals (Figure 7). Interim maxillary and mandibular removable partial dentures were delivered, along with splinted provisional crowns on teeth #21-#22 and #27-#28. (Figure 8). Although the pulp chambers and canals of the treated teeth (#6-#11 and #23-#26) appeared to be calcified, the patient was informed of the possibility of irreversible pulpitis. If such an event occurred, he would be referred to the endodontist for evaluation and treatment.

Due to restrictions with local anesthesia, arches were treated at separate appointments. At the end of each appointment, occlusion was checked and adjusted so that the patient had bilateral contacts. Once both arches were restored with interim restorations, occlusion was checked and bilateral contacts were present. The patient was given instructions for oral homecare and maintenance of his removable prostheses.

The patient was checked at 24 hours, 1 week and then every 2 weeks. Minor adjustments to the prostheses were made. Bilateral occlusal contact was present. The patient remained in the interim prosthesis and provisionals at the increased vertical dimension of occlusion for three months. During this period, the patient was monitored to determine if the restored vertical dimension would be tolerated. Patient was monitored for ability to function, chew and phonate properly. This interim stage was extremely important for the patient's psychological, social and emotional comfort.

After three months, the patient reported success with speech, function and esthetics. The vital decoronated teeth did not dis-

play any symptoms of pulpitis. The decision was made, with the patient, to proceed with definitive prostheses.

Definitive Restoration

Rest seats were prepared on the mesial and distal surfaces of teeth #2 and #15. Custom trays were fabricated with Triad material, border molded; and a secondary impression was made with the same polyether impression material 50:50 mix for both maxillary and mandibular arches. The interocclusal registration was made at the patient's existing vertical dimension (of his interim prostheses). Survey crowns for teeth #21, # 22, #27 and #28 were evaluated intraorally, and verified using the maxillary interim prosthesis as a guide. After the survey crowns were finished and cemented, a new definitive cast of the mandibular arch was made.

Prostheses Design

A cast chromium cobalt removable partial denture framework was fabricated for both maxillary and mandibular arches (Figures 9, 10). Rounded loupes were utilized in the maxillary frame to aid in acrylic retention (Figure 9), and a large open loupe frame design was utilized on the mandibular frame (Figure 10). Rest seats were cast on mesial and distal surfaces of teeth #2 and #15; guide planes were utilized for retention. The "double abutment" rest seats created a rotational path for insertion and removal. The maxillary anterior framework did not extend past the incisive papilla. As #6-#11 roots were to be retained, a buccal flange would provide excessive lip support, so the final prosthesis was flangeless from teeth #6-#11.[4,5]

Figure 10. Mandibular chromium cobalt framework.

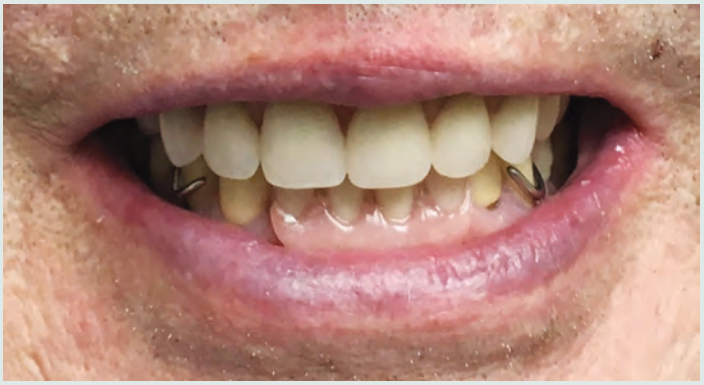

Figure 11. Definitive maxillary and mandibular prostheses.

Mandibular rests were placed in the appropriate surfaces of the survey crowns; mesh framework was utilized for acrylic retention. Frameworks were evaluated for approximate fit and retention. An interocclusal record was made to verify articulated casts.

An artificial tooth arrangement was tried in. Interocclusal distance, occlusion and esthetics were evaluated and approval obtained from the patient. Prostheses were delivered at the following appointment (Figure 11).

The patient was given follow-up appointments at 24 hours and one-week intervals. He was instructed to return sooner if a problem should arise. Minor adjustments were made at visits. Instructions for oral homecare and maintenance of prostheses were reviewed. The patient was placed on three-month hygiene intervals. The patient has been followed for 24 months with no incidence.

The patient was instructed to return to the practice sooner if an emergency should arise prior to the hygiene appointments.

Discussion

The etiology of tooth wear is multifactorial and often of unknown origin.[6] Causes of tooth surface loss can be chemical (erosion), mechanical (attrition and abrasion), abfraction or a combination of factors.[7,8,10] Patients of any age group are susceptible to tooth wear. Unfortunately, a group of older patients with chronic diseases may be utilizing multiple medications. Patients with complex medical ailments may be more vulnerable to tooth wear and tooth loss. With increasing complexities, such as demonstrated with this patient, advanced treatment options can be limited.

With appropriate evaluation, the prosthodontist can be innovative in planning this type of combination therapy to fulfill the patient's treatment needs.

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Are Advanced Personal Protective Devices a Worthwhile Investment?

A Review of the Current Literature

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ABSTRACT

Many practitioners are being sold personal protective devices that are said to reduce the transmission of COVID-19, thereby protecting our patients, our staff and ourselves. As there is much uncertainty about making these purchases, the authors provide a review of the literature on these devices in an aim to inform the dental practitioner. While UV lights have been proven effective against RNA viruses, such as coronavirus variants, the upfront cost can be great and their environmental impact is not fully researched. Powered air-purifying respirators (PAPRs) can be beneficial for those preforming invasive procedures with aerosol-generating potential, such as high-speed drilling by dentists or ultrasonic scaling by hygienists.

SARS-CoV-2 has been demonstrated to remain aerosolized for up to three hours after a procedure and may persist on plastics and stainless steel for up to 72 hours.[1,2] While there is a wide body of evidence showing that various dental procedures create bio-aerosols, it is unclear whether dental bio-aerosols are more or less problematic than aerosols generated in certain hospital procedures, such as intubation. Uncertainty stems from the fact that there have been far fewer studies on the composition of dental bio-aerosols in comparison to hospital bio-aerosols, but they are believed to be comparable.[3] Several studies have shown the existence of viral particles in bio-aerosols generated via certain hospital procedures; however, no attempt to culture viral particles from dental bio-aerosols has been made.[4]

Despite the lack of direct evidence supporting the existence of culturable viruses in dental bio-aerosols, several studies have shown the existence of both bacteria and fungi in aerosols generated via certain dental procedures. And there is case-report evidence of a dental team member contracting HSV-1 from treatment of an acutely ill patient.[5]

Samaranayake et al. published a retrospective review in 2004 after the peak of the SARS outbreak. It found that the SARS outbreak had a large impact on providers, with some countries reporting that 25% to 33% of those infected were healthcare workers.[6] Moreover, coronavirus particles have been found intraorally, both in saliva and on the dorsum of the tongue, suggesting spread via aerosols generated by breathing and oral droplets.[7-10] These findings illustrate the biological plausibility of viral spread via dental bio-aerosols, but further research is needed to confirm and quantify the viral load of dental bio-aerosols. Nevertheless, it stands to reason that the dental community is a relatively high-risk population for exposure to COVID-19.

The purpose of this paper is to inform the practitioner of the different devices being marketed during this pandemic so practitioners can make an informed decision as to which, if any, may be necessary in their practice.

Review of the Literature

No directly linked cases of COVID-19 contraction in a dental setting have been identified to date. The plausibility for viral spread is high due to the large amounts of aerosols generated in the dental office.[11] Extra precautions to minimize COVID-19 spread might be warranted. Some of the enhanced PPE may include negative-pressure environments, advanced HEPA filters, UV lights and increased air exchange rates of at least 12 cycles per hour.[11-13] Converting an existing room to one capable of accommodating negative-pressure isolation has been estimated to cost upwards of $120,000, with an operational life of at least 20 years once converted.[14]

High-efficiency particulate air (HEPA) filters are frequently recommended for negative-pressure isolation in cases of airborne bacterial infections, like *M. tuberculosis*, which is 2.5 microns to 4 microns in length and 0.1 microns to 0.2 microns in width.[15]

Figure 1. Portable UV system to disinfect operatory between patients was purchased for about $300. Providers run this model and two units for 15 minutes between patients. These are non-ozone-forming models, so patients can be seated as soon as it is finished.

Photo courtesy Michele Bergen, DMD, MD, FACS, Infinity Oral Surgery.

TABLE 1

Types of advanced PPE being marketed to private dentists and dental schools, with remarks on potential pros and cons.

Conversion of an operatory to support negative pressure	Pros: Rapid air exchange rates that move viral particles away from people's faces and toward the ground; vastly reduced potential for pathogenic spread outside of the negative-pressure room. Cons: Immense upfront cost; not all dental procedures are aerosol generating to the same degree and may not require negative pressure.
HEPA filters	Pros: Wide body of literature surrounding their efficacy in removal of large pathogens, such as *M. tuberculosis*, from the air. frequent combination of HEPA filtration with negative-pressure rooms, UV air sanitization devices, and PAPRs. Cons: Filter pore size may be too large to prevent the spread of the coronavirus.
ULPA filters	Pros: Pore size is smaller than the diameter of the virus responsible for the novel coronavirus, implying prevention of its passage through the filter. Cons: Not as wide of a backing in the literature as traditional HEPA filters and may be more difficult to find filters that are compatible with negative-pressure operatory set-ups, air sanitization devices, or PAPRs.
UV sanitization devices	Pros: Various options for UV sanitization, such as UV sanitization towers that clean surfaces and the air, as well as enclosed UV air sanitization devices that can clean the air all day long. Cons: Cost; uncertain backing in the literature with respect to the prevention of COVID-19 spread; UV sanitization towers require that rooms be empty during their use.
N95 masks	Pros: Wide body of literature supporting their use for COVID-19 protection afforded to the wearer. Cons: Fit-testing; shaving requirements; breathing difficulty; mask shortages during acute outbreaks.
PAPRs	Pros: No fit-testing; can have facial hair; easier to breathe; better filtration than N95 masks; reusable. Cons: Cost; highly specific donning and doffing training protocols; potential for pathogenic spread during cleaning; difficulty in communication between wearers and patients.
Preprocedural mouthrinse	Pros: Helpful in the reduction of salivary viral loads when 1% hydrogen peroxide or 0.2% povidone is used. Cons: Chlorhexidine may not be effective in killing the coronavirus responsible for COVID-19.[37]
Rubber dam isolation	Pros: Minimize the spread of aerosols generated by dental procedures, especially those of particular high risk, such as high-speed drilling with water or ultrasonic scaling. Cons: Not all dental procedures allow for rubber dam isolation.
Extraoral aerosol suction	Pros: Potential for the reduction of bacterial particles from dental aerosols. Cons: Overwhelming lack of evidence surrounding their efficacy; significant upfront cost.

Negative-pressure rooms force clean air into the operatory while continuously drawing out air from the floor. The air that is removed is filtered before returning to circulation. Negative-pressure rooms are useful in that they provide many air exchanges per hour. They also force the air to the floor, thereby taking any viral particles away from peoples' faces and reducing risk of transmission.

However, it may not be enough to rely upon common HEPA filters, which filter particles as small as 0.3 microns, because the coronavirus is 0.125 microns.[16] In order for the HEPA filters to be effective against this disease, the filters must have ultra-low penetrating air (ULPA) efficiency ratings. HEPA ULPA filters are able to filter particles as small as 0.1 microns.[16] Advanced HEPA filters are 99.9% effective at removing SARS-CoV aerosols when they have at least 0.023 micrometer pore sizes.[17] The filters required for these negative-pressure setups are quite expensive, costing upwards of $600 for the filter and associated labor with installation. Additionally, it is anticipated that the filters need to be replaced biannually.[14] As an added precaution, some offices have also installed UV lights that work with their HEPA filters to clean the air as it circulates.

UV-C spectrum, in the range of 10 0nm to 280 nm, has the highest germicidal efficiency.[18,19] Gates determined that peak bactericidal effectiveness of UV-C light occurs at 265 nm, which suggested that nucleic acids may be the target of UV-C light.[20-22] Gates's suggestion was later corroborated by the work of Hollaender and Oliphant, who proposed that bacterial sensitivity to 265 nm electromagnetic radiation was due to effects on deoxyribonucleic acid (DNA).[23] Later, Beukers and Berends came to the realization that thymine nucleic acid residues form dimers when exposed to UV-C radiation, ultimately accounting for "a large part of the effects of ultraviolet radiation on biological systems."[24,25]

Since these early findings were made known, it has been widely reported that UV-C light is effective in reducing airborne bacteria and DNA viruses, such as influenza. However, the coronavirus is an RNA virus. Therefore, questions pertaining to the efficacy of UV-C in the reduction of airborne RNA viruses should be entertained. Whole-room UV-C disinfection systems are efficacious in reducing RNA viruses, such as Middle Eastern Respiratory Syndrome-coronavirus (MERS-CoV).[26] Multiple-emitter continuous UV-C disinfection systems were >99.999% effective against MHV-A59, a mouse analog of MERS-CoV and SARS-CoV-01, in a 10-minute exposure.[26]

The environmental implications of widespread UV-C use have not been addressed, and the practicality and safety of UV-C irradiation is of great concern. Dentists do not want to purchase devices that can ultimately put their staff and patients at additional risks. While UV-C is the most biologically active radiation, UV-C wavelengths are mostly absorbed by dead skin, while UV-B and UV-A penetrate to deeper levels of the body, causing more damage.[27,28] Overexposure to 254 nm radiation can cause sunburn and damage the eyes. However, the health risks are considered to be largely negligible when compared to UV exposures of solar etiology.[27]

Nevertheless, it is still important to prioritize safety with UV emitting devices. It is perhaps easier to ensure safety for certain UV-C devices than for others. For example, portable UV-C light towers used by some hospitals require that the device be placed in an empty room that has already been manually disinfected. The time required for UV-C sanitation of surfaces in these rooms can vary from 15 to 20 minutes, which is, of course, in addition to the time required for manual disinfection.[29] The cost of hospital-grade UV-C towers employed for healthcare-associated infection (HAI) reduction can be prohibitive for a private dental practitioner, ranging from $80,000 to $100,000 for the device, and several thousand more for warranties, maintenance and staff operation.[29]

In light of the fiscal barrier to entry associated with hospital-grade UV sanitization towers, as well as the time lost operating them, some companies are creating devices that can be operated 24 hours a day with people in the room. For example, the VidaShield UV24 Overhead Air Purification System from Medical Illumination operates by vacuuming ambient air in the room, passing that air through an enclosed UV-C compartment for sanitization and, finally, blowing the sanitized air out the other side to be re-circulated through the room. The device may also prove to be an attractive option for practitioners because it attaches to ceilings behind standard fluorescent ceiling lights, out of view of patients and dental staff. The device is far less expensive than hospital-grade UV-C sanitization towers, at $1,500 to $2,000 per unit, and has been shown to be efficacious in the removal of bacteria, fungi and viruses—including SARS-CoV—from the air.[30]

Despite these findings, practitioners must remember that the VidaShield system operates on the removal of airborne pathogens, with no reported effect on surface-bound pathogens. This implies that the device be used in addition to manual sanitization of surfaces. Practically speaking, air filtering UV-C sanitization devices still seem to be a better option than the hospital-grade UV-C sanitization towers. Still though, some companies are beginning to produce cheaper alternatives to the large hospital-grade UV-C sanitization towers, and are marketing them to healthcare practitioners who provide care in smaller, private office settings. With the implications of the current COVID-19 crisis, the upfront financial costs associated with air sanitation devices having UV-C capabilities may be worth it (Figure 1).

The PPE Conundrum

There is currently great controversy over proper PPE guidelines, especially because so much about the SARS-CoV is unknown. Powered air-purifying respirators (PAPRs) are better than even the best fitting N95 masks. While it is very difficult to breathe through advanced filters, the PAPRs rely on battery power to maintain airflow through very fine filter systems. These filters

can be much more efficacious than N95 masks, as the air that is pulled through them is generated by a machine.[31] Notably, it is the responsibility of the employer to assess the necessary filtration precautions based on the amount of airborne contaminant, which may pose a medicolegal challenge for private practitioners thinking about purchasing PAPRs for their practices.[32]

HEPA filters are commonly used in a PAPR for airborne precautions because they filter at least 99.97% of particles 0.3 microns in diameter and are oil proof. As noted above, the coronavirus responsible for COVID-19 is 0.125 microns in size.[16] Therefore, aerosol-generating procedures of the head and neck region may require filters with ULPA efficiency ratings. Nevertheless, even if HEPA filters are used, it is implied that PAPRs have a greater level of protection than N95 masks.[31,33]

PAPRs are designed with full facial protection, similar to a helmet, thereby protecting the eyes as well. PAPRs do not require fit-testing and allow for use with facial hair.[31] Conversely, PAPRs are battery operated, noisy, associated with eye-dryness and are "the most expensive PPE against respiratory infections."[34] Additionally, the PAPRs require specific training protocols for donning and doffing to mitigate the risk of self-contamination. PAPRs are also much more cumbersome, which may hinder the practitioner's ability to provide care, as most people will be unfamiliar with seeing and operating through them.

PAPRs have been recommended for use among healthcare workers handling live, airborne viruses.[34,35] The same PAPR may be used without removal when dealing with patients having the same diagnosis to avoid wasting PPE.[34] PAPRs are also reusable, which may make them seem like good investments for private practitioners. However, there is a risk associated with reprocessing reusable PAPRs, so there are medicolegal considerations. Therefore, the appropriate use of more cost-effective post-COVID protections, such as social distancing, telehealth, and rapid viral and antibody testing, may render PAPRs unnecessary in a private dental practice setting. Currently, the Centers for Disease Control and Prevention (CDC) maintains that N95s may be preferable to PAPRs because they are disposable.[34]

Discussion

Private dentists practiced without gloves, gowns and surgical masks up until the acquired immune deficiency syndrome (AIDS) outbreak in the early 1980s. The outbreak taught clinicians valuable lessons about the importance and efficacy of PPE. Despite considerable initial pushback, the adoption of basic PPE has been crucial to

the protection of dentists, their staff and their patients.[36] Unfortunately, health crises like the AIDS outbreak are often responsible for accelerating advancements to standard PPE protocols. This has been illustrated via severe acute respiratory syndrome-coronavirus (SARS-CoV), MERS-CoV, novel influenza strains like H1N1, the Ebola virus and, now, the COVID-19 pandemic.

To protect individuals from COVID-19 infections, the National Institute for Occupational Safety and Health (NIOSH) has been consistently recommending increased personal protective equipment. While a large shortage of N95 masks exists across the world, they are effective.[36] N95 masks filter 95% of aerosol particles <5 microns in diameter. However, there have been numerous challenges associated with N95 respirators. First, the wearer needs to undergo fit-testing to ensure a proper seal against the skin. This also necessitates that the wearer maintains a clean-shaven face. Additionally, it is not enough to perform fit-testing just once, as the mask may warp. Regular fit-testing is necessary. And it is clear that a significant financial burden is associated with stocking various sizes of N95 respirators for oneself and staff.

Due to the rampant initial spread of COVID-19, an acute shortage of N95 respirators occurred, and many providers were forced to either stop treatment, or continue treatment without the proper respiratory protection. Several medical providers were presumed to have suffered from acute COVID-19 infections, and several passed away as a result. In order to combat the severe N95 shortage, the U.S. Food and Drug Administration (FDA) issued emergency approvals of N95 variants, like the Korean-N95 (KN95). However, several of these variants were later found to be ineffective, and clinicians continued to bear the burden of inefficacious PPE.

Beyond mask-wearing and other CDC guidelines, various forms of additional personal protective measures exist, including the utilization of preprocedural rinses with 1% hydrogen peroxide or 0.2% povidone to reduce potential salivary viral loads in patients.[37] Preprocedural mouthrinses may be most useful in cases where rubber dam isolation cannot be established. The utilization of rubber dams can reduce microbial aerosolization by up to 70%.[38] Hand hygiene is still the single most effective method for reducing transmission of COVID-19.[6]

Fear-based marketing has begun to plague our private practices. The lack of scientific information about this virus has allowed companies to target dentists to buy advanced equipment, though many of these dentists are unfamiliar with the technology. For example, some private dentists are purchasing expensive extraoral aerosol suction devices, like the Chairside Aerosol Suc-

tion—Aerosol and Micro Duct Collector from JK Dental Group, which is listed at $2,200.[39] With the exception of Teanpaisan et al., there is an overwhelming lack of evidence for the use of such expensive machines.

Teanpaisan et al. established that a household vacuum cleaner could be modified into an extraoral vacuum aspirator (EOVA) to significantly reduce bacteria from dental aerosols.[40] It should be noted that this study did not report on the reduction of fungal, viral or parasitic particles. Furthermore, it should also be highlighted that the researchers modified a household vacuum cleaner because the cost of extraoral suction devices, similar to the model described above, was too high. A more thorough body of evidence must be investigated regarding EOVAs benefit.

Fear-based marketing will continue to prey on dental practitioners, many of whom are already facing financial concerns due to the COVID-19 pandemic. Some providers are purchasing these devices because they think they will be good for marketing their practices and will make patients feel more protected. Without clinical trials, there is no data to specifically support these purchases. Dental schools around the country are also purchasing many of the same devices being marketed to private practices. Dental students at schools such as Rutgers, UCSF, University of the Pacific, University at Buffalo and Columbia are being asked to wear surgical masks over fit-tested N95s (to prolong the lifespan of the N95), perform frequent hand hygiene, as well as to wear face-shields, and surgical gowns and caps.

Some variation exists between schools in the division of clinical practice between aerosol- and non-aerosol generating procedures, as well as the implementation of negative-pressure settings for high-risk aerosol-generating procedures among high-risk patients. Dental schools are also requiring students to get a one-time COVID PCR test upon return to school. Many schools are not testing patients unless the procedure is especially high-risk, which has added to a certain level of anxiety among students—who are less likely to provide especially high-risk procedures. The use of ultrasonic scalers is not allowed by dental students at any of these schools, and students are being asked to practice four-handed dentistry with rubber dam isolation in as many situations as possible.

Summary

Advanced HEPA filters, air-exchange devices, external mouth suctions, UV lights and PAPRs may serve a purpose in dental practices.[41,42] Until vaccines are more widely available and rapid testing more readily used, there is no way to completely minimize transmission in dental practices. While many of these devices might help, their cost can be high. Advanced HEPA filters are generally cheaper and are effective at cleaning the air, which would be helpful in small dental practices. While UV lights are effective, the upfront cost can be substantial and their environmental impact is not fully known. The authors would recommend considering PAPRs for practitioners who are performing invasive procedures that may generate aerosols, such as high-speed drilling by dentists or ultrasonic scalers by hygienists.

There are no conflicts of interest declared by any of the authors. This study received no commercial funding. Queries about this article can be sent to Dr. Ferneini at eferneini@yahoo.com.

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Solitary Median Maxillary Central Incisor Syndrome

A Report of Two Cases and Review of the Literature

Stephen H. Roth, D.D.S.; Kathleen Schultz, D.M.D.; Paul Crespi, D.D.S.

ABSTRACT

Solitary median maxillary central incisor syndrome comprises several midline defects, many of which are evident in the head and neck. The syndrome is characterized by a solitary median maxillary central incisor with unique morphology and position within the maxilla in addition to other anomalies, such as congenital nasal obstruction and short stature. This report includes two cases of solitary median maxillary central incisor syndrome observed in a 5-year-old female and a 7-year-old female, both of whom were born with congenital nasal pyriform aperture stenosis, and exhibited other unique characteristics of the condition. Patients and their families may be unaware of this condition, and both dental treatment and medical management of these patients can be complex.

Solitary median maxillary central incisor syndrome is a rare condition, occurring in approximately 1 in 50,000 live births. The syndrome is characterized by a solitary median maxillary central incisor (SMMCI) that exhibits distinctive crown morphology and a central position in the maxillary arch. The primary and permanent dentitions are involved. The SMMCI is perfectly symmetrical around the tooth's midaxis, and the contour of both mesial and distal surfaces exhibit the contour of a normal central incisor's distal surface.[1] Syndromic patients can also exhibit other midline anomalies, such as congenital nasal obstruction in the form of choanal atresia, midnasal stenosis, or congenital nasal pyriform aperture stenosis.[2] These abnormalities of the nasal passage can have significant implications for the patient, and emergency intervention may be required at birth to prevent respiratory distress in the newborn.[3] Short stature and ocular abnormalities are also commonly observed, among many other congenital anomalies, including cleft lip and/or palate, holoprosencephaly, intellectual delay and pituitary abnormalities.[1]

This report discusses two cases of patients with SMMCI, both of whom were diagnosed with congenital nasal pyriform aperture stenosis at birth.

Case One

A 5-year-old healthy female reported to the pediatric dental clinic at Cohen Children's Medical Center for routine examination and prophylaxis. She had been a patient of record with the clinic for the past three years. The patient initially presented with a history of congenital pyriform aperture stenosis that was diagnosed at 17 days of age on radiologic exam. The patient's mother noted that the patient had difficulty breathing through her nose and would occasionally gasp through her mouth during feeding. The computed tomography scan and magnetic resonance images (Figure 1) demonstrated pyriform aperture stenosis, with narrowing of the nasal cavity and choana, a single primary central incisor and decreased intercanthal distance, consistent with hypotelorism. Endocrinology was consulted. Thyroid studies, cortisol, and IGF-1 were all normal, ruling out endocrine abnormalities that could potentially affect her growth. At subsequent examinations, the patient was found to have esotropia (median deviation of the eye, contributing to a "cross-eyed" appearance) and clinical hypotelorism. Her respiratory symptoms were managed with over-the-counter nasal sprays.

At the time of the dental exam, the patient was a healthy preschooler without evidence of developmental or intellectual delay. The patient continues to be followed by both ear, nose and throat and endocrinology services. She is currently in the 55th percentile for stature but the 4th percentile for weight. A year prior to her dental exam, the patient was observed to have a slightly slower growth rate of 3.18 cm/year; however, at her last follow-up with endocrinology, she was observed to have an excellent growth rate of 8.27 cm/year. The patient is tracking along her growth curve. Her IGF-1 and free T4 levels are routinely monitored and are currently stable.

The patient's dental exam revealed a single, primary, maxillary central incisor (Figure 2), in addition to a talon cusp noted on the lingual surface of tooth #G. The right mandibular central incisor also exhibited a unique morphology, appearing slightly wider than the left, with an exaggerated mamelon or incisal edge notch. She was found to have bilateral maxillary posterior lingual crossbite, with a functional mandibular shift to the left of 1 mm to 2 mm, consistent with a constricted maxilla. The patient does not exhibit a maxillary labial frenum and has a prominent intermaxillary suture that mimics an elongated torus. A maxillary occlusal radiograph (Figure 3) was obtained, demonstrating the unique morphology of the primary solitary maxillary central incisor, in addition to the underlying solitary successor with similar coronal morphology. A conical tooth can be appreciated lateral to the left permanent lateral incisor. The radiographs demonstrated that this patient's anterior permanent dentition consisted of a SMMCI, two lateral incisors, and a conical supernumerary tooth currently positioned to erupt distally to the left permanent lateral incisor.

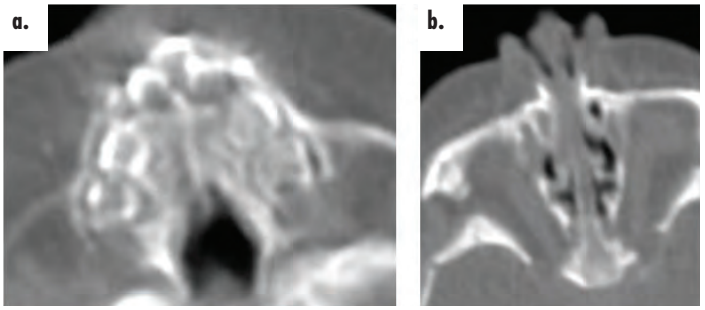

Figure 1. Selected axial images from CT with contrast performed on patient in Case 1 at 17 days of age. Axial sections of CT display both developing primary solitary median maxillary central incisor (a) and congenital pyriform aperture stenosis with narrowing of nasal cavity and choana (b).

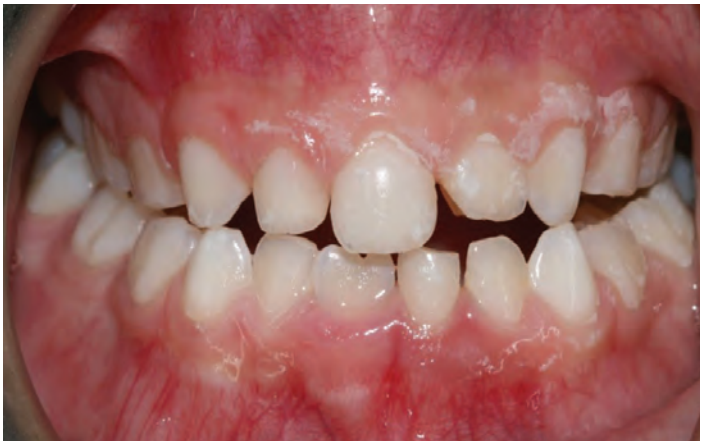

Figure 2. Current clinical photograph of patient in Case 1. Characteristic features of solitary median maxillary central incisor are appreciated, including perfectly symmetrical SMMCI, which erupts in midline of dental arch. Maxillary labial frenum is absent. In addition, talon cusp on tooth #G's lingual surface can be appreciated from this angle. Exaggerated mamelon/incisal notch of mandibular right central incisor is also noted.

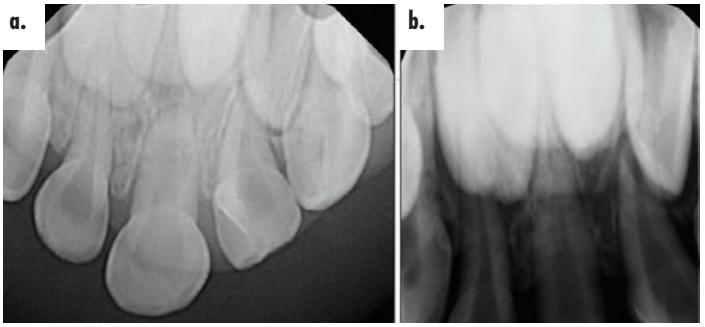

Figure 3. Periapical radiographic images of patient in Case 1. Radiographs emphasize characteristic anatomy of primary solitary median maxillary central incisor. Talon cusp on tooth #G is also readily appreciated (a). Developing succedaneous SMMCI with similar anatomy to primary SMMCI can be appreciated between two unerupted permanent lateral incisors in addition to conical supernumerary tooth distal to permanent left lateral incisor (b).

Of note, the patient's mother, maternal aunt and maternal grandmother all have neurofibromatosis type 1 (NF1). The patient has a café-au-lait macule on her thigh. The patient was evaluated by genetics for this condition and she does not meet the criteria for the diagnosis of NF1. The family history is otherwise negative for SMMCI syndrome or associated sequelae.

The current dental treatment plan is to initiate interception orthodontics, using a rapid palatal expander (RPE) appliance when the maxillary first permanent molars erupt, which would address her posterior crossbite and maxillary constriction. If this patient's supernumerary tooth erupts after successful palatal expansion, the treatment plan includes recontouring the anterior dentition by reshaping teeth either with direct or indirect restorations to match the expected morphology of the anterior dentition. The patient and her family were made aware that the patient will require orthodontics as she transitions to the permanent dentition.

Case Two

A 7-year-old healthy female reported to the pediatric dental clinic at Cohen Children's Medical Center for routine examination and prophylaxis. The patient had been a patient of record in the clinic for five years. The patient was initially diagnosed with pyriform aperture stenosis at birth and underwent surgical repair at one month of age. The patient was also diagnosed with intestinal midgut malrotation, which was repaired by Ladd's bands procedure at 3 months of age. Recently, the patient had visited the emergency department with complaints of frequent epistaxis and sinus congestion. The patient's mother also noted severe nighttime snoring. The patient was managing symptoms secondary to nasal congestion with over-the-counter nasal sprays. She had a history of a heart murmur, previously evaluated by cardiology. Her pediatrician had recently performed serology for endocrine abnormalities in addition to a complete blood count, and all values, including a thyroid panel, were reportedly normal. Patient is in the 50th percentile for height.

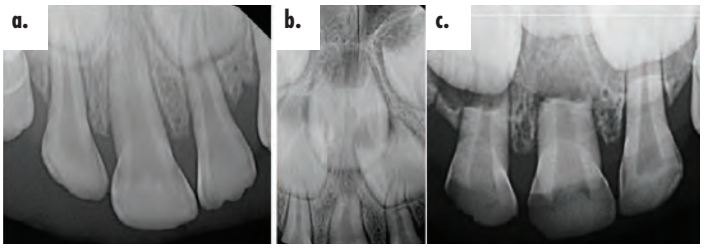

Figure 4. Sequential periapical radiographic images of patient in Case 2. Patient's periapical radiograph at age 3 displays characteristic SMMCI morphology and position within primary dental arch (a). By age 4, permanent SMMCI exhibiting same morphology can be identified in periapical radiograph (b). Periapical radiograph obtained at age 7 exhibits root resorption of primary dentition in addition to eruption of permanent lateral incisors and permanent SMMCI (c).

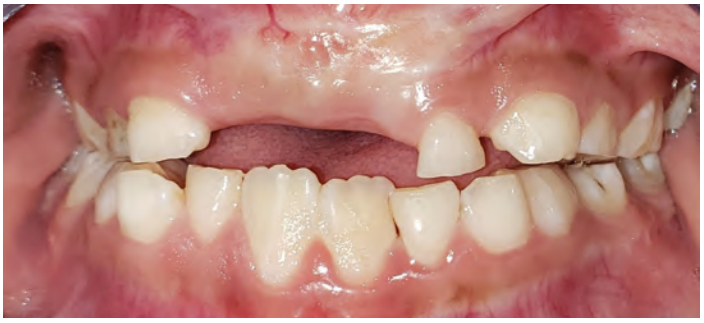

Figure 5. Current clinical photograph of patient in Case 2. Patient had parulis extending from apex of primary SMMCI, which necessitated extraction. This clinical photo displays her current maxillary anterior dentition: right primary canine, healing extraction socket of right lateral incisor, healing extraction socket of SMMCI, left lateral incisor and left canine. Patient's posterior crossbite and lack of true midline maxillary labial frenum are also observed.

During the patient's routine dental examinations, multiple periapical radiographs (Figure 4) were obtained over time. These radiographs revealed the characteristic SMMCI present in both her primary and developing permanent dentition. A fistula was identified associated with the primary central incisor, and it was extracted. The patient has two prominent maxillary labial frena that approximate the lateral incisor positions; however, a central maxillary labial frenum is not observed (Figure 5). The patient also has a more prominent intermaxillary suture that mimics an elongated palatal torus.

The patient currently has no other manifestations of any endocrine or midline abnormality and seems to be developing appropriately both intellectually and physically in terms of height and weight. The patient and family had not been aware of the syndrome diagnosis prior to the most recent exam, and appropriate follow-up with the patient's pediatrician and ear, nose, and throat team was initiated. The patient was found to have a functional heart murmur, monitored routinely, early closure of the anterior fontanelle, and her pediatrician confirmed the history of intestinal malrotation, corrected by surgical intervention and with gastrostomy tube. Consultation with her pediatrician confirmed the diagnosis of her syndrome.

Discussion

Solitary median maxillary central incisor syndrome comprises several midline defects that develop in utero after the 35th to 38th day from conception.[1] The original name for this condition, "solitary median maxillary central incisor, short stature, choanal atresia/midnasal stenosis syndrome," encompassed the major clinical findings; however, the syndrome's name has since been shortened to the current form, "solitary median maxillary central incisor syndrome."[2]

The most apparent feature of this syndrome during dental examination is the characteristic single or solitary median maxillary central incisor. Hall[1] best described the unique appearance of the SMMCI as perfectly symmetrical along the tooth's

midaxis, with the contour of both medial and distal surfaces of the SMMCI mimicking the contour of a normal central incisor's distal surface. The primary SMMCI usually erupts in the seventh to eighth month of life in the midline of the maxilla. Absence of the midline maxillary frenulum has also been observed, and was a common finding in both of our patients. The primary SMMCI and permanent SMMCI display the same characteristics. The identical distinct morphology of the tooth in both dentitions can help exclude traumatic/therapeutic exfoliation of one central incisor with subsequent shift of the remaining central, mesiodens eruption, or fusion of two central incisors or a central incisor with a mesiodens, all of which would not exhibit the same morphology or consistency with a successor on exfoliation of the primary dentition.

One of the more serious sequelae of the syndrome involves the nasal passage, as one study found that over 90% of babies with this syndrome present with either choanal atresia, midnasal stenosis, or congenital nasal pyriform aperture stenosis.[2] Infants breathe only through their nostrils in the first month of life; therefore, these anomalies often require emergency surgery at birth to prevent severe respiratory distress.[3] Both patients required surgical intervention within the first month of life. Fortunately, SMMCI syndrome can be diagnosed as early as 18 to 22 weeks during routine mid-trimester ultrasound examination.[1] If the nasal anomaly is not diagnosed on ultrasound, it can be detected and sometimes more definitively diagnosed by CT.[4]

The other associated anomalies include holoprosencephaly, mild-to-severe intellectual disability, congenital heart defects, and cleft lip and/or palate.[1,5-7] Less commonly, other craniofacial defects, such as microcephaly, hypopituitarism, hypotelorism, and esotropia (the latter two were noted in our first case), have been identified.[1,8,9] Additionally, esophageal and duodenal atresia, hypothyroidism, scoliosis, absent kidney, micropenis/ambiguous genitalia have been reported.[1,9,10] The patient in our second case presented with premature closure of the anterior fontanelle, midgut malrotation and a functional heart murmur. Cardiac anomalies have been observed in 25% of patients, and other gastrointestinal abnormalities, such as esophageal and duodenal atresia, have been observed in 10% of patients with the syndrome.[1] Half of syndromic patients present with short stature, which may require growth hormone therapy.[1,5]

The syndrome has been identified in approximately 1:50,000 live births, and 25% of cases occur with a positive family history of midline defects.[1,5] Genetic abnormalities have been discov-

ered in some patients; however, the underlying genetic etiology for SMMCI is unknown. The described genetic changes observed in some patients with SMMCI include chromosomal abnormalities of chromosomes 7, 18, 22 and X, as well as mutations of the SHH gene (7q36.3). However, a consistent universal genetic cause is yet to be defined.[1]

The characteristic solitary median maxillary central incisor can be observed as an isolated anomaly or part of a syndrome complex, including SMMCI syndrome, CHARGE syndrome (coloboma of the eye, heart defects, atresia of choana, retardation of growth and/or development, genital and/or urinary anomalies, and ear abnormalities/deafness), and VACTERL syndrome (vertebral anomalies, anal atresia, cardiovascular malformation, trachea-esophageal fistula, renal and limb abnormalities).[11,12] It is imperative that a full work-up with multidisciplinary care is initiated when a SMMCI is observed in our dental patients.

Dental treatment of the SMMCI is complex and often involves interdisciplinary care. Patients may elect to simply accept the tooth shape and central location and choose the option not to treat the anomaly. Alternatively, Machado et al.[4] suggested Phase I treatment, with rapid palatal expansion, followed by Phase II of fixed orthodontic treatment to move the SMMCI to one side. If delayed, possible surgical expansion with concurrent repair of any nasal or septal defect can be initiated. Once space has been created, prosthetic treatment can range from a removable partial denture, fixed partial denture, or implant-retained restoration, depending on the age of the patient.[1,4] Often, recontouring, with or without veneers, is performed to restore normal central incisor anatomic contour.[1]

Conclusion

Identification of SMMCI and any associated symptoms is imperative. Recognizing and understanding this anomaly will shape the dental treatment plan and could help identify sequelae that may affect the patient's systemic health, requiring complex interdisciplinary dental and medical care and greater surveillance.

The authors would like to acknowledge Jason Holt, D.D.S., and Hannah Callen, D.D.S., for sharing these cases with us and for providing thorough documentation to aid our publication. The authors have stated they have no conflicts of interests to disclose. Queries about this article can be sent to Dr. Roth at roth.304@gmail.com.

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NYU Dentistry Launches Center for Oral Health Policy and Management

NEW YORK UNIVERSITY COLLEGE OF DENTISTRY has announced creation of the NYU Dentistry Center for Oral Health Policy and Management, an interdepartmental and interdisciplinary think tank that focuses on oral health policy and management in the 21st century.

The creation of the center recognizes that the current oral health policy and management environment in the U.S. requires a holistic approach—an approach that has been lacking, according to Charles N. Bertolami, Herman Robert Fox Dean of NYU Dentistry.

"While tremendous strides have been made in improving the oral health status of Americans through scientific breakthroughs, many are left without access to basic dental care," said Bertolami. "Dental benefits remain separated from other healthcare coverage and out of reach for many individuals and families."

In addition, the rigorous curriculum for dental students focuses predominantly on basic science and clinical care, but most learn little about the complexity of the dental and general healthcare systems of which they will soon be a part. The center aims to change this through new programming and academic offerings on oral health policy and leadership.

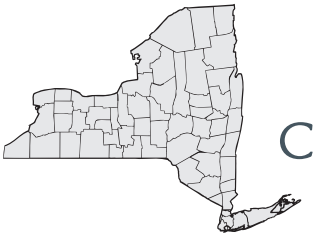
"The future of dental care, dental education, and oral health research is uncertain, complex and ambiguous, requiring the development and implementation of a national agenda for oral health policy and management and making the need for adaptive, character-based leaders throughout the dental profession greater than ever before," added Bertolami. "It is within this context that the NYU Dentistry Center for Oral Health Policy and Management has been created and within which it will initiate its work."

The NYU Dentistry Center for Oral Health Policy and Management will be led by Richard Valachovic, a visiting scholar at NYU Dentistry and president emeritus of the American Dental Education Association, who has been named founding director of the center, and Michael P. O'Connor, executive vice dean at NYU Dentistry, who has been named founding co-director of the center. Both men have extensive expertise and experience in areas of health policy and management.

A key focus of the new center is to develop and promote a national agenda for oral health policy and management that recognizes the fundamental relationship between oral health and overall health and the responsibilities that the dental professions have for the overall well-being of the public.

Another priority for the center will be to develop the next generation of policy-oriented leaders for the dental and related healthcare professions through creating new leadership programming and courses.

The first NYU Dentistry Center for Oral Health Policy and Management seminar is planned for May 2021 and will focus on the impact of the COVID-19 pandemic on dentistry and dental education, as well as the path forward.



Component NEWS

NASSAU COUNTY
New Officers Installed
Eugene G. Porcelli, D.D.S.

Nassau County Dental Society installed its new officers during a virtual ceremony on Jan. 9. NYSDA Executive Director Mark Feldman presided. Taking the oath of office were: Howard Baylarian, president; Joe Brofsky, president-elect; Steve Akseizer, vice-president; Robert Peskin, acting secretary; and Donald Hills, treasurer. An additional honor went to Doug Schildhaus, who received the NCDS 2021 Humanitarian Award.

The virtual ceremony got the job done but, unfortunately, without the celebratory atmosphere we've become accustomed to.

Virtual February
February began with two significant snowstorms on Long Island, dropping a total of over two feet of snow. The one good thing about virtual meetings is not having to cancel them due to weather. Our Board of Directors meeting proceeded on Feb. 1 as the snow fell!

Also in February, we traditionally hold our Give Kids A Smile event at the Cradle of Aviation Museum in Garden City. With 1,200 to 1,500 students usually in attendance, it's one of the largest GKAS events in the country. However, due to the current pandemic an "in-person" event was not possible this year. Instead, our co-chairs, Joe Brofsky and Michael Shreck, put together a fun instructional video that was distributed to the schools usually in attendance at our event. We hold out hope for some type of live event later in the year.

CE For All
Our CE schedule is shaping up nicely for 2021. And since the courses will be virtual until at least the fall, anyone in the state is welcome to go to our website at www.nassaudental.org to sign up for topics of interest to them.

Speaking of our website, the revamped version is full of new and varied content and is receiving many positive reviews!

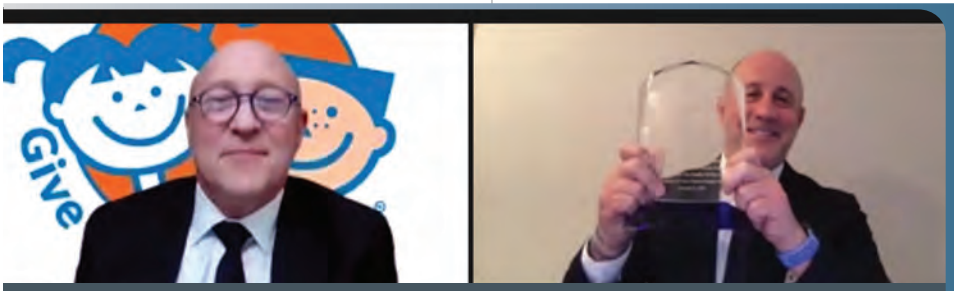
Slow Progress
Many members are still calling to express their frustration at not being able to get an appointment for the COVID vaccine. Through the hard efforts of NYSDA, dentists and their staff were part of the 1a group, but the lack of supply has still delayed the vaccine for many. In the last two weeks the only appointments available through the New York State Health Department website were 450 miles away from Nassau County!

We are hopeful that when you read this, the supply will have improved and the bottleneck relieved.

FIFTH DISTRICT
Online Study
Janice Pliszczak, D.D.S., M.S., M.B.A.

In response to the pandemic, the Fifth District Dental Society's webinars are available on-demand. These include courses on radiology and oral pathology, as well as New York State-mandated courses on infection control and opioids. A total of 19 CE hours are being provided online.

CNYDC Still On for October
At the time of this writing (February), The



Doug Schildhaus, right, is proud recipient of NCDS Humanitarian Award. Congratulating him is President-Elect Joseph Brofsky, award presenter.

NASSAU COUNTY

NCDS members and staff, top row, look on as society's officers are installed. Taking oath of office virtually are: second row, from left—Treasurer Donald Hills, President Howard Baylarian (with wife, Tamar), Vice President Steve Akseizer (with wife, Diane). Bottom row, from left—Installing Officer Mark Feldman, President-Elect Joseph Brofsky, Acting Secretary Robert Peskin.

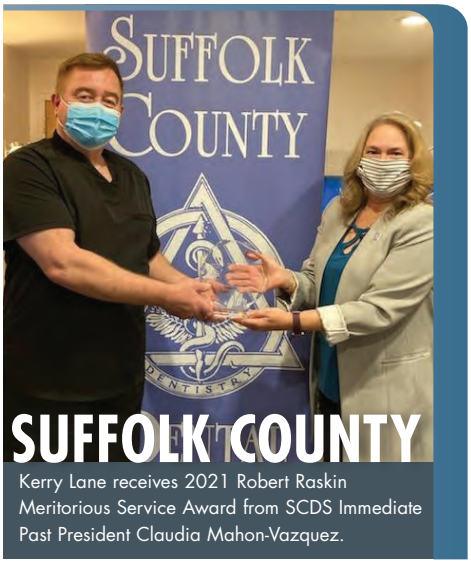
Fifth District remained hopeful that the Central New York Dental Conference would take place in person in October. This year's featured speaker will be Gordon Christensen, who was originally scheduled to appear at the 2020 conference. Additional courses will be offered for the entire dental staff, along with a mandated course in infection control. More details can be found on the district website, www.5dds.org.

SUFFOLK COUNTY
Virtual Installation Ceremony
Howard Schneider, D.D.S.

Patricia M. Hanlon was sworn in as the 41st president of the Suffolk County Dental Society during a well-attended Zoom ceremony on Jan. 16. Joining her in the coming year are the other newly installed officers: Craig E. Smith, president-elect; Radha Sachdeva-Munk, vice president; Howard E. Schneider, secretary; and John L. Guariglia, treasurer.

At that same meeting, it was announced that Kerry Lane had been selected to receive the 2021 Robert Raskin Meritorious Service Award. The Raskin Award was established in 1993 to honor the memory of Dr. Robert Raskin. It recognizes individuals who during their years of membership in the society have made "significant and ongoing contributions to SCDS."

Give Kids A Smile
SCDS held a virtual Give Kids A Smile event Feb. 6, during which it provided information on oral health, including brushing and flossing; finding a dentist; getting healthcare and dental insurance; healthy eating; and more. We were joined by our sponsors from FidelisCare and Long Island Head-Start, who helped promote the event.



Kerry Lane receives 2021 Robert Raskin Meritorious Service Award from SCDS Immediate Past President Claudia Mahon-Vazquez.

As part of Children's Dental Health Month, we built out a GKAS web page, replete with fun and informative content for children and parents, most of it in both English and Spanish.

Events
We continue to offer a wide variety of virtual and in-person events. Many of our courses and events are now offered via Aptify. Our website (www.suffolkdental.org) has additional details on courses. We hope to see you virtually—or in person in the not-too-distant future.

Don't Miss a Thing
We continue to make a significant push to better communicate and connect with our members in methods that more easily integrate with their lifestyle. You can find us on Facebook, Twitter, Instagram, LinkedIn and, even, Spotify, in addition to our traditional www.SuffolkDental.Org presence.

SEVENTH DISTRICT
Pandemic Provided Opportunity
H. Bradley Davidson, D.D.S.

The Seventh District has used this break in the routine provided by the pandemic to take to Zoom and retool for the future. Much work has been accomplished by various committees.

Ad Hoc Committee. This committee was formed to evaluate Seventh District Dental Society operations and to review the current structure and relationship of the district with Empire Dental Administrators; the county societies, including the Monroe County Dental Society; and other relevant organizations. Under the leadership of Bill Calnon, the committee requested proposals from several internal auditing firms and chose one to complete this work. The committee then presented the Board with a prioritized list of recommendations that emanated from the audit. These were approved. Many actions have already been taken, and work is continuing.

Strategic Planning Committee. This group, chaired by Bill Zugner, has been meeting for several months with the goal of presenting a District Strategic Plan that will guide all of the district's decisions and actions during the next five or so years. A tentative plan has been developed and is being gradually presented to the Board for its input, with the goal of accepting a final version later this year.

Executive Director Search Committee. The retirement of our former executive director last year put much into action. An interim executive director was named and served admirably for several months. Upon her departure, the district was extremely fortunate to have one of our most active and informed members, Andy Vorrasi, come out of retirement and fill the position while a comprehensive search is completed and a new ED named. This committee was formed under the chairmanship of Bill Calnon to conduct this search.

Finance Committee. Under the leadership of Michael Grassi, this committee has been actively responding to several recommendations originating from the internal audit. The finances of the district, Monroe County and Empire Dental Administrators are now highly coordinated. Reports to the Board will be more extensive and consistent over time.

Finally, in an effort to provide innovative help in this difficult time, and in conjunction with the Eastman Institute for Oral Health, the district provided a free continuing education course via Zoom, given by Eli Eliav, as a member benefit.

NINTH DISTRICT
Ever Onward
Olga Lombo-Sguerra, D.D.S.

Not all storms come to disrupt your life. Some come to clear your path! That's how it's beginning to feel in the Ninth District. Nearly a year has gone by since the inception of New York on Pause. In that time, we have learned a great deal about the

Ninth District *cont.*

resilience of our members, staff and our Association. We have continued ever forward, implementing new protocols, methodologies and developing new capabilities to carry on our business on behalf of our members and the public at large.

CE Continues

The Ninth will, once again, provide members with a full slate of virtual CE courses for the spring—except for the in-person, hands-on, skills-assessment portion of the AHA's BLS CPR courses. As we did in the fall, we will assign one to two attendees a half-hour timeframe in which to enter headquarters—socially distant and masked—to finalize the certification process.

An Important Forum

The General Meeting on March 10 was held virtually. This year's speaker, Larry Lieberman, presented "Soft & Hard Tissue Dental Lasers with Aesthetic Capabilities." The program was offered at no charge to Ninth Members. Attendees received six MCE credits. Despite its virtual nature, the General Meeting provided a forum for members to come together to interact with colleagues and show their support for each other.

Site Assistance

Our thanks to the ADA, NYSDA and our executives and delegates for providing access to COVID vaccination sites for our members. We continue to update these resources as new sites become available and vaccine supplies are replenished on a now, regular basis. We hope by now most of us are vaccinated and providing support to our patients regarding such an important community event.

Important Resource

Our March Bulletin will be finalized and released shortly. It is chock full of relative information for our membership. We are grateful to our advertisers and sponsors for their continuing support and welcome any comments and ideas for upcoming issues.

We continue to be vigilant about the pandemic and stopping its spread—ever hopeful the time will come soon when we can, once again, get together in person. Until then, we encourage members and their staffs to get vaccinated as soon as possible and to reach out to headquarters with any issues, questions or concerns that arise.

BRONX COUNTY

BCDS Lecture Series

Laurence Schimmel, D.D.S.

In response to the COVID-19 pandemic, the Bronx County Dental Society has continued its lecture series via Zoom. The first lecture, on dental-medical billing, featured Christine Taxin.

This was followed by a presentation on minimally invasive dentistry given by Howard Glazer entitled "I Have it....You Need it!" Dr. Glazer explored the concept of bioactivity vs. biomimicry as a minimally invasive approach to restoring dentition. As an added bonus, Dr. Glazer offered one lucky winner free tuition to his "Smiles in the Sun" seminar at Longboat Key.

On March 24, board-certified pharmacist Tom Viola presented a lecture titled "I Haven't Got Time for this Pain," focusing on dental pain management for the entire team. This program provided participants with a comprehensive understanding of the pharmacology and therapeutics of local anesthetic agents and analgesics. Special emphasis was given to effective perioperative pain management and best practices for prescribing analgesics for postoperative pain control.

Next up in the lecture series is BCDS member Adam Goodman, who will discuss predictable Invisalign treatment for minor and moderate crowding. Dr. Goodman is expected to review a systematic approach to properly selecting cases, setting reasonable goals, reaching the planned result and stabilizing it with retention.

Special thanks to Joy Patane and BCDS Board members for helping to coordinate this effort to bring continuing education to our members during the pandemic.

EIGHTH DISTRICT

Virtual Installation

Kevin J. Hanley, D.D.S.

Because of the ongoing pandemic, activities in the Eighth District Dental Society have been limited. The District Executive Council has met twice this year via Zoom, in January and February. At the January meeting, the incoming officers of the society were installed by outgoing president James Matteliano. Taking the oath of office were: Joseph Craddock, president; Joseph Gambacorta, president-elect; Joshua Hutter, vice president; Robert Bochiechio, secretary; and Mark Barone, treasurer.

Virtual Executive Council meetings will continue at least until May. It is hoped the council will be able to resume in-person meetings in September. Since the officers were installed at the Executive Council meeting, the traditional President's Reception was not held. The district plans to host the reception later in the year.

Erie County Offers CE and Recreation

The Erie County Dental Society held a CPR and Basic Life Support class at the district office on March 1. The society sponsors this course periodically for members who need to be recertified. Pandemic restrictions limit the number of people allowed to take the course to 10.

Erie County held its annual Ski Day and CE event on Feb. 12 at HoliMont Ski Club. For the CE portion, Joseph Gambacorta presented the lecture "Dental Education in Light of COVID-19." He gave Part 1 of his lecture from 8:30 a.m. to 9:30 a.m. Participants hit the slopes until 12 p.m., then returned for lunch and Part 2 of Dr. Gambacorta's lecture. At 1p.m., it was back to the slopes for more skiing.

It was a productive day that offered education and a lot of great skiing for those attending.

SECOND DISTRICT

Members Still Getting Together Virtually

Alyson Buchalter, D.M.D.

COVID-19 has turned much of our programming upside down, as it has for practically everyone and everything. The Second District Dental Society regrets the continuing need to have virtual meetings and virtual CE. But, despite the online nature of these programs, we are thrilled to continue to offer our membership opportunities to come together.

On March 11, we had our second General Membership Meeting via Zoom. Amr Habib presented "Long Term Dental Care of the Oncologic Patient" during the CE component of the meeting. Our branch society, the Richmond County Dental Society, had its Board and membership meeting on March 16, also via Zoom. It featured Steve Yusupov's presentation of "Oral Cancer: Early Detection and Treatment." SDDS will present a Sunday Morning Webinar on March 21 entitled "Peri-implantitis," by Paul Fletcher.

GKAS Carries On

The SDDS Give Kids A Smile program, led by Reneida Reyes, chair of the district Oral Health Committee, is continuing full steam. COVID has had a tremendous effect on the educational programs available through the New York City Department of Education. Despite that, on Feb. 5, SDDS, in collaboration with Colgate's Bright Smiles, Bright Futures, offered a virtual dental health education program to P771K@IS14, a school for special needs students. We would like to thank Claude Beaujuin, health education facilitator, who helped coordinate the program.

A second GKAS program was presented on Feb. 10 for the Al-Madinah school, facilitated by Zenab El Kady, the school principal. In each case, all children, including those who were doing remote learning, participated and received oral health kits, which were sent directly to the schools for distribution.

Dr. Reyes has assured us "other programs are being developed for both local lower and

Second District *cont.*

middle schools, as well as preschools and daycare facilities." The SDDS is grateful to Dr. Reyes and members of her committee for putting together a first-class GKAS program despite these challenging times.

Lieb to CODA

SDDS congratulates past president Howard Lieb on his appointment to the ADA Commission on Dental Accreditation, also known as CODA. CODA is the national agency that accredits and monitors dental and dental-related programs, including dental schools, GPR and specialty programs, as well as allied dental education programs. It functions independently and autonomously. Dr. Lieb's term began at the conclusion of the HOD this past October and will conclude in 2024.

Howard Lieb

SECOND DISTRICT

GNYDM Comes to a Close

The 96th Greater New York Dental Meeting concluded on Feb. 25. The SDDS is proud to host this annual meeting along with our partners at the NYCDS. In a very short time, the awesome volunteers on the organization committee pivoted from the usual live event at the Javits Center to an amazing program of virtual booths and online CE.

Over 135 courses were offered. And in typical GNYDM style, all the courses were offered to our dental community for free. They called it "A Celebration of Dentistry!" It was the GNYDM's holiday gift to all of us. Over 15,000 dental professionals from around the world took advantage of this opportunity.

The GNYDM is looking forward to seeing everyone LIVE at the Javits Center this coming November.

Reneida Reyes, third row, at left, presents virtual GKAS dental health program to P771K@IS14 in collaboration with Colgate Bright Smiles, Bright Futures.

NEW YORK COUNTY

District Makes History

Mina Kim, D.M.D.

A historic slate of officers was installed virtually on Feb. 24. The all-female, diverse slate of officers, a first throughout the ADA components, reflects the change that is occurring at New York County Dental Society. The society's 2021 officers are President Lois A. Jackson, President-Elect Ioanna G. Mentzelopoulou, Vice President Mina C. Kim, Secretary Suchie Chawla and Treasurer Vera W. L-. Tang. Installing officer ADA Past President Maxine Feinberg praised NYCDS and suggested it is a model for all of organized dentistry.

It was a festive, celebratory event, with several distinguished guest speakers in addition to Dr. Feinberg featured. They included ADA President-Elect Cesar R. Sabates, ADA Second Vice President Maria Maranga, New York State Dental Association President Craig Ratner, ADA District 2 Trustee Paul Leary and New York State Dental Association Executive Director Mark Feldman.

Special thanks to NYCDS past president and master of ceremonies for the event Kenneth B. Cooperman, who made the night go smoothly, and to Gail E. Schupak, for providing the invocation for the evening. Immediate Past President Richard J. Lewenson was acknowledged for his years of service on the society's Executive Committee. Maurice L. Edwards (NYCDS) and William W. Bongiorno Jr. (2nd District Dental Society) were recognized for serving on the Greater New York Dental Meeting's Organizing Committee.

NYCDS would also like to acknowledge several prominent members of organized dentistry who attended. They are: NYSDA President-Elect Kevin Henner and Vice President James Galati; NYSDA trustees Viran Jhaveri, Mitchell Mindlin, David Shipper and Jay Skolnick; 2nd District President Babak Bina, past president Paul Albicocco and Executive Director Bernie Hackett; Queens County President Arelys Santana and Executive Director and past ADA President Chad Gehani and his wife, Rekha Gehani; Nassau County President Howard Baylarian, Executive Director Eugene Porcelli and Board member Lynda Asadourian; Suffolk County President Patricia Hanlon; and from the Greater New York Dental Meeting—Chair-Elect Richard Oshrain, Executive Director Robert Edwab and many committee members and troubleshooters.

GKAS NYC Goes Virtual

Due to COVID-19, the society's Give Kids A Smile Committee reimagined its annual event by creating an expanded virtual/

remote program. The nine participating schools were excited about and appreciative of our efforts to ensure that underserved children in East Harlem continued to receive critical oral hygiene awareness education. In addition, many more children were reached virtually, which will have a great impact on oral health awareness in that region of Manhattan.

Three unique, fun, and exceptionally creative and educational videos on oral health, tailored specifically for lower, middle, and upper school students, were developed. This is the first year we are reaching students in higher grade levels, utilizing the convenience and benefits of the virtual approach. The videos were prepared to be shared with 5,000+ students.

For the first time, a Superhero poster contest was created to further engage students. The winning design will be incorporated into the volunteer tee-shirt logo for next year's event. A live-stream parent workshop was planned to be held during a community town hall meeting in February, but due to technical interference during the virtual town hall meeting, the parent workshop had to be postponed to a future date.

This year, we were honored that GKAS NYC was chosen by Henry Schein and the ADA GKAS Committee to share promotional information to inform the public about the ADA's GKAS initiative. None of this would be possible without the leadership of GKAS NYC General Chair Deborah Weisfuse and the members of the Steering Committee.

"Getting Started in Private Practice"

Attendees of the Feb. 22nd new dentist webinar "Getting Started in Private Practice" learned about various pathways to practice ownership and some of the essential steps to take along the way. The program offered lots of "food for thought," to help new dentists formulate questions and develop their own roadmap for practice ownership. All of the speakers emphasized the importance of building a dental team of lawyers, accountants and others; creating a business plan; finding mentors; and connecting with organized dentistry as cornerstones to success. Each speaker had a unique perspective to share on how to get started in private practice.

"Orofacial Pain and the Pandemic"

With the pandemic continuing to impact the lives of people throughout the world, disrupted sleep, postural strain, physical inactivity and emotional stress are frequent complaints voiced by patients arriving at dental offices. Many are showing up with broken restorations, fractured and sore teeth and muscles, and TM joints that have been overworked. There are also a variety of orofacial sensory disorders generating complaints of pain in the absence of physical or radiographic evidence of pathology.

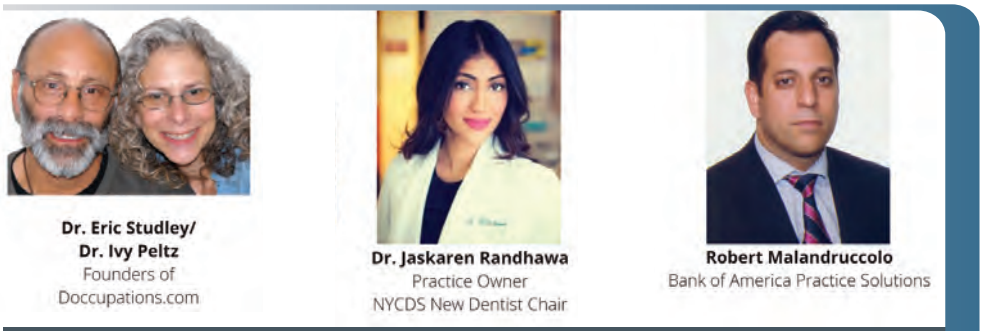
NYCDS offered a four-part series, led by noted clinician Donald R. Tanenbaum, D.D.S., M.P.H., with the primary goal of raising the diagnostic skills of residents and new dentists, who are just beginning to experience the challenges of diagnosing and treating patients in pain, and providing practical pain management strategies that can be used in a predictable way. Dr. Tannenbaum is an ADA specialist in orofacial pain, a diplomate of the American Board of Orofacial Pain and a fellow of the American Academy of Orofacial Pain.

CE Highlights

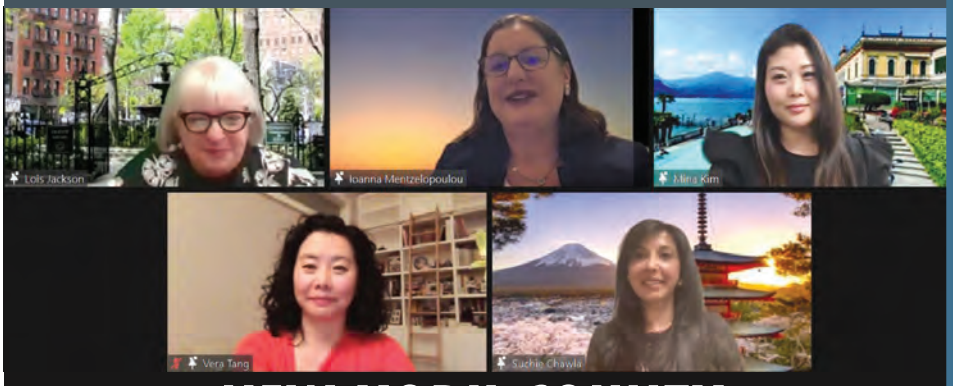
We have received positive responses to our three series of webinars, and more are being considered. We are also planning to collaborate with other continuing education providers to bring a wide variety of speakers and topics to our program. Throughout the year, we will continue to offer daytime and early evening webinars to fit your schedule. Future programs include:

- April 14: "Professional Liability and Defensive Dentistry."
- April 21: ACD Mentoring Lecture Program: "What Would You Do?"
- April 29: Orofacial Pain Lecture Series: Part 4.
- May 19: ACD Mentoring Lecture Program: "Peer Review."

Visit www.nycdentalsociety.org for information on the latest courses and registration.



Each speaker at February New Dentist program had unique perspective to share on how to get started in private practice.



NYCDS's all-female Executive Committee is made up of: top row, from left—President Lois Jackson, President-Elect Ioanna Mentzelopoulou, Vice President Mina Kim. Bottom row, from left—Secretary Suchi Chawla, Treasurer Vera Tang.

Component Presidents 2021

NEW YORK COUNTY
Lois A. Jackson
505 LaGuardia Place, L4, New York, NY 10012

BA, Barnard College, 1973. DDS, Columbia University College of Dental Medicine, 1977. GPR, Montefiore Hospital and Medical Center, 1978. Pediatric Residency, Columbia University College of Dental Medicine, 1980. Assistant Clinical Professor, Columbia University College of Dental Medicine.
Pediatric practice, New York City, 1983, and Brooklyn, 2001.

Diplomate, American Board of Pediatric Dentistry. Fellow, International College of Dentists, American College of Dentists, Pierre Fauchard Academy. Member, American Academy of Pediatric Dentistry, Northeastern Society of Pediatric Dentistry, Omicron Kappa Upsilon.

Enjoys road trips, documentary films and Cajun and Zydeco music.

Spouse: Michael Gerstein

SECOND DISTRICT
Babak Bina
17 Maple Drive, Great Neck, NY 11021

BS, SUNY Stony Brook, 1993. DDM, University of Pennsylvania School of Dental Medicine, 1997. GPR, Lutheran Medical Center, 1998. Chief Resident, Lutheran Medical Center, 1999. Director, General Practice Residency and Attending, NYU Langone Health.
General practice, Great Neck, 2001.

Fellow, Pierre Fauchard Academy, American College of Dentists. Delegate, NYSDA House.

Enjoys watching sports, especially NY Mets and Knicks.

Spouse: Anna Shabtai, DDS. Children: Talia, Ronen and Nathaniel.

THIRD DISTRICT
Timothy Adams
2 Willowbrook Lane, Troy, NY 12180

BS, Siena College, 2007. DDS, New York University College of Dentistry, 2012. OMFS Residency, Thomas Jefferson Hospital, 2016. Volunteer Attending, St. Peter's Hospital, Albany.
Oral Surgery Practice, Albany and Queensbury.

Diplomate, American Board of Oral and Maxillofacial Surgeons. Member, New York State Society Oral and Maxillofacial Surgeons.

Enjoys travel, golf and spending time with family.

Spouse: Katherine. Children: Jack, Graham and Reese.

FOURTH DISTRICT
Laura Johnstone
163 Lake Hill Road, Burnt Hills, NY 12027

BA, Fordham University, 2007. DDS, Stony Brook University, 2011. Dental Practice Residency, New York Hospital, Queens, 2012.
Family, Sedation and Implant practice, Burnt Hills, 2019.
Fellow, Pierre Fauchard Academy. Member, NYSDA New Dentist Committee. Alternate Delegate, American Dental Association House.

Enjoys hiking, kayaking, gardening, painting, homebrewing.

Spouse: Joseph Denning, DDS. Children: Ronan and Donovan.

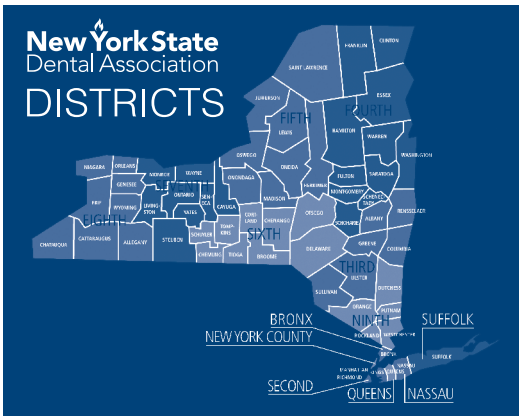
FIFTH DISTRICT
Walter Bozek
49 W. 5th Street, Oswego, NY 13126

BS, LeMoyne College, 1996. University at Buffalo School of Dental Medicine, 1999. GPR, St. Joseph's Hospital, Syracuse, 2000.
General practice, Oswego, 2001.

President, Oswego County Dental Society. Member, NYSDA Council on Dental Benefit Programs. Alternate Delegate, NYSDA House.

Enjoys restoration of his Victorian home, music, hiking and computers.

Spouse: Jennifer.



SIXTH DISTRICT
Scott Noren
1301 Trumansburg Road, Suite G,
Ithaca, NY 14850

BS, University of Illinois. DDS, Loyola University of Chicago Dental School. GPR, Cook County Hospital, Chicago, 1991. Oral Surgery Externship, Louisiana State University Health Sciences Center, New Orleans. OMFS Residency, University of Missouri, Kansas City, Truman Medical Center, 1997.
OMFS and Implant practice, Ithaca, 2005.

Member, American Association of Oral and Maxillofacial Surgeons.

Enjoys ceramics, weightlifting, fishing, Torah studies and politics. Spouse: Michelle. Children: Sarah, Jared, Rachael and Arielle.

SEVENTH DISTRICT
Richard F. Andolina Jr.
74 Main Street, Hornell, NY 14843

BA, The Ohio State University, 2005. MA, University at Buffalo, 2007. DDS, University at Buffalo School of Dental Medicine, 2013. GPR, Ellis Hospital, Schenectady, 2014.
General practice, Hornell, 2014.

Fellow, Pierre Fauchard Academy, International College of Dentists. Member, Steuben County Dental Society.

Enjoys outdoor activities, including hunting, fishing, camping and skiing. Avid fan of Ohio State Buckeyes and Buffalo Bills.

EIGHTH DISTRICT
Joseph Craddock
3325 East Main Street, Attica, NY 14011

BA, University at Buffalo, 1994. DDS, University at Buffalo School of Dental Medicine, 1998. GPR, University at Buffalo School of Dental Medicine, 1999. Adjunct Clinical Instructor, Monroe County Community College. Volunteer Clinical Instructor, University at Buffalo School of Dental Medicine.
General practice, Attica, NY, 2000.

Member, Academy of General Dentistry, Tri-County Dental Society, Erie Community College Dental Hygiene Advisory Board, NYSDA Council on Dental Benefit Programs. Delegate, NYSDA House. Volunteer, Score International Dental Missions to Dominican Republic.

Enjoys golf, bowling and cheering on Buffalo Bills, Buffalo Sabres and NY Yankees.

Spouse: Marcy. Children: Eric, Noah and Laura.

NINTH DISTRICT
Roberto Rodriguez
4 N. Division Street, Peekskill, NY 10566

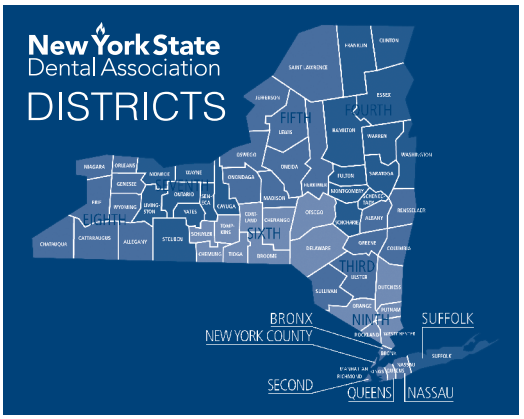
DDS, Pontificia Universidad Javeriana, 1985. DDS, New York University College of Dentistry, 1988. Armed Forces Institute of Pathology, Forensic Dentistry Certificate, 2000.
General practice, Peekskill, 1992.

Fellow, Academy of General Dentistry. Delegate, NYSDA House. Alternate Delegate, ADA House.

Enjoys painting, carpentry, outdoor activities and reading.

Spouse: Dr. Clara Sofia Calderon. Children: Daniel and Antonella.

Component Presidents 2021



NASSAU COUNTY
Howard Baylarian
55 Northern Boulevard, Suite 203, Great Neck, NY 11021

BA, State University of New York at Stony Brook, 1974. DDS, New York University College of Dentistry, 1977. GPR, Goldwater Memorial Hospital.
General practice, Great Neck, 1997.

Fellow, Academy of General Dentistry. Member, Crown Council.
Enjoys travel, golf, being in nature and spending time with family. Spouse: Tamar. Children: Mitch and Ashley. One grandchild.

QUEENS COUNTY
Arelys Santana
24-17 202nd Street, Bayside, NY 11360

Unversidad Central del Este Dominican Republic, 1987. DDS, New York University College of Dental Medicine, 1995. GPR, Woodhull Hospital, 2003.
General and Implant practice, Jackson Heights, 2003.

President-Elect, Hispanic Dental Association, New York Chapter. Past President, American Medical Dental Association. Member, Dominican Dental Society, Puerto Rican Dental Association.

Enjoys dental missions, charity foundation support, mentoring, community outreach and support.
Children: Katherine, Keisha and Kevin.

SUFFOLK COUNTY
Patricia M. Hanlon
4 Lyme Street, Wading River, NY 11792

BS, State University of New York at Stony Brook, 1976. DMD, Washington University School of Dental Medicine, 1981. Certificate in Pediatric Dentistry, Mott Children's Health Center/Hurley Medical Center, 1985.
Retired from Pediatric practice, 2020.

Chair, NYSDA Committee on Dental Medicaid. Member, NYSDA Council on Dental Benefit Programs. Delegate, NYSDA House. Alternate Delegate, American Dental Association House.

Enjoys reading, sewing and travel. Volunteer coach for daughter's special needs running club Rolling Thunder.

Spouse: Dr. Terry Sanders. Children: Quadruplets Sean, Tara, Michael and Kevin.

BRONX COUNTY
Donald Safferstein
One Fordham Hill Oval, Bronx, NY 10468

BA, University of Rochester, 1978. DDS, University at Buffalo School of Dental Medicine, 1982. GPR, Buffalo General Hospital, 1983.
General practice, Bronx, 1985.

Member, NYSDA Chemical Dependency Committee. NYSDA representative in Healing Communities Study. Volunteer, missionary dentistry trips to Borgne, Haiti.

Enjoys long distance running—completing 21 marathons, hiking, camping and travel with family.

Spouse: Vicki. Children: Dayna, Julie and Rachel.

Read, Learn and Earn

Readers of *The New York State Dental Journal* are invited to earn three (3) home study credits, approved by the New York State Dental Foundation, by properly answering the following 30 True or False questions, all of which are based on articles that appear in this issue.

When you have completed the questionnaire, return it to the New York State Dental Foundation, along with payment of $60. All those who achieve a passing grade of at least 70% will receive verification of completion. Credits will automatically be added to the CE Registry for NYSDA members.

For a complete listing of online lectures and home study CE courses sponsored by the New York State Dental Foundation, visit www.nysdentalfoundation.org/course-catalog.html.

Skeletal Changes in Non-invasive Orthodontic Treatment in Growing Patients—Page 18-21

1. The American Association of Orthodontists (AAO) recommends referral to an orthodontist by age 7.
   ❑ T or ❑ F
2. Peak growth in boys usually occurs in the 10-to-12-age range.
   ❑ T or ❑ F
3. Certain skeletal malocclusions should be treated well before peak growth.
   ❑ T or ❑ F
4. Sometimes retruded maxillary incisors can mask a retruded mandible.
   ❑ T or ❑ F
5. Orthodontists lack functional appliances for patient treatment.
   ❑ T or ❑ F
6. Many skeletal Class III cases will evolve into surgical cases no matter what the orthodontist does.
   ❑ T or ❑ F

❑ *Enclosed is a check for the full amount of $60. (Make checks payable to the New York State Dental Foundation.) Mail to NYSDF, 20 Corporate Woods Boulevard, Suite 602, Albany, NY 12211. Questionnaires must be received within 90 days of Journal publication.*

Please charge my: ❑ VISA ❑ MasterCard ❑ American Express

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Telephone _____

E-mail _____

ADA # _____

License # _____

NYSDA Member? ❑ yes or ❑ no

Local/State Dental Society _____

7. Open bite cases from vertical maxillary excess are not challenging for the orthodontist.
❑ T or ❑ F
8. Vertical skeletal malformation cases often require different treatment plans from open bites arising from finger sucking or tongue thrust habit.
❑ T or ❑ F
9. An orthodontist will take a panoramic radiograph to insure proper eruption pathways of the remaining unerupted permanent teeth in a child with a mixed dentition.
❑ T or ❑ F
10. This article indicates that non-invasive orthodontic techniques may be used to manipulate a patient's growth if a referral is made in advance of tooth exfoliation.
❑ T or ❑ F

Treating Severely Worn Dentition in a Medically Compromised Patient—Page 22-26

1. The author implies that there is a widening gap between practitioners who offer "cosmetic and digital dentistry" and those who are willing to utilize traditional skills.
❑ T or ❑ F
2. Advanced dental technology can be limited, due to confounders of medical limitations to treatment.
❑ T or ❑ F
3. The patient represented in the clinical report did not require a cardiology consult.
❑ T or ❑ F
4. The clinical patient's remaining teeth had no evidence of mobility.
❑ T or ❑ F
5. The clinical patient was an excellent candidate for root canal therapy and crown extension.
❑ T or ❑ F
6. The patient's current vertical dimension (prior to treatment) was sufficient for restoration.
❑ T or ❑ F
7. Cast chromium cobalt removable dentures were designed for the patient's final restorations.
❑ T or ❑ F
8. The etiology of wear is multifactorial and often of unknown origin.
❑ T or ❑ F
9. Tooth wear is only found in senior patients.
❑ T or ❑ F
10. Advanced treatment options are unlimited when treating patients with complex medical and dental issues.
❑ T or ❑ F

Solitary Median Maxillary Central Incisor Syndrome—Page 34-38

1. Solitary median maxillary central incisor (SMMCI) syndrome is unique and has no other midline defects.
❑ T or ❑ F
2. Congenital nasal obstructions may be found in conjunction with SMMCI.
❑ T or ❑ F
3. Dental and medical management of SMMCI syndrome patients is often complex.
❑ T or ❑ F
4. SMMCI syndrome is a common condition.
❑ T or ❑ F
5. Short stature and ocular abnormalities are also commonly observed with SMMCI syndrome.
❑ T or ❑ F
6. Case one patient exhibited esotropia upon examination.
❑ T or ❑ F
7. SMMCI syndrome usually develops in utero after the 35th to 38th day from conception.
❑ T or ❑ F
8. Midnasal stenosis syndrome is not associated with SMMCI syndrome.
❑ T or ❑ F
9. One of the most serious sequelae of SMMCI syndrome involves the nasal passage.
❑ T or ❑ F
10. Identification of SMMCI syndrome and any associated symptoms is imperative due to the complex dental and medical treatment of such patients.
❑ T or ❑ F

CLASSIFIED
INFORMATION

Online Rates for 60-day posting of 150 words or less: Members: $100—can include photo/image online. Non-Members: $150 + $40 fee for online photo. Corporate/Business Ads: $200 + $40 fee for photo/image/logo. Classifieds will also appear in print during months when Journal is mailed: Jan, March, July and Sept.

FOR SALE

CAPITAL DISTRICT: Suburban general dentistry practice for sale. Grossing $600K on 3.5 days/week. Four modern ops, new equipment, fully computerized with Dentrix software. Large FFS base with minimal insurance participation. Good new patient flow and referral base with patients seeking esthetic and implant dentistry. Ample off-street parking available. Seller retiring but will stay to introduce. Email: jgrossman@ggcpallp.com.

GREATER ALBANY: Practice for sale. If considering an eastern NY practice, this is the one. Current doctor highly regarded in community and practicing for 40 years. Dental office located in charming, free-standing building with 2,800 square feet. Real estate also for sale. 6 fully equipped ops. Collections $1.02M and EBITDA over $250K. 4,000 active patients. Contact Kaile Vierstra with Professional Transition Strategies via email: kaile@professionaltransition.com; or call: (719) 694-8320.

WESTCHESTER: Periodontal practice for sale. 8 fully equipped ops. Collections $1.7M and EBITDA of $290K. Well-established practice with excellent referral base. 7,500 active patients and 40 new patients per month. Contact Kaile Vierstra with Professional Transition Strategies via email: kaile@professionaltransition.com; or call: (719) 694-8320.

MIDTOWN MANHATTAN: Esthetic/Restorative FFS-only practice for sale. Low to mid 7-figure gross for past 5 years. 32-hour week. 1,850 square feet. 5 ops, 2 POs, lab. Can extend lease or willing to move. Paperless, Itero scanner, Dentrix. Contact for details: midtowndmd2@gmail.com.

BUFFALO SUBURB: Practice for sale by owner looking to retire. Very favorable terms. Preferably looking to sell or merge. Fully computerized; digital X-rays and paper charting. 5-op facility with 2,100 active patients and average of 30 new patients/month. Gross $555K in 2019 and $521K in 2020. Fully furnished and equipped. Retiring dentist will introduce. Practice offers restoration and other basic services. Endo, Perio, Ortho, Implants and Oral Surgery referred out. Great opportunity for growth. Email: docjoe2233@gmail.com or call (716) 445-6236 about this great opportunity.

SARATOGA COUNTY: General practice for sale. 2019 gross $600K. Building with additional rental tenant also available. Inquire to: dentprac47@gmail.com.

BRONX: Newly renovated, 31-year-old practice in Bronx. Running well; owner retiring. Three ops, digital X-rays, lab, sterilization room, Nitrous oxide. Very good setup; must see. No Medicaid, no HMO, no DMO. Only good insurance and private pay. Call for details (718) 862-9232.

OSWEGO: 6 ops in north central part of NYS. Town is located on beautiful lake housing popular state college. Revenue $868K; sale price $550K. All digital, quality equipment, 3,000-square-foot office space in professional standalone building. Includes rental space earning $25K/year also for sale. Loyal staff, large patient base of PPO patients. Accepting all insurances; no Medicaid. Contact Henry Schein Professional Practice Transition Sales Consultant Donna Bambrick at (315) 430-0643; email: donna.bambrick@henryschein.com. #NY1751.

BRONX: Great family neighborhood in highly desirable area. Strong PPO/FFS private practice, features 3 ops in 900-square-foot condo. Real estate also available. Seller refers Endo, Pedo, Oral Surgery, Perio, and implant placement. Room to grow; adding days and procedures. Strong hygiene program. Contact Henry Schein Professional Practice Transition Sales Consultant Michael Apalucci at (718) 213-9386; email: michael.apalucci@henryschein.com. #NY1874.

WATERTOWN: Class-act office in best location near Fort Drum; off main highway with high visibility in active small strip mall. Doctor moving out of state. Gross revenue $445K working 3.5 days. Three ops. Eaglesoft, Planmeca digital pan, all A-dec chairs and cabinetry, including sterilization center. Only 9 years old. Contact Henry Schein Professional Practice Transition Sales Consultant Donna Bambrick by email: donna.bambrick@henryschein.com; or call (315) 430-0643. #NY2484.

CAMDEN: 4+4-op general practice has associate buy-in opportunity. Digital, high-tech, paperless, modern office utilizing EagleSoft. Strong hygiene program. Contact Henry Schein Professional Practice Transition Sales Consultant Donna Bambrick at (315) 430-0643; or email: donna.bambrick@henryschein.com. #NY285.

CICERO: Well-established general practice in community's fastest growing suburb. Located in busy plaza with 1,460 square feet. Walking distance to area's largest high school, creating potential for significant growth. Four (4) A-dec ops, sterilization center, new digital Pan, Dentrix software and Dexis sensors. Doctor refers out most specialty procedures. Healthy new patient flow and patient base. Accepting mix of insurances, plus FFS. Gross just under $700K. Contact Transition Sales Consultant Donna Bambrick by email: donna.bambrick@henryschein.com; or call (315) 430-0643. #NY1677.

WATERTOWN AREA: General practice with $500K revenue. Digital, walk-in ready with nice equipment. Located in stand-alone building, which is for sale with two (2) apartments with private entry. Contact Henry Schein Professional Practice Transition Sales Consultant Donna Bambrick by email: donna.bambrick@henryschein.com; or call (315) 430-0643. #NY1421.

LONG ISLAND: North Shore. Ready for terrific opportunity in highly desirable area? Step right up. PPO and FFS private practice with updated equipment features 3 ops in 900 square feet utilizing Dentrix, digital X-rays, Dexis and laser. Clinical procedures referred. 41 patient hours per week and strong supporting staff. Met all post-COVID challenges and now uses Electrostatic Disinfection. Seller available to stay as needed. Contact Henry Schein Professional Practice Transition Sales Consultant Mike Apalucci at (718) 213-9386; or email: michael.apalucci@henryschein.com. #NY2403.

WOLCOTT: Great rural lifestyle with fully modernized, up-to-date, high-tech general practice. Revenue $850K on 3 days/week. One hour from Rochester and Syracuse. Stand-alone, converted 2,500-square-foot residence has real estate for sale. Two full-time hygienists, four (4) ops; mostly all A-dec, New Sirona CBCT, Eaglesoft, Schick sensors, CEREC scanner and milling machine. 50% FFS and 50% indemnity plans, with 8-10 new patients per month. Consideration for Associate with buy-in agreement. Contact Henry Schein Professional Practice Transition Sales Consultant Donna Bambrick by email: donna.bambrick@henryschein.com; or call: (315) 430-0643. #NY2692.

SOUTH BUFFALO: Very reasonably priced practice for sale. Excellent option especially if considering expansion of current practice or recent graduate not desiring to incur sizeable debt. 2 large, bright ops, with great Pelton Crane chairs/delivery units. Utilizes Sirona Orthophos XG5 pan with bitewing feature. Clinical production highly focused on quality restorative, with most specialty services referred to local specialists. In-network with larger insurance providers. No Medicaid. Contact Henry Schein Professional Practice Transition Sales Consultant Donna Bambrick at (315) 430-0643; email: donna.bambrick@henryschein.com. #NY273.

SARATOGA COUNTY: 100% FFS 5-op practice in desirable location; grossing $900K. Digital scanning, X-rays and Pan. Room for additional ops. Real estate available for sale or lease. Contact Henry Schein Professional Practice Transitions Consultant E. Scott Weinberger at (518) 512-9988; or email: escott.weinberger@henryschein.com. #NY259.

SUFFOLK COUNTY: Pediatric practice. Highly respected and in operation 40 years. Established 21 years by current owner. 1,600 square feet in lovely community with 4 ops. 4-day workweek. 10% FFS; 70% PPO; and 20% Medicaid. Solid staff members will stay with new owner. Motivated seller. Interested in all offers. Contact Henry Schein Professional Practice Transition Sales Consultant Linda Zalkin at (631) 357-1003; or email: linda.zalkin@henryschein.com. #NY308.

FAYETTEVILLE: Central NY general practice in desirable community. Outright sale or available for Associateship leading to buy-in. High visibility building with 7 ops. Digital, Dentrix; 2 full-time hygienists. Over 2,200 active patients and no state insurance. Referring out many specialty procedures. For details contact Henry Schein Professional Practice Transition Sales Consultant Donna Bambrick at (315) 430-0643; or email: donna.bambrick@henryschein.com. #NY310.

STATEN ISLAND: Wonderful family practice in well-designed, 2-op office with third plumbed op. Digital X-rays, intraoral camera and Dentrix. Beautiful 3,700-square-foot property for sale, with two-story 1,800-square-foot office and patient-friendly, open-air area. High visibility neighborhood with easy access off main highway. Mix of FFS/PPO grossing $287K on 28 hours/week. Great potential for more days with additional procedures kept in-house. Contact Henry Schein Professional Practice Transition Sales Consultant Mike Apalucci at (718) 213-9386; or email: michael.apalucci@henryschein.com. #NY311.

NASSAU COUNTY: North Shore. Productive, well-established practice located in very desirable community. 5 operatories, plus 1 additional not equipped in 1,700 square feet, utilizing Eaglesoft, Schick, Biolase, Sirona CBCT and Itero. 60% PPO; 20% FFS; 20% Delta Premier. Seller willing to work post-sale for agreed timeframe. Great opportunity to acquire strong solid practice running at 39 hours/week, with unlimited growth potential. Location, location, location. Contact Henry Schein Professional Practice Transition Sales Consultant Linda Zalkin at (631) 357-1003; or email: linda.zalkin@henryschein.com. #NY313.

NASSAU COUNTY: General practice with 3 equipped ops, digital, high tech. Updated using EagleSoft. Located in desirable, diverse financial community. Gross $387K. Contact Henry Schein Professional Practice Transition Sales Consultant Mike Apalucci at (718) 213-9386; or email: michael.apalucci@henryschein.com. #NY316.

SYRACUSE: Immaculate general practice. Fully equipped with latest technology: Dentrix, Dexis, Waterlase, CAD/CAM, digital Pan. Three ops; 2,300 active patients. Strong FFS and some PPO. Revenue $481K. Refers out specialties. Stand-alone, converted residence with income apartment featuring 3 bedrooms, 1.2 baths. Building for sale; near hospital and college. Contact HSPPT Consultant Donna Bambrick at (315) 430-0643; or email: donna.bambrick@henryschein.com. #NY317.

NASSAU COUNTY: Exciting opportunity to purchase extraordinarily profitable GP dental practice on Long Island's North Shore. In this location for 35 years in terrific community. 4 operatories, large lab, administrative space and ample reception room. Wireless intraoral camera, Dexis, digital X-ray and Tru-Def Intraoral Scanner included in fully computerized office with 8 workstations and server. Seller willing to stay for period to assure strong and effective transition. 3-year average annual gross: $987K. Contact Henry Schein Professional Practice Transition Consultant Mike Apalucci at (718) 213-9386; or email: michael.apalucci@henryschein.com. #NY1296.

WESTERN SOUTHERN TIER: Quick sale. General practice with 4 bright operatories and room to add more. FFS. Digital, digital Pan, Curve software. Large and loyal patient base. Stand-alone 3,400-square-foot building also for sale. Practice nestled in popular college town with major manufacturing. Revenue $600K. Offered for steal at $290K for practice. Huge parking lot and 1.67 acres. Contact Henry Schein Professional Practice Transition Sales Consultant Donna Bambrick at (315) 430-0643; or email: donna.bambrick@henryschein.com. #NY1335.

NASSAU COUNTY: Looking for terrific practice positioned for immediate revenue growth featuring valued location and highly profitable office? You found it. Located on busy thoroughfare, practice has 3 operatories with additional room for expansion. Sun-filled, sparkling office occupies 1,472 square feet in self-standing building. Large reception area, lab and private office. Equipped with intraoral camera, Dexis digital X-ray, Dentrix, and CariVue caries detection. Gross revenue: $523K. Mix of FFS and PPO. Seller willing to help with transition. Contact Henry Schein Professional Practice Transition Consultant Mike Apalucci at (718) 213-9386; or email: michael.apalucci@henryschein.com. #NY1428.

SUFFOLK COUNTY: South Shore. Begin practicing immediately in beautifully treated facility located in growing and popular community. 1,500 square feet. 3 ops, plus additional room for expansion. Digital X-rays, intraoral camera with Dexis and Dentrix software. Insurance and FFS driving $528K in gross receipts, with strong profit margins. Seller owns condo available for lease or purchase. Strong hygiene program; all specialties referred out. 22- to 24-hour workweek. Lovely office; amazing upside for continued growth. Contact Mike Apalucci at (718) 213-9386; or email: michael.apalucci@henryschein.com. #NY1587.

AMHERST: General/Prosthodontic practice situated in growing community. 4 fully equipped operatories and one unequipped for expansion. 1,875 square feet of leased space in handicapped-accessible, beautiful office park. Dentrix, Digidoc cameras, Gendex sensors, Planscan with milling unit and glazing machine, Sarona Pan digital X-rays and Ivoclar laser. Great staff. All endo and oral surgery referred out; no state insurance. Doctor willing to stay for transition. Gross revenue $439K. Contact Donna Bambrick at (315) 430-0643; or email: donna.bambrick@henryschein.com. #NY1594.

ERIE COUNTY: Located on busy road surrounded by established residential population and beautiful town. 3-op digital practice; well-positioned for future growth. $307K gross revenue. Crown and bridge, restorative and preventative focus. Some specialties referred out. Strong patient base and mixed PPO. Real estate next to practice owned by seller and for sale with practice. Contact Brian Whalen at (716) 913-2632; or email: brian.whalen@henryschein.com. #NY1648.

MENDON: Amazing practice in growing, affluent town near Rochester. Three bright, up-to-date operatories in spacious condo also for sale. Located in office park with 1,080 square feet. Largely FFS; refers out specialties. Room to grow. Move-in ready. Great equipment; new compressor, new Airtech Vac, new furnace and just updated computers with Eaglesoft practice management software. Dexis Sensors, non-digital Sordex Pan and Covid-ready. Live, work and be part of great community. Contact Henry Schein Professional Practice Transition Sales Consultant Donna Bambrick at (315) 430-0643; or email: donna.bambrick@henryschein.com. #NY1680.

SUFFOLK COUNTY: Seller ready to retire from 40 years of practicing in small professional building in lovely community. 1,350 square feet. 4 ops, plus 1. Nicely appointed; extremely neat, with welcoming, warm feel. 2019 gross receipts $330,951; 2018 gross receipts $373,230. Specialties referred out. 70% PPO and 30% FFS. 1,250 active patients. Rent: $2,705, including water. Functional office needs updating. Seller highly motivated. Contact Henry Schein Professional Practice Transition Consultant Linda Zalkin at (631) 357-1003; or email: linda.zalkin@henryschein.com. #NY1704.

ERIE COUNTY: Well-established general practice in heart of south Buffalo. Highly visible practice located on busy street with on-street and off-street parking. 5 ops with excellent workflow. Dentrix, digital pan and sensors. Mix of FFS and PPO with some Medicaid. Real estate for sale with apartment for rental or to live. Great opportunity to acquire strong net income practice and grow. Gross revenue $410K. Contact Brian Whalen at (716) 913-2632; or email: brian.whalen@henryschein.com. #NY1796.

HUDSON COUNTY, NJ: Beautiful, well-established and nicely equipped general practice in high visibility, corner location. Four (4) operatories; all digital with Dentrix, CBCT and Ceph, intraoral cameras, Zoom and laser. Over 1,100 active patients in leased 2,000-square-foot space. Some ortho and implant placement being done. Revenue $780K. Contact Henry Schein Professional Practice Transition Sales Consultant Donna Costa at (609) 304-0652; or email: donna.costa@henryschein.com. #NJ1478.

SUFFOLK COUNTY: North Shore. Well-established practice in desirable community located in store-front building with lots of visibility. 1,000-square-foot office using Dexis digital X-ray, panoramic digital pan and Easy Dental software. 2 treatment rooms, plus 1 additional plumbed. Open 4.5 days/week with stable patient base and strong hygiene program. Specialty procedures referred out. Gross receipts over $450K. Well-trained staff available for transition. Seller open to transition options. This will not last. Contact Linda Zalkin at (631) 357-1003; or email: linda.zalkin@henryschein.com. #NY1815.

NASSAU COUNTY: North Shore. Well-established practice in desirable community with 4 ops, digital X-ray and Easy Dental in 1,200 square feet. Open 39 hours/week; referring out most specialty procedures. 85% PPO and 15% FFS. Well-trained, experienced staff of 6 available for transition. Fourteen new patients per months with no outside marketing and 1,800 loyal patients. 2020 showed nice post-Covid production rebound. Seller will remain available for smooth transition. Contact Linda Zalkin at (631) 357-1003; or email: linda.zalkin@henryschein.com. #NY1854.

DUTCHESS COUNTY: Well-established GP in desirable growth community. Established 47 years, practice has loyal patient base and is located in professional building with ample free parking and main street visibility. 1,000-square-foot office. Seller owns real estate and willing to continue long-term lease. Four treatment rooms, digital X-ray, intraoral cameras, laser unit and Eaglesoft. Most specialty procedures referred. $613K revenue can quickly grow by adding days and procedures. Contact Henry Schein Professional Practice Transition Sales Consultant Mike Apalucci at (718) 213-9386; or email: michael.apalucci@henryschein.com. #NY2390.

LIVERPOOL: North Syracuse. Six (6) ops with Pelton & Crane and X-ray room with pan, Dexis and ScanX. Insurance practice. Professional building with parking; working 4 days/week. Contact Henry Schein Professional Practice Transition Sales Consultant Donna Bambrick at (315) 430-0643; or email: donna.bambrick@henryschein.com. #NY250.

QUEENSBURY: North of Albany. General practice with revenue of $520K. Selling practice and building for $400K. Practice alone valued at $367K. Stand-alone building in professional office park with large parking lot. Six miles from Lake George; near 4-year college, ski areas and 20 minutes from Saratoga Springs. Four bright ops, Practice Works practice management program, Kodak intraoral cameras and pan. Contact Henry Schein Professional Practice Transition Sales Consultant Donna Bambrick by email: donna.bambrick@henryschein.com; or call (315) 430-0643. #NY1735.

NORTHEAST BRONX: Established since 1980, private and insurance-based GP located in busy, desirable Bronx community. Loyal patient base, with active new patients per month. Street corner, street-front location, with bus stop right at office and directly across from Montefiore Medical Center. Selling practice and real estate together. 1,700-square-foot office. 3 equipped treatment rooms with 2 additional plumbed. Seller willing to stay as needed. Contact Henry Schein Professional Practice Transition Sales Consultant Mike Apalucci at (718) 213-9386; or email: michael.apalucci@henryschein.com. #NY2404.

KINGSTON: Biological/Holistic, high-producing FFS practice that is mercury safe. About 2 hours from NYC and minutes from Woodstock. Revenue of $1.5M. Five ops; stand-alone building also for sale. Great systems keep A/R low; open 5 days/week. Equipment 6 years old includes Ozone Generators, IQ air operatory filtration, Dentrix and Dexis. Paperless office. 1,600 patients. Perio associate one day/week. Doctor will stay if needed. 15 new patients/month; dedicated staff. Contact Transition Sales Consultant Donna Bambrick at (315) 430-0643; or email: Donna.bambrick@henryschein.com. #NY2560.

MIDTOWN MANHATTAN: High-end, FFS dental practice for sale in heart of Midtown. Last year gross over $1M on 4-day week. Beautiful architecturally designed modern spacious facility. Six fully equipped ops like new, with room to expand; windows throughout; two private offices. Separate alcove for Planmeca Pan/Ceph imaging. Tenant controlled AC; fully computerized; turnkey operation. Secure, 24/7, Class A commercial building. New 10-year lease available. Staff will remain. Many amenities, too numerous to mention. No brokerage fee. Motivated seller wishes to retire and will stay to introduce. Reply to: ddsnow28@aol.com.

SUFFOLK COUNTY: Orthodontic practice on North Shore. 1,280-square-foot, 4-chair condominium office. Modern decor and equipment, management software, digital pan/cep unit and model scanner. PPS and FFS. Contact Dr. Scott Firestone by email: Scott.Firestone@henryschein.com; or call (516) 459-9258.

GLENS FALLS: General dental practice for sale. Outstanding, long-time, quality family practice. Fully digital with CEREC. Owner will train during transition. Sale includes building with office, equipment and apartment. Self-sufficient. Three ops and room for fourth. Excellent reputation and ever-expanding loyal patient base and loyal staff. Golden, walk-in opportunity for right person. $550K on 4.5-day week. For details call: (518) 791-7457.

ROCKVILLE CENTRE: Dental office building for sale. Located on major intersection at 364 Merrick Road. 2,300 square feet. 5 treatment rooms; expandable. Onsite parking, full basement with lab, 2-zone HVAC gas/heat. Equipment included. Taxes $20K annually. Price $725K. Contact owner at (516) 652-9238; or email: alexandercorsair1941@gmail.com.

ITHACA: Affordable Finger Lakes area. Turnkey general practice. Eager to retire. Valuation $291K; asking $225K. 1,574 active patients are 99% FFS. 2019 annual collections $481K with relaxed pace of 4-day week. Excellent income growth potential. Referrals include implant placement, ortho, endo and oral surgery. Three bright, spacious, fully equipped operatories. Updated technology includes digital X-rays and Eaglesoft. HEPA-filtered/UV- treated air (>12 changes/hour) and chairside extraoral HEPA filtration units. Highly visible, well-maintained, handicap-accessible, free-standing building with off-street parking. Building for sale ($275K) or lease. Includes second-floor apartment for use or rental income. Sale of building and equipment to specialty practice or use as satellite office considered. Region has natural beauty, excellent schools, recreational and cultural activities. Inquiries confidential. Contact Dr. Bernie Kowalski by phone: (267) 337-3215; or email: b.kowalski@choicetransitions.com.

NORTH SHORE, SUFFOLK COUNTY: Great opportunity. Owner retiring. Professional building and lucrative practice for sale. Busy location with designated parking spaces and handicap access. Dental practice: 4 ops, lab, private office, waiting and reception room, staff kitchen and storage. Second floor: renovated apartment in desirable downtown location. For details, contact Katy Anastasio, Licensed RE Broker at (631) 549-5800; or email: aarealtors@gmail.com.

BROOME COUNTY: Beautiful, busy, well-established practice with very limited competition available for immediate purchase. Six well-equipped operatories. Digital X-ray and pan, updated computer system, turnkey. Easy transition to new owner. Gross revenue $585K/net $285K on 4-day work week. Practice alone appraised at $411K. Will sell practice and building for $399K. Contact cncnl@aol.com; or text to: (607) 768-3810.

NASSAU COUNTY: Plainview. Practice available for quick sale due to illness. $425K in 9.5 months of 2020 — same as previous year's total. Beautiful office in Plainview. Contact: buymypractice25@gmail.com.

ROCKLAND COUNTY: Suffern. Dental practice for sale. Office for rent. Be the exclusive dentist in beautiful, middle class, 1,500-family residential garden apartment complex. Immediate income. Fully furnished and equipped. Retiring dentist will introduce. Contact: (845) 642-2463.

BUFFALO SUBURB: General dentistry practice in Buffalo suburb for sale. Second owner of practice established for 61 years. Good gross and net on part-time hours. Practice strictly hygiene and restorative. All endo, perio, implants and oral surgery referred out. Great opportunity for growth. Owner looking to retire later this year. Real estate available if desired. Very favorable terms. Preferably looking to sell or merge. Replies to: khc6591@aol.com.

ROCKLAND COUNTY: Long-established FFS general/restorative practice available for purchase. Updated modern practice with active patient database. Owner plans to work part time up to 12 months to assure successful transition. Please direct inquiries to: drsmiles2021@gmail.com.

STATEN ISLAND: Prime location. Exceptional practice for sale. Beautiful office in prime location on busy street. Grossing just under $1M in 2019. High visibility with plenty of on-street parking. Must be seen in person to appreciate how much has been put into office. 5 ops, with room to expand and add 5 more. Owner is GP with busy hygiene and re-care system in place. Open only 2.5 days/week at 20-25 hours/week. FFS with big focus on cosmetic and implant restorations. Periodontist comes in to place implants. Referring out Endo, Ortho

and Pedo. Dentist owns commercial real estate subject to sale with right package deal. Contact Inna at (866) 881-9157; or email: sales@btqconsult.com.

CENTRAL PARK SOUTH: Oral Surgery practice for sale. Transition to ownership. Premier Oral Surgery practice with four operatories with windows facing Central Park. Prime, exclusive Medical Condominium building on Central Park South. Established dentoalveolar surgery practice since 2001 with large patient database, complete medical equipment and website. Long-term lease of professional space of approximately 900 square feet included. Current oral surgeon retiring. Office-based practice includes dentoalveolar surgery, bone grafting, ridge augmentation, sinus floor augmentation, dental implants, wisdom teeth and IV general anesthesia. Pristine office in prime location. Tremendous growth potential. Please inquire by email: nycentralparksouth@gmail.com.

SUFFOLK COUNTY: Oral and Maxillofacial Surgery medical condo for sale. 2,468 square feet and fully equipped. Turnkey business. For more information contact Rich Pino at (516) 667-7107; or email: rpino@rrcrg.com.

BUFFALO: Periodontal practice. Ownership opportunity. Busy periodontal practice; two locations; over 2,100 active patients. Current doctor seeking 50/50 partner. 9 operatories and collections of $2.25M. Adjusted EBITDA $480K. 40-50 new patients per month. To learn more, please contact Kaile Vierstra with Professional Transition Strategies: kaile@professionaltransition.com.

LONG ISLAND: Periodontal practice for sale. New to market. Thriving practice located in office building with 1,700+ square feet, as well as satellite office for additional business. 2,100 active patients and 10 new patients/month. 5 operatories and expansion opportunity for additional plumbed op. Collections of $1.4M and EBITDA of $300K. Well-established practice with great referral base. To learn more, please contact Kaile Vierstra with Professional Transition Strategies: kaile@professionaltransition.com.

ULSTER COUNTY: Hudson Valley dental office in Woodstock. Excellent location on high-traffic intersection. 2 hours from NYC in high-demand region of NY with vibrant middle- upper-income clientele. Practice: Digitally equipped. Turnkey and Covid-ready operation with 5 ops, dedicated pan/ceph room, N2O, high-powered suction and state-of-the-art IT with Dentrix. 700+ FFS patient records available. Established 40+ years. Suitable for single or multiple dentists. Private ample parking lot. Building: country setting, charming and laid-back. Abundant natural light throughout. City water and sewer, central AC, high-speed internet, new roof, single story, meticulously maintained. Purchase outright; no transition period from current doctor/owner. Great investment property can be easily suited for other professional/medical office needs. Email: max@TravelinMax.com. See photos at: http://www.WoodstockDentist.com/property-photos.html.

PARAGON Practice Transitions
"We Put the SUCCESS in SUCCESSion"

SOUTHERN WESTCHESTER: Long-established general practice with specialists coming in. State-of-the-art office in most desirable location. Over $1.5M in collections on FFS patients. Fully computerized, digital X-rays, panoramic. Own practice of your dreams. NYNEIRGR.

NORTHERN WESTCHESTER: Highly respected, long-established integrative dental practice in prime professional building. 4 ops; fully computerized, digital X-rays, cone beam and laser. Over $1.9M revenue in 2019; on track to do $2M+ in 2020. Close to 1,000 FFS patients, with over 20 new patients/month. Rare opportunity to own 5-star practice in beautiful suburb 45 minutes from NYC. NYERIRLE.

ORANGE COUNTY: Well-respected endodontic practice within 1 hour of NYC. Approximately $650k revenue; combination of better PPO and FFS. Seller willing to stay to introduce and assist transfer of practice. Modern facility; computerized with digital X-ray. NYERIRPU.

ULSTER COUNTY: Fabulous, long-established, FFS practice. Gross revenue nearly $900K, with over $200K in passive income. Over 800 FFS patients. Five ops; fully computerized with digital X-rays, panoramic and soft-tissue laser. Practice in "New Hamptons" in relaxed atmosphere and make over $400K net income. NYIAIRLE.

NORTHERN SUFFOLK COUNTY: Long-established, highly respected FFS general practice for merger into your location. Approximately $500k in collections. Doctor willing to stay on for one year to assure transfer of patient population. A rare gem that will not be on the market long. NYERIRPA.

For more information, please contact:
Ira@paragon.us.com; or call (516)318-3900.

Find us online at: www.paragon.us.com.

FOR RENT

MANHATTAN: Murray Hill. Space available in established, friendly dental practice off Park Avenue. One op with shared reception area, WiFi and utilities. First floor of luxury doorman building in desirable location at 35 East 35th Street. Call (212) 532- 0690; or email: parkavedentistny@gmail.com.

MIDTOWN EAST: Grand Central area. 2 operatories and office available for rent full or part time. Operatories are recently renovated with modern equipment. Bathroom within office suite. Shared front desk space available. Full access to sterilization. Please email: tyoung89@gmail.com.

MIDTOWN MANHATTAN: 2-3 operatories for rent with shared front desk space. For more information, please email: veronica@maidsonavenuesmiles.com.

MIDTOWN MANHATTAN: Beautiful, new, large-windowed dental operatories for rent. Pelton Crane equipment, massage chairs, private office and front desk space. Doorman; warm environment. Best location — 46th Street and Madison Avenue. Please call (212) 371-1999; or email: karenjtj@aol.com.

WHITE PLAINS: Modern, state-of-the-art operatories available in large office with reception. Available FT/PT; turnkey. Rent includes digital radiology with Panorex, equipment, Nitrous, all disposables. Start-up or phase down. Need a satellite or more space? Upgrade or downsize. Please call (914) 290-6545; or email: broadwayda@gmail.com.

MIDTOWN MANHATTAN: Facing Central Park South. Fully digital dental office, including i-Cat, for lease. Great opportunity; be on your own. State-of-the-art décor, newly renovated, modern office and equipment; handicap access. Near all public transportation. Available immediately, full time or part time. To schedule appointment, please email: perioimplantbythepark@gmail.com; or call: (917) 679-6013.

BROOKLYN: Sheepshead Bay. Approximately 1,800-square-foot storefront dental office space. 5 ops; reception area, lab area, large staff lounge and private office. Current dentists did so well they are expanding to larger space. Directly across from thousands of families. Long lease available with comfortable terms, plus free months to get started. Call landlord directly at (516) 593-0962.

MIDTOWN MANHATTAN: Dental ops for rent on Madison Avenue. FFS practice has 1-2 ops available full time or part time. Beautiful, new, large-windowed dental ops with Pelton Crane equipment, massage chairs and two TVs at 12 o'clock and overhead. Pano/CT/Ceph available. Shared front desk space and private office. Will consider sharing staff if needed. Located at 53rd Street and Madison Ave. Please inquire at: nycmidtownoffice@gmail.com.

MANHATTAN: Dental op for rent part time. Private office located on Park Ave; walking distance to Grand Central. Ground floor; separate entrance; lots of windows with street views; great natural light in op. Exclusive use of office on Mondays, Tuesdays and weekends. Other days negotiable. Ample storage space in op. Inquires to: gentletouchdentalnyc@gmail.com.

BROOKLYN: Midwood. Kings Highway and East 14th. 1 or 2 rooms for rent full time or part time in 2-story medical/dental building. Rooms plumbed and have dental cabinetry; can be used as ops or private/business office. One block from train and bus service. Private parking lot across the street. Waiting room newly renovated, lab/sterilization area, staff lounge, Pan and storage space available. Reasonable. Reply to Gary at: drgaryfranco@gmail.com; or call (917) 797-4407.

MIDTOWN EAST: 2,500-square-foot full-floor office with high ceilings and lots of amazing light all day. Office just underwent gut renovation. Private office available. Plenty of front desk space and 1 to 2 chairs available. Everything brand new from floor to ceilings and equipment. Call or email today. (516) 780-3945 or (516) 780-3945; email: drzarabi@yahoo.com.

SERVICES

TAXES: Your office, business or personal. Specialty dentists. Personable CPA. Call Stuart A. Sinclair, CPA, at (516) 935-2086. Visit our website: www.dentaxsolutions.com. Offices located at 1120 Old Country Rd., Plainview, NY 11803.

OPPORTUNITIES WANTED

WESTCHESTER: Board-certified periodontist with over 15 years experience seeks part-time position in general dental practice. Skilled in all periodontal procedures, implant placement, extractions, bone and soft-tissue grafting, sinus grafting and pinhole technique. Has all equipment and instruments. Please call (917) 363-4672; or email: periodoc914@gmail.com.

NEW YORK METRO AREA: Periodontist with 50 years experience seeks position in your office. Nassau County or 5 boroughs. Contact: pbzs12644@aol.com.

OPPORTUNITIES AVAILABLE

ROCKLAND COUNTY: Community Medical & Dental Care, Inc., is multi-specialty medical and dental center. As dental department expands we seek to hire part-time practitioners:

- **Pediatric Dentist:** DDS or DMD degree with thorough knowledge of specific dental needs of children and excellent communication skills.

- **Endodontist:** Responsible to perform root canals and other advanced procedures; diagnose and treat severe oral pain; strong "bedside manner" that puts patients at ease.

- **Oral Surgeon:** Consult with patients; treat infections of oral cavity; tooth extractions; consult with patients; analyze patient data to determine needs and treatment goals.

All providers must be Board Certified or Board Eligible and have NYS License. Generous salary commensurate with experience. If interested, please email CV to: schait@cmadc.com; or call (845) 352-6800, ext. 6817.

INDIANA: Associateship available. Full-time associate wanted for very busy practice located in Plymouth, Indiana. Plymouth is growing community in North Central Indiana. Low taxes, low crime, low reported cases of COVID-19. Easy access to South Bend, Fort Wayne, Chicago and numerous recreational lakes. Must be proficient in all aspects of dentistry. Pay based on 35% production. Buy-in possible after 1 year. Send resume to: drbrucefbecker@yahoo.com.

SARATOGA COUNTY: Fantastic and rare opportunity to join high-quality and rapidly growing dental group. Modern, state-of-the-art facilities with new equipment, digital X-rays and paperless charting. Seeking the right dentists to join our team as we expand and grow. First- and second-year salary minimum guaranteed with opportunity for earnings well above average. Flexible terms can be tailored to fit individual desires if determined to be right fit. Very competitive compensation methodology. Training available for precision-guided dental implant surgery. Very strong mentorship program for new and recent graduates. Contact John O'Brien, DDS: jobrien1218@gmail.com; or (518) 703-5321.

WILLIAMSBURG: High-end oral surgery practice seeks part-time prosthodontist. Responsibilities include treatment planning and execution of complex fixed implant restorations ranging from single unit to multi-unit to full-arch reconstruction, including complex resorption cases. Patient-focused office and restorative-driven dental implant practice. Depending on patient acceptance and volume, room for further future opportunity. Email: astern@havemeyeroms.com; or call: (718) 909-7960.

AUGUSTA, MAINE: Associate dentist wanted for patient-focused, FFS practice. Seeking fantastic dentist who values comprehensive care, patient experience and growth. Progressive and comprehensive private practice with advanced technology looking for full-time associate dentist to support growth and development. Responsible for being leader within practice, overseeing re-care, performing periodic and comprehensive exams, diagnosing, and presenting comprehensive treatment and support overall practice goals. New doctor will be supported by excellent team of dental professionals committed to providing extraordinary patient care and experience. Competitive compensation package and quality clinical and business mentorship, along with continuing education and other professional development resources available. Please send CV to: carrie@beautifulsmile.com.

FINGER LAKES REGION: Privately run dental office seeks exceptional associate to join growing, busy team. We deliver high-quality, personalized care in newly built, modern facility with caring and upbeat environment. Great pay and production incentives. Base pay plus commission. FFS; no insurance networks. Future partnership option available. 2 years experience preferred. Higher quality of life at much lower cost. Compare with New York City, for instance: Housing– $300K for home with 4 bedrooms, 3 baths vs. 1-bedrom 1-bath coop apt; Schools–Montessori private school for $9,555 vs. $46,300; Tolls–$0 vs $400/month; Traffic–none vs congested; Crime–low vs high. Cover letter, resume and inquiries to Maria E. Marzo, DDS, by email: drmmarzo@fingerlakesfamilydental.com; or call: (607) 742-1854.

POTSDAM: Full-time associate wanted for partnership. Busy FFS general practice supports 2 FT and 1 PT dentist and 5 FT hygienists. Senior dentist retiring. New 4,500-square-foot building and 9 operatories of new equipment, including digital X-rays, paperless charting, iTero scan. Services include restorative, periodontal, endodontics, orthodontics and hybrid dentures. Potsdam is located in Adirondack foothills in center of St. Lawrence County. Outdoor enthusiasts will enjoy St. Lawrence River and Adk mountains in backyard. Ottowa, Lake Placid and Thousand Islands all within 90 minutes. Tight-knit community, considered cultural and educational center rich in education and technology hosting State University of Potsdam and Clarkson University with St. Lawrence University and SUNY Canton 15 minutes away. Potsdam boasts one of NY's finest public school systems and progressive medical facility–St. Lawrence Health System. Other nearby employers include ALCOA Aluminum, Corning Glass, NYS Power Authority and NYS Dept of Corrections. To learn more, visit: www.sandstonedentistry.com.

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IVOCLAR VIVADENT'S

ICDE

International Center for Dental Education

Digital Workflow - Materials Selection and Cementation Protocol

Course Description:

The patients demand for esthetic restorations encourage dental practitioners to select contemporary ceramic materials for restorative treatments. With the advancements in dental technology, use of chairside digital workflows are preferred by dental offices. There are multiple digital workflows to selected depending on dental practice requirements, however, selection of ideal restorative materials is critical for clinical success.

A variety of ceramic restorative materials - feldspathic, lithium disilicates, zirconia and cementation options for luting or bonding are available. Therefore, a selection of ideal workflows and materials for clinical conditions can be confusing! In this program, we will review digital technologies, various ceramic materials, their properties, clinical selection, bonding protocols and tips/tricks to make this journey easier for dental practitioners.

Learning Objectives:

- Overview of digital workflows and technologies
- Classification and comparison of contemporary ceramic materials
- Understand the differences in the restorative materials options along with the tips for clinical selection.
- Overview of bonding protocols.

Date & Time:

- March 30, 2021; 6:00 – 7:30 PM

Registration:

https://register.gotowebinar.com/register/5587347969443513872

CE: 1.5 Credits

Dr. Shashikant Singhal, B.D.S., M.S., graduated with Bachelor of Dental Surgery from the College of Dental Sciences, India. After graduation, he maintained a successful dental practice in Delhi, India. However, his passion towards dental materials research and eagerness to learn about materials science inspired him to enroll in the Advance Clinical Dentistry Program (Biomaterials) at the University of Alabama at Birmingham, AL. He concentrated his research on contemporary dental materials and presented his research data at both national and international scientific meetings. Currently, Dr. Singhal serves at a position of *Director of Education and Professional Services* at Ivoclar Vivadent Inc., Amherst, NY. He directs education initiatives of Ivoclar Vivadent in United States. In addition, he participates in the development of new products/technologies and conducts clinical evaluations. He is an editorial board member of Journal of Cosmetic Dentistry, published multiple research articles, presents his research data at scientific meetings and lectures at national international venues.

PACE ACADEMY OF GENERAL DENTISTRY PROGRAM APPROVAL FOR CONTINUING EDUCATION

Ivoclar Vivadent, Inc.
Nationally Approved PACE Program Provider for FAGD/MAGD credit.
Approval date does not imply acceptance by any regulatory authority or AGD endorsement.
June 1, 2018 - May 31, 2021
Provider ID# 218958

NYSDF New York State Dental Foundation
IMPROVING THE ORAL HEALTH OF ALL NEW YORKERS

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Management of Wisdom Teeth

NYSS OMS
NEW YORK STATE SOCIETY of Oral and Maxillofacial Surgeons

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Dental Implant Surgery
Wisdom Teeth Management
Extractions and Other Oral Surgeries
Facial Injury / Trauma Surgery
Oral, Head and Neck Pathology
Corrective Jaw Surgery
Obstructive Sleep Apnea (OSA)
Facial Cosmetic Surgery
Cleft Lip/Palate and Craniofacial Surgery
TMJ and Facial Pain

Why refer patients to an OMS even if their molars are erupted and pain-free?

Even erupted third molars can be prone to disease. An oral and maxillofacial surgeon (OMS) is well-qualified to regularly assess a patient's third molar status or, if necessary, to remove problem wisdom teeth. When it comes to wisdom teeth, pain-free does not mean problem-free. Visit MyOMS.org for more information.

AAOMS

Oral and maxillofacial surgeons:
The experts in face, mouth and jaw surgery®

MyOMS.org