Same-day inlay/onlay technique

Want to save teeth and time and improve your practice?

By Lorin Berland, DDS, FAACD

I’m always looking for ways to help my patients get the dentistry they want and deserve. More and more patients are demanding esthetic, reliable alternatives for their old, defective amalgams.

They still want to avoid crowns, root canals and multiple visits. This is why I’ve been providing reliable, durable and much appreciated biomimetic same-day inlays and onlays for years.

What is biomimetic dentistry? Biomimetic dentistry is conservative, preservative dentistry. We treat weak, fractured and decayed teeth in a way that conserves tooth structure and helps preserve strength.

This helps provide resistance to bacterial invasion. It reduces the need to drill down teeth for crowns and will reduce postoperative discomfort, as well as the need for two appointments, and possible endodontic treatment.

In essence, it is utilizing the latest in dental materials and technology to keep what we’ve got for as long as we’ve got — just as nature intended. Unlike other parts of our bodies, our teeth do not mend on their own.

It is, therefore, imperative to conserve as much natural tooth structure as possible. We strive to do this with same-day inlays/onlays.

This means no excessive tooth removal, no cumbersome temporaries and no time-consuming and uncomfortable second visits.

Biomimetic: to copy/mimic nature

Nature is our ideal model. In order to mimic nature, we cannot drill down teeth to prepare for a crown or onlay. Instead, we can utilize the latest in dental materials to simulate tooth structure. This means no excessive tooth removal, no crown, no root canal and no time-consuming and uncomfortable second visits.

What does oral health have to do with heart health? Quite a bit if you ask some of the leading experts in their respective fields.

Evidence has long shown that those with diseased mouths are at a higher risk for heart attacks and strokes. More recent findings indicate that improving a person’s oral health reduces the risk of atherosclerosis or plaque in arteries. The evidence is so strong that leading experts in periodontology and cardiology are teaming up to encourage other dental and medical professionals to work together.

“The immense power we have as dentists to impact not just our patients’ oral condition but their entire general state of health is becoming clearer in the science when it comes to reducing the risk of heart attacks and strokes. The evidence is so strong that leading experts in periodontology and cardiology are teaming up to encourage other dental and medical professionals to work together. The evidence is so strong that leading experts in periodontology and cardiology are teaming up to encourage other dental and medical professionals to work together.”

Fig. 1: Large, broken-down amalgam.

Fig. 2: Immediate post-op, occlusal.

The oral body connection

By Fred Michmershuizen, Online Editor

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Want to save teeth and time and improve your practice?

Archived hygiene Webinars: Earn 5 C.E. credits!

The DT Study Club Webinar series “Simple Advanced Treatment Modalities for the Dependent Patient” with Hygiene Tribune Editor in Chief Angie Stone, left, and Dental Tribune author Shirley Gutkowski is available online for viewing at a time that suits your schedule.

See page 19A

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December 2009
Periodontist Dr. Bradley Engle discusses online continuing education and how it addresses the needs of dental professionals.

Please tell our readers a bit about your own personal dental background and how you became interested in continuing education.

I went to Ohio State University and gained early acceptance to dental school. By age 24, I earned my dental degree from the Medical University of South Carolina. Over the next 36 months, I earned my periodontics certificate as well as a master’s of health science degree [MHS].

Soon after residency, I passed both parts of the board exam to become a board certified periodontist. I became a clinical associate professor at the Medical University of South Carolina in 2004. Due to the travel distance between Charleston, S.C., and Naples, Fla., it was clear that I had to provide a more direct link between the periodontal residents and me. It was simply impossible to provide teaching there any more than once every couple of months.

In 2006, I hired a professional company to install a high-definition surgical production studio at my Naples location. It was kind of fun recording surgical procedures and making DVDs for the residents to watch and archive for reference. Since graduating from residency, I have enjoyed providing lectures around the world.

How long has www.dentaledu.tv been around and what has been the response to it so far?

Last November, my producer, Emanuel Boeck, and I stumbled upon a rare format of video that allowed streaming through the Internet at a standard Internet speed. By February, we were able to develop a functioning dental C.E. video distribution Web site. We hired a full-time programmer to continually add additional functionality to the Web site.

It is a nice compliment that both content providers as well as co-marketing partners and sponsors are contacting me daily for more information and how to become involved. We recently started forming a steadily growing momentum, especially since we completed the live video broadcasting system with two-way chat system.

We are a recognized dental continuing education provider by ADA CERP, AGD PACE and the Florida Board of Dentistry.

How many courses do you offer?

Over a period of six months, we filmed over 36 content providers with over 65 course titles. All of our content providers are recognized as key opinion leaders in dentistry. In addition, our user base is expanding rapidly.

The site obviously offers tremendous convenience for dental professionals who can learn at home, at their own pace. But are there any disadvantages for those who seek continuing education online?

Dentaledu.tv provides the complete solution for online dental C.E. Recently, I was told that we were the “next generation Webinar.”

There are disadvantages to online C.E., which include the following: Some health care providers coordinate their vacations with taking CE. Their tax deductible vacation expenses are lost when there is no longer a need to travel to receive credits. Despite dentaledu.tv having the ability to provide clean, full-screen video streaming, the interaction with the instructor is lost online.

To help increase the interaction with the provider, we developed a two-way chat system to allow the user to communicate directly with the content provider during live events.

Your Web site is very high-tech and very professional. How complicated was it to set it up?

I spent day and night over the last two years dreaming and implementing the development of this project. Forming strategic relationships with other professionals, I got lucky to get as fast as I have gotten. Owning 100 percent of both the production company, www.1mediaproduction, and DentalEdu, www.dentaledu.tv, has kept the control and advancements of this project solely with me.

Since we are a video Web site, I have partnered with someone — Emanuel Boeck, a major film producer and director from Europe — who has made full-length films. He can mobilize a film crew to produce a one-hour course or can cast call a DentalEdu commercial.

Emanuel helped perfect the use of our video format and has been a loyal friend throughout the last two years.

Our full-time programmer has incorporated patent pending technology that provides a lot of the functionality of the site. He understands and has rewritten the Adobe video players to function as we need them to.

Since May 2009, he has perfected all of the databases and has created a completely automated Web site.

In your opinion, what do you think the future holds for online dental continuing education?

Due to providers’ crazy professional schedules, online education will reduce or eliminate trade shows and some of the smaller venues. The larger venues will use a platform like dentaledu.tv to broadcast high-definition, TV-quality videos to providers that were unable to travel to the meeting.

The next few years will be crucial. Our video systems can stream video to the iPhone. Currently, all of our videos are saved on our server, ready to stream. The future is video.
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whole body inflammatory side effects from dental conditions,” said Dr. Neil Gottehrer, a periodontist who is considered a leading dental authority on the oral-body inflammatory connection.

Gottehrer and Dr. Marvin Slepian, a cardiologist, delivered an address at the recent Academy of General Dentistry meeting in Baltimore on the subject and co-wrote a guide, Evaluation & Management of the Oral Body Inflammatory Connection. The guide was printed as a courtesy by Chase HealthAdvance financing options.

“As more physicians and dentists become fully aware of this and understand that there are treatment protocols shown to diminish or eliminate gum disease for the long term, we’re going to start seeing many more patients having healthier lives medically because of what happens in the dentist’s office,” Gottehrer said. “We’re probably entering one of the most exciting phases that dentistry has ever seen.”

Slepian told Dental Tribune that many people who are at risk may not be receiving any dental or medical care at all. He said it is important when such high-risk people do enter either a dental or medical office, that they be referred to the other specialty as well.

For example, he said, a person who enters a dental office for treatment of inflamed gums may be on the brink of a “major event.”

On the other hand, Slepian said, patients being treated for heart disease can reduce their risk and improve their overall health by improving their oral health.

“Typically evident in most patients with dental disease who were also recorded as exhibiting the biological markers on a blood test, require some type of periodontal care and often-times tooth replacement with dental implants or the use of Captek periodontal crowns if they have dental crowns next to the gums,” Gottehrer said.

Resources are available for dentists and doctors who are interested in incorporating these philosophies into their practices.

Big Case Marketing, a marketing and case acceptance consulting firm for dentists, has developed a referral and marketing program for general dentists, periodontists, oral surgeons and prosthodontists that helps facilitate relationships with physicians.

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Dental tissue engineering products in the U.S. market to double by 2015

By Heather Paterson, BSc & Kamran Zamanian, PhD

Use of tissue engineering is a rapidly growing trend in dental offices across the United States. Used in dental bone graft procedures, tissue-engineering products initiate osteogenesist and the selective regrowth of supporting tissues. Tissue engineering enhances osteoinductivity to increase the rate and volume of bone regeneration, leading to increased success in dental bone grafting.

The U.S. market for tissue engineering is expected to reach nearly $50 million by 2015.

New products drive adoption

In 2009, the market for dental tissue engineering was composed of only three products: GEM-21S, distributed by OsteoHealth; INFUSE, distributed by Medtronic; and Emdogain, distributed by Straumann.

Emdogain was approved by the FDA in 1999, while both GEM-21S and INFUSE did not enter the market until after 2005. Tissue-engineering products are gaining more acceptance from dentists and oral surgeons, allowing them to be used in a wider range of dental procedures.

The continued introduction of new, competitive products will drive the adoption of tissue engineering to improve the effectiveness of bone grafting, especially in elderly patients.

Expands patient base for dental bone grafting

Bone regeneration is enhanced with tissue-engineering products, allowing dental bone grafting procedures to be performed on patients who would otherwise not be able to receive such treatment.

Tissue-engineering products encourage native bone cells, or osteoclasts, to grow into grafted bone material, compensating for the very low endogenous or natural level of growth factors in older patients.

A lucrative market opportunity

Tissue engineering products for dental applications are expected to remain a niche market, but their high price and associated procedure fees represent a lucrative opportunity for dentists.

Procedures using tissue-engineering products do not require much more time than conventional bone grafting procedures while generating substantially larger billing revenues.

Autografts account for large proportion of dental bone grafts

In 2009, over one fifth of dental bone graft materials used were autografts, material taken from the patient’s own body, as shown in Chart 1. Other types of bone graft substitutes include allografts, demineralized bone matrix (DBM), xenografts and synthetics.

Autografts are widely considered as an optimal material for bone grafting due to their inherent growth factors and natural scaffolding. While autografts have no commercial price, the time required to harvest them is an opportunity cost for dental professionals.

Autograft materials are generally used immediately after the extraction of the problematic tooth and often combined with another type of bone graft substitute.

The volume of autografts used is expected to grow at a compound annual growth rate (CAGR) of 8.5 percent by 2015.

Strong recovery expected in dental bone graft substitutes market

The U.S. market for dental bone graft substitutes (BGS) experienced a large decline in late 2008 through 2009 due to the economic recession, which resulted in a decreased demand for dental implants and the associated bone grafting procedures.

Many consumers lost financial confidence and limited their spending for dental implant procedures and bone grafts.

With fewer patients, practitioners were reluctant to purchase as many implants and bone graft substitutes.

However, the dental bone graft substitutes market closely follows that of dental implants and is expected to show a strong recovery in 2010, returning to double-digit growth rates.

The bone graft substitute market is expected to grow faster than the dental implant market as long as prices for BGS materials increase faster than those for implants.

About the authors

Heather Paterson, BSc is a research analyst at iData Research. Kamran Zamanian is the head of research at iData Research. iData Research is an international market research and consulting group focused on providing market intelligence for the medical device, dental and pharmaceutical industries.

The information contained in this article is taken from a detailed and comprehensive global series on the “Markets for Bone Graft Substitutes and Other Biomaterials 2009,” which is available for purchase from iData Research and includes coverage on the United States, 17 countries in Europe and three countries in Asia Pacific.

iData also offers global market intelligence reports on the dental implant, dental prosthetic and dental CAD/CAM markets. For more information about this and other reports on the dental industry, call (866) 964-5282, e-mail dental@idataresearch.net or visit www.idataresearch.net.
Making sense of digital radiography

By Lorne Lavine, DMD

The look and feel of the modern dental practice has changed dramatically over the past 10 years. Systems that were once paper-based have now moved into the digital realm. In many dental advances over the past few years, there’s no doubt that the technology has been the driving force in this process. This is as true in other fields as it has been in dentistry.

In the early 1990s, intraoral cameras were all the rage. In the late ’90s, it was digital cameras. At present, no other topic seems to generate greater interest than digital radiography. While entire books can be written on the subject, the goal for this article is to focus on how digital radiography can improve the profitability of the practice, particularly by improving case acceptance.

In Part II, which will be published in a few weeks, we’ll take a closer look at the infrastructure that is required as this is often overlooked by many practices.

Having worked with hundreds of offices that have installed digital radiography, the biggest hurdle to adopting this technology is financial. While these initial costs are high, there is little doubt that using digital radiography can definitely help the bottom line of the practice by increasing patients’ willingness to come to the practice and accept treatment. There are a number of key areas where digital radiography makes sense.

Image size and quality matters

There is no doubt that in order to increase case acceptance, we have to improve our ability to diagnose disease, and the vast majority of dental practices find digital radiography to be superior to film.

In a recent survey, over 73 percent of the respondents claimed that they found digital radiography to be more diagnostic than film. There are a few reasons for this.

First, there’s a big difference between seeing a life-size image that is around 1 inch compared to an image magnified to fill up a typical 17- or 19-inch screen. Secondly, and just as important, all digital radiography software gives us incredible tools to improve diagnostics. There are a few programs that really simplify this process.

For example, XDR, a smaller company from the Los Angeles area, offers a “caries” icon and a “perio” icon. One click of the icons will apply numerous filters and enhancements to bring out the diagnostic features of the image with minimal muss and fuss.

One thing to keep in mind, however, is that if it’s necessary to enhance every image in order to make it diagnostic, then there’s probably something wrong with the exposure times on the X-ray head or other problems. It’s not an efficient use of your time if you have to modify every raw image that you take.

Timesaving

A practice that is efficient and saves time will be very attractive to your patient base, many who are busy and would prefer to minimize the time spent in the office. The time saved with digital radiography is quite significant. However, it’s important to understand that the time saved is limited to the hard sensors.

While an excellent option for many offices, phosphor plate systems do not provide any time saving over traditional film. Many offices can start and finish a full mouth series of radiographs...
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Fiscally fit in 2009

Tax breaks and limited-time laws make 2009 the right time to invest in your practice

By Keith Drayer

The American Recovery and Reinvestment Act of 2009 was signed into law on Feb. 17 with some of the best benefits having limited remaining time eligibility.

Small business owners have limited time in 2009 to benefit from the most lucrative tax incentives for acquiring technology and/or equipment.

If your practice is ready to buy equipment or software, the tax incentives for doing so are better than ever. These benefits will expire, or be reduced, as of Jan. 1, 2010.

The American Recovery and Reinvestment Act accompanied by lower interest rates makes this a strategic time to invest in your practice to take advantage of the American Recovery and Reinvestment Act of 2009.

Because of these beneficial conditions, installing equipment and technology in 2009 can create a cash-flow win-win for health care practitioners “in the know.”

Can you deduct $250,000?

For the 2009 tax year, many small businesses may potentially deduct up to $250,000 if the equipment or software is placed in service.

This valuable break is the Section 179 depreciation deduction privilege, and it is an exception to the general rule that you must depreciate equipment and software costs over several years.

Section 179 is an annual “use it or lose it” accelerated deduction benefit that optimally lowers taxable income.

The bonus depreciation is allowable for regular and alternative minimum tax (AMT) purposes for the tax year in which the property is placed in service.

Property eligible for this treatment includes:

• Property with a recovery period of 20 years or less (almost all dental equipment).

• Standard software/practice-management software.

Who can take the deduction?

This deduction is available whether you are a sole proprietorship, partnership or corporation (S corporations are subject to different rules). If you plan to acquire equipment in the near future, purchasing it before year’s end is prudent.

What type of financing is eligible?

Utilizing a finance agreement or capital lease to acquire technology or equipment will qualify for this benefit, while true leases or fair market value agreements will not.

If you use a finance agreement to acquire your equipment and you have deferred payments, you may file your tax returns and achieve the benefits before you have made any payments.

Avoid last-minute decisions

Don’t wait too long to acquire technology or upgrade your office. Although it is true that you can have equipment placed in service by Dec. 31 to take advantage of the incentives, waiting much longer may mean that you will settle on your selections because of diminished year-end choices.

Now is the right time to meet with an equipment or technology specialist and discuss acquiring the optimal production-enhancing technology and equipment that will help your practice stay fiscally fit.

Don’t forget bonus depreciation

Your practice may generally claim first-year bonus depreciation deductions equal to 50 percent of the cost that is left over after subtracting allowable Section 179 deductions (if any).

If your business uses the calendar year for tax purposes, you only have until Dec. 31 to take advantage of the generous $250,000 allowance.

Don’t wait to see if 2010 will provide the same opportunity. Act now and take advantage of all the benefits available through this current legislative windfall.

Invest in your practice with HSFS

Henry Schein Financial Services (HSFS) business solutions portfolio offers a wide range of financing options that make it possible for you to invest in your practice for greater efficiency, increased productivity and enhanced patient services.

HSFS helps health care practitioners operate financially successful practices by offering complete leasing and financing programs. HSFS can help obtain financing for equipment and technology purchases, practice acquisitions and practice start-ups.

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For further information, please call (800) 855-9495 or send an e-mail to hsfs@henryschein.com.

About the author

Keith Drayer is vice president of Henry Schein Financial Services, which provides equipment, technology, practice start-up and acquisition financing services nationwide. Henry Schein Financial Services can be reached at (800) 855-9495 or hsfs@henryschein.com.

Please consult your tax advisor regarding your individual circumstances.
It is an unfortunate irony: survey a group of dentists and many of them will tell you that they chose this profession because they grew up enjoying working with their hands. Or perhaps they genuinely wanted to help people, and probably they always loved science. Maybe they knew they wanted a medical career, but didn’t want the physician’s way of life.

There are a number of very good reasons why people choose to enter dentistry. However, few would say they entered the field because their No. 1 desire in life was to spend day after day talking to people.

Even fewer would say they got into the profession because they wanted to be in charge of a dozen staff members or wanted to worry about making money or selling cases or dealing with an unhappy patient now and then.

The fact is that the art and science of dentistry attracts certain types of individuals, and most entered the profession to simply “do the dentistry.” Yet, once there, they quickly discover there is far more to succeeding in this profession than being an expert clinician.

There is considerably more to being a successful dentist than being an expert clinician. One factor in particular that is seemingly elusive but profoundly important is personality — that of the dentist and everyone else on staff. Years ago, personality clashes were dismissed as minor and inconsequential. However, over the years, studies have shown those little “personality conflicts” can metamorphose into all-out wars leaving collateral damage rivaling that of history’s major battles.

**Personality: Plus or problem?**

What exactly is this unwieldy thing called personality? There are a variety of traits and every person’s personality is composed of a combination of 16 categories. While people are different due to their upbringing and life’s experiences, their basic personality will fit into one of the 16 categories.

Introverted personality types, for example, enjoy spending time alone. They need to have quiet time for concentration and dislike being interrupted by the telephone. They can work on one project for a long time without any interruption and can have trouble remembering in well under 10 minutes, allowing patients to get in and out of the office quicker.

From the practice’s standpoint, being able to see patients quicker means that additional patients can be scheduled during the day, improving the profitability of the practice.

**Reduced exposure time**

Another key feature of digital radiography is the fact that you can reduce the exposure time of the radiographs. This can be a big selling point for current and future patients.

One thing to be cautious of is that many vendors still claim unrealistic amounts of exposure reduction.

When digital radiography was first introduced, film was much slower and the claims of 80-90 percent reduction in exposure were accurate. However, over the past 15 years, the speed of film has greatly increased, and many offices are now using E-speed film.

While offices using digital radiography should still expect a reduction, it’s closer to 50-50 percent over film.

What I always suggest for practices, which may seem counter intuitive to what most people expect, is to take the X-rays at the highest possible setting without overexposing them.

Not only do underexposed digital X-rays appear grainy, you may end up missing many problems because there’s not enough radiation to pick up on pathology.

**Codiagnosis**

Probably the biggest selling point of digital radiography for case acceptance is the concept of co-diagnosis. In the past, patients had to rely on consultations at their trust of the practice and the dentist to proceed with dental treatment.

In many cases, their dental conditions were not apparent to them and did not have any associated pain, so patients were completely unaware of their dental problems.

While we often tried to show patients the X-rays on a light box, this is not ideal for most patients as they have difficulty seeing the problems. Digital radiography changes all of that.

Now, dental problems that show up in a radiograph can be viewed on a 17- or 19-inch screen and the patients, for the first time, can see exactly what we as dental professionals can see. Once they see and understand their condition, they will be far more accepting of our treatment plans as there will be no doubt in their mind about the status of their condition.

There’s little doubt that digital radiography is still a very hot topic in dentistry. By my estimation, around 40 percent of practices are now digital and I expect that to rise to 60 percent in the next two to three years.

With the federal government mandating an electronic health record by the year 2014 and stimulus funds soon available, there’s no time like the present to get started.

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**About the author**

Dr. Lorne Lavine, founder and president of Dental Technology Consultants (DTC), has more than 20 years invested in the dental and dental technology fields. A graduate of USC, he earned his DMD from Boston University and completed his residency at the Eastman Dental Center in Rochester, N.Y.

He received his specialty training at the University of Washington and went into private practice in Vermont until moving to California in 2002 to establish DTC, a company that focuses on the specialized technological needs of the dental community.
names and faces. They prefer to work alone and may prefer to communicate in writing rather than talking.

Introverted dentists also tend to be exhausted when they go home at night. Depending on the degree of introversion, these doctors have to force themselves to be extroverted all day long, which drains their energy level. Introverted dentists also are not comfortable giving verbal feedback to employees, which is essential in addressing performance issues and management system shortfalls.

Moreover, introverted dentists can also have low case acceptance rates because they are unable to clearly articulate patient needs. They don’t naturally engage in conversation so they are less likely to ask patients about dental wants. This difficulty in communication takes its toll on the practice, and there is often a struggle to reach practice goals that can unwittingly make staff members come across as uncaring and aloof to patients.

Consider Dr. Goodfellow. He is an excellent clinician who loves the profession of dentistry, but he absolutely will not do anything else during a hygiene check except a hygiene check. Why? Because Dr. Goodfellow is an introverted dentist and he really just wants to get back to the patient he was pulled away from.

The hygiene patient in the chair, who’s been staring at her discolored teeth for years and is tired of them, wanted to ask about veneers but has no opportunity. Dr. Goodfellow doesn’t ask questions. He offers no suggestions, such as, “Ms. Sutherland, have you ever considered whitening or veneers?”

He doesn’t offer the slightest hint that he has a moment more to spend on this patient. He is on the “check and charge” path: check the patient, tell him/her all looks good and charge right back out that door. Yet, Dr. Goodfellow doesn’t understand why new patient numbers aren’t higher or why production isn’t better.

Opposite of introverted personalities are the extroverted. Extroverts love talking to people and being with people. Extroverts like variety and action in their jobs and are sometimes impatient with long, slow jobs. They enjoy talking, sometimes too much, and generally would prefer to communicate by talking rather than writing. It is not uncommon for extroverted dentists to run behind schedule.

Introvert vs. extrovert: Let the games begin!

The typical misunderstandings between extroverts and introverts can be a source of ongoing conflict in dental practices. Introverts seem to understand why extroverts are boisterous.

Yet extroverts cannot seem to comprehend why their introverted colleagues don’t enjoy talking and being around people to the extent that extroverts do. As a result, extroverts can fall into the trap of looking at introverts as if there is something wrong with them. “What’s her problem?!”

Introverts can come across to extroverts as being snobbish. Similarly, introverted clinicians often come across as moody. They may be short in their answers because they do not like to engage in conversation longer than is necessary and are not interested in openly sharing the reasons why they don’t feel good or are not happy.

Because of introverts’ desire not to communicate outwardly, they have a difficult time in dentistry overall. Extroverts who work with them often are trying to figure them out and understand what’s going on. Extroverts may perceive the office as being tense and feel as though they are walking on eggshells.

In some cases, the difficulties of the clinician are further compounded by the fact that these dentists have a tendency to hire employees with similar personalities. Introverted dentists are more comfortable with introverted staff members who, like themselves, don’t care to talk all the time. Unfortunately, this general aversion to communication can spell trouble for the practice.

The overall lack of communication not only affects treatment acceptance, it also has a powerful impact on team dynamics and the ability of the office to maximize the talents of the staff.

To achieve the level of success that these dentists want and are capable of achieving, these doctors have to force themselves to be extroverted again, trying to figure them out and understand what’s going on. Extroverts may perceive the office as being tense and feel as though they are walking on eggshells. Their answers because they do not like to engage in conversation longer than is necessary and are not interested in openly sharing the reasons why they don’t feel good or are not happy.

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a result, they can hurt a person’s feelings but are totally unaware they have done so. Fairness is extremely important to thinking types. They are able to step back from a situation, analyze it for what it is and apply an impersonal solution.

Thinking types can come across as heartless, insensitive and uncaring because they naturally see all the flaws in situations and are seemingly very critical. Thinking types are usually motivated by a desire for achieving goals and accomplishments. They also feel it is more important to tell the truth than be tactful.

Feeling types: harmony at any price
Feeling types like harmony and will work very hard to make this happen. They will tend to be sympathetic toward other co-workers, even if those co-workers are not performing to practice expectations, and they need plenty of feedback and praise from employers.

They consider it important to be tactful. They dislike telling people unpleasant things and have an inner desire to please everybody. They can come across to others as appearing weak and emotional.

Thinking type dentists generally have better managed dental practices from the business standpoint. Their strengths lie in efficiently run systems and analyzing a situation if it starts to break down.

On the other hand, depending on the types of employees they are working with, they can have poor relationships with the team, especially if many staff members are feeling types.

Thinking types tend to voice only their discontent because giving praise does not typically come naturally for them. They feel that doing so will come across as fake to the employee. Yet, all employees need feedback, direction and guidance regardless of their personality type — even thinking types.

However, for feeling type employees — and this temperament type tends to be most attracted to dentistry — they can be crushed by a thinking-type dentist’s tendency to only find fault and never give praise. Feeling type employees need praise regularly to help them achieve maximum performance.

Thinking types can also turn this firm and tough-minded attitude toward patients too. “You know I’ve been telling you for two years this tooth was going to break. We could have done a crown and saved it, now I don’t know if that’s going to be possible.”

Conversely, the feeling type dentists will be apologizing and agonizing over the fact that their treatment plan is going to cost upwards of $5,000, so they’ll present it then hurry up and tell the patient that they can pay $50 a month for the next five years. Feeling type dentists usually have high patient bases because of their strong warmth and compassion.

However, case acceptance may be low because they are uncomfortable telling patients things that they feel are unpleasant, and their accounts receivables are often high.

Dentistry requires certain parameters to be successful and every dentist and dental team needs to know and understand itself as well as others in the practice. Explore personality assessments such as the Keirsey Temperament Sorter in the book “Please Understand Me”.

In doing so, you will gain a far better understanding of yourself and each other. You’ll understand much more clearly why you work the way you do and how to maximize your personality strengths and address the weaknesses.

Surround yourself with employees whose temperament types complement yours but are not necessarily the opposite.

Moreover, even though a dentist or a staff member may not fit exactly into a specific personality type that is considered ideal for certain positions, those willing to pursue additional training and improve communication skills can often make huge strides in achieving their professional goals and dreams.

For additional information on personality types and how they affect practices, visit www.mckenziegmt.com.

About the author
Sally McKenzie is CEO of McKenzie Management, which provides success-proven management solutions to dental practitioners nationwide. She is also editor of The Dentist’s Network Newsletter at www.the.dentistsnetwork.net; the e-Management Newsletter from www.mckenziemgmt.com; and The New Dentist™ magazine, www.thenewdentist.net. She can be reached at (877) 777-6151 or sallymckenziegmt.com.
People value a beautiful smile even in today’s economy. Many patients will still accept cosmetic service if you continue to promote the value of your practice.

When a high level of enthusiasm for a dazzling smile is conveyed and communication between patients and team members is maintained, the value of cosmetic services is linked to your practice.

Showcase the value of esthetic treatment

Traditional dentistry is concerned with the proper and healthy functioning of the oral cavity, while cosmetic dentistry focuses on improving the patient’s smile and quality of life. Unlike need-based dentistry, cosmetic procedures are viewed as “extras” by patients.

A recent survey of Levin Group clients revealed that the second most difficult challenge to general practices today is reduced cosmetic case acceptance — second only to lower practitioner compensation. So how do you overcome that challenge?

The key to showing patients the benefits of cosmetic dentistry begins with a case presentation that is both motivating and exciting. Simply going through the motions will not cut it.

Patients want to see themselves transformed. Showing patients before-and-after photographs of successful cosmetic cases has been proven extremely persuasive.

Begin a conversation about cosmetic dentistry by asking patients questions such as:

• Have you ever thought about whitening?
• Is there anything about your smile you don’t like?
• Do you know you could have a smile like this? (Use appropriate visual aid here.)

These conversation starters are a great way to get patients to think about cosmetic dentistry.

Extending the value beyond the treatment

When a customer accepts cosmetic services, schedule the appointment right away. Create a spa-like atmosphere where patients are treated like special guests of the practice.

Train team members to call patients by name, provide refreshments and use encouraging, enthusiastic comments before the procedure.

Once treatment is performed, the clinician should place a follow-up call that night to ensure patients are doing well and are satisfied with the results.

Levin Group recommends that practices offer patients a Waterpik® dental water jet as an excellent way to maintain their investment in cosmetic dentistry. Proper home-care is the best method to preserve a new and improved smile.

Exceeding patient expectations is the heart of value creation. Patients expect more from practices that provide cosmetic dentistry.

Look at your practice through the eyes of patients. Could it be perceived as basic or just OK? Be honest.

Every practice has room for improvement. Find those areas and apply the principles of value creation.

You’ll end up with a better team, happier patients and a more successful cosmetic practice.
Biomimetic dentistry is conservative

Modern adhesives and bonding techniques are the driving force of biomimetic dentistry. With traditional dentistry, healthy tooth structure is destroyed and/or removed in order to retain a new restoration. By using advanced adhesive techniques and properly fashioned inlays and onlays, dentists can help save their patients’ teeth, time, and money.

We could say that preservation and conservation lie at the heart of biomimetic dentistry. It is a win-win situation for everyone.

I think every dentist who sees a lot of old amalgams should consider offering these restorations. Most dentists probably have almost everything they need to do so, including the patients.

All that is most likely needed is an indirect composite and curing system, a portable hydrocolloid impression method, silicone injectables for die and model work and disposable articulators. That’s it.

In addition, once a dentist has all that, in addition to same-day inlays/onlays, the dentists will be ready to provide patients with lab-quality transitional and temporaries as well as custom trays on an immediate, low-cost basis.

That means better dentistry. Sound good?

We know it’s the right thing to do. It’s what we would do for ourselves. Gordon Christensen says, “The lack of use of tooth-colored onlays is one of the most frustrating situations I see in current restorative dentistry.”

People hate temporaries. The worst aspect about temporizing inlays and onlays is they always come out when you don’t want them to and sometimes won’t come out when you do want them to at the second, or “bond” visit.

Patients hate having to come back to get numb for yet another uncomfortable appointment.

Moreover, that second visit is what keeps many people from being proactive about replacing all of their old amalgams. In addition, it’s also what makes it so costly — for your patients and for you.

That’s why if you incorporate these restorations in your practice, your overhead goes down and your profits increase — all while taking better care of your patients.

Same-day inlay/onlays will definitely benefit your patients and your practice.

For a minimum investment in new equipment and materials, and a very short and easy learning curve, you and your assistants can quickly begin to replace defective amalgam restorations and at the same time conserve and reinforce remaining tooth structure — and so much more!

Your quadrant and full-mouth dentistry will definitely increase along with patient satisfaction, referrals and profits.

Look at the benefits for you and your patients:

• No temporaries means no “lost temporary” emergencies between appointments.
• No costly second appointments mean patients appreciate getting it all done the same day.
• No lab bill means reduced overhead costs.

If you’d like more information on the Biomimetic Same Day Inlay/Onlays 8 AGD credit CD-ROM that outlines the materials, equipment and techniques, please call (214) 999-0110 or e-mail ashley@dallasdentalspa.com.

About the author

Dr. Lorin Berland, a fellow of the AACD, pioneered the Dental Spa concept in his multi-doctor practice in the Dallas Arts District. In 2008, he was honored by the AACD for his contributions to the art and science of cosmetic dentistry.

For more information on The Lorin Library Smile Style Guide, www.denturewearers.com, a “Full-month Rehab in 2 Visits” DVD and Biomimetic Same-day Inlay/Onlay 8 AGD Credits CD-ROM, call (214) 999-0110 or visit www.berlanddentalarts.com.
The utility of cone-beam computed tomography in endo

By Dov M. Almog, DMD; Samuel Melecer, DMD and Sergio Bueno, DMD

Following what seemed to be a root canal failure in tooth No. 14 based on clinical and radiographic diagnosis with a conventional two-dimensional periapical radiograph (Fig. 1), the patient was considered for referral for an endodontic consult.

At this stage, several treatment options were contemplated: apicectomy and retrograde filling; palatal root amputation; and possible extraction. This diagnostic and treatment planning protocol is fairly common in dentistry.

However, although no clinical evidence was reached at this stage and periodontal disease is frequently the result of apical progression of periodontal disease, at times it is derived from endodontic disease.

A peri-endo lesion can have a variety of pathogenesis, that is, a periapical lesion, root fractures and/or root canal perforation. Although peri-probing surrounding tooth No. 14 was done in this case, there was no evidence for furcation or apical progression of periodontal disease.

As a matter of fact, already in 1997 it was found that only one out of 14 furcation defects in the maxillary molars was seen on periapical radiographs because of overlapping roots, whereas medical CT scans were able to identify all furcation defects.1

Moreover, in 2008 it was found that CBCT showed significantly more lesions than periapical radiographs.2 Given the recent CBCT extended diagnostic capacity as it pertains to endodontics, the treating dentist made a decision to take advantage of this three-dimensional diagnostic modality and the patient was referred for a CBCT.

As is described in this case report, some root canal treatment failures sometimes go unnoticed, and therefore it behooves us to familiarize ourselves with the diagnostic capacity of CBCT as it pertains to endodontic complications vs. conventional periapical radiographs.

Dentists’ ability to assess the anatomical area of any tooth utilizing conventional periapical radiographs that are known for superimposition of anatomical structures is very limited, whereas their ability to assess the anatomical area of interest utilizing a three-dimensional CBCT is almost unlimited.3,4

After performing a CBCT utilizing an i-CAT™ 5-D CBCT (Imaging Sciences International, Hatfield, Pa.) to evaluate tooth No. 14 and its surrounding anatomy, it was determined that there was an endo-perio lesion on the mesio-lingual aspect of the palatal root.

The CBCT study included cross-sectional slices of tooth No. 14 at 0.5 mm intervals, revealing endo-perio communication and demonstrating that the periapical disease extended toward the sinus and into the trifurcation area, and caused bone resorption extending up to the palatal gingival margin (Figs. 2, 3).

The patient was then referred back to the referring dentist in order to re-probe the mesio-lingual aspect of tooth No. 14. During the initial examination, the periodontal probing depth was only 5 mm. After the i-CAT was reviewed, the patient was re-probed in an attempt to communicate with the endo lesion.

The periodontal probe was inserted from the lingual aspect in a buccal direction to about 5 mm and then re-directed to a palatal direction reaching a depth of 11 mm. This indicates that on routine periapical probing, an endo-perio lesion may not be diagnosed because the osseous defect does not always occur in a perfect matching path to the long axis of the tooth. A pre-curved gutta-percha point size 40 was then inserted in the same direction and a new periapical radiograph confirmed the osseous endo-perio defect (Fig. 4).

Once the endo-perio communication was confirmed, it was confirmed that the advanced periodontal disease occurred secondary to the endo lesion. When the pulp becomes infected, the lesion can progress beyond the apical foramen and cause periodontal disease.

Once the endo-perio communication was confirmed, a referral to oral surgery was generated for extraction of No. 14 with bone grafting in preparation for a future dental implant.

Conclusion

As was described in this case report, some root canal treatment failures and associated dento-alveolar pathologic defects sometimes go unnoticed and/or misdiagnosed. Therefore, it is essential for us to familiarize ourselves with the diagnostic capacity of CBCT as it pertains to endodontic lesions diagnosis and associated complications vs. the use of conventional diagnostic periapical radiographs.

This would certainly lead to better diagnosis and treatment planning. This is besides the fact that CBCT offers considerable scan-time and radiation dose reduction compared to a medical CT.

References

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Fig. 1: Based on clinical and radiographic diagnosis with a conventional two-dimensional periapical radiograph, the root canal in tooth No. 14 seems to be failing.

Fig. 2: By utilizing the i-CAT 3-D CBCT (Imaging Sciences International, Hatfield, Pa.), an axial view of tooth No. 14 was obtained that demonstrated a mesio-lingual bony defect.

Fig. 3: The CBCT study includes cross-sectional slices of tooth No. 14 at 0.5 mm intervals, and revealed endo-perio communication demonstrating that the periapical disease extended toward the sinus into the trifurcation and bucco-occlusally.

Fig. 4: Conventional periapical radiograph with a gutta-percha point in the mesio-palatal aspect of tooth No. 14 demonstrating an 11 mm endo-perio communication. In this case, the periodontal disease is occurring secondary to the endo lesion.
Dependent adults: The key is biofilm reduction

How can dental professionals decrease the complications of teeth in the dependent adult population without adding stress to caregivers?

By Shirley Gutkowski, RDH, BSDH, FACE

I think it’s safe to say that, in general, the oral care of dependent adults is bad. Perhaps the word horrible is more accurate, or abyssmal, shameful, poor, dreadful, terrible or awful and possibly even “aweful!” The teeth, broken, misaligned and stained, are covered with a thick coating of biofilm, once called plaque. Caregivers think this is normal. They don’t make a connection between nice teeth and their dependent charges.

There are a multitude of reasons for this disconnect. The people who study these types of things found a couple of interesting insights. For one, as the dental IQ of the caregiver increases, the oral health of his or her charges increases.

They also find that a dental health care professional on-site increases oral care incidence for the resident. The third finding shows that oral care in-service meetings (regardless of the duration) increase oral care over a short term, but the benefits fade away quickly.

It’s time to shift our thinking. The quickest and easiest thing to do is remove all teeth. No teeth, no biofilm, no dental problems. Many a care provider has uttered this wish.

They don’t know what we know about the decrease in the quality of life these dependents undergo once their teeth are removed. The caregivers have a gut feeling that teeth are a locus of infection and removing them will surely help their charges. They’re right.

Oral health care providers must answer this question: How can dental professionals decrease the complications of teeth in the dependent adult population without adding stress to caregivers?

The answer is to shift the thinking down a notch from mechanical means of biofilm reduction to biofilm disruption, period. It is possible to do one without the other.

Recent research has given us a list of ways to address biofilm without the use of caustic chemicals. Many of the tools we’ve been trying to use to address oral biofilm aren’t really penetrating.

If they do, they penetrate a short distance into the film and never affect the dormant or persistent microbes deep inside. Most typical rinses, pastes and creams affect the free floating, planktonic bacteria. However, the biofilm re-establishes itself quickly after the danger is past.

Many microbes contribute to the film part of biofilm. For the most part, they use sucrose and convert it, not only to acids, but to the polysaccharide covering as well.

This covering makes it easy for the biofilm to adhere to the tooth, and protects the microbes from attack. If the microbes are not sheltered by the polysaccharide, they are easy to kill.

Science has found ways to interfere with the adhesion process of oral pathogens. They are lactoferrin, cranberry, licorice root extract and xylitol. Including any of these into the diet of those dependent adults will decrease the microbes’ ability to adhere to the hard or soft tissue.

Let’s see how swapping these ingredients in a normal routine will work.

Breakfast. Provide only cranberry juice in place of the traditional rotation of juices (orange, apple and cranberry); hot or cold cereal sweetened with xylitol.

Lunch. Applesauce sweetened with xylitol to help swallow the daily round of medication.

Snack. Finish with xylitol gum or mint.

Dinner. Finish with xylitol candy or mint.

Evening Snack. Licorice root sucker.

Daily oral care routine. Xylitol toothpaste, xylitol mouthwash, xylitol dry mouth spray. Lactoferrin is not a viable product for this type of use yet. Currently it is being used in chronic wound care mixed with xylitol.

The biofilm associated with dental disease is very sensitive to pH changes. Using products to change the pH will also shift the biofilm to a more homeostatic one.

The shift can be accelerated by using a bicarbonate rinse, but is poorly tolerated. Mixing xylitol into drinking water is a way to increase oral pH and help hydrate the dependent adult.

Recaldent and NovaMin in pastes have a track record of increasing oral pH for hours after application. Arginine compound pastes share that benefit as well.

Even if these pastes are put onto the finger of the residents for them to apply themselves, pH shift will occur, stopping biofilm growth on a dime.

We know that xylitol has residual effects for years after use. It’s prudent for clinicians to advise all patients approaching declining age to start using xylitol products as a preventive.

Use of these products, with an eye toward biofilm reduction as opposed to brush and floss education, may be the answer everyone has been waiting for.

About the author

Shirley Gutkowski, RDH, BSDH, FACE, is a clinical dental hygienist from Sun Prairie, Wis. She is the 2008 recipient of the Leadership Award from the World Congress of Minimally Invasive Dentistry.


You may contact Gutkowski at crosslinkpresent@aol.com.

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Visit www.DTStudyClub.com to access “Simple Advanced Treatment Modalities for the Dependent Patient.” Only $95 for three hours of C.E. that suit your schedule.
A moisture tolerant, resin-based pit and fissure sealant

By Ira Hoffman, DDS, BSc

Pit and fissure sealants have been shown to be highly effective in preventing caries, and there is considerable research documenting sealant success over extended periods.1-4 The primary measure of sealant efficacy is retention. If the sealant material stays bonded to the tooth and provides a good seal, then it is reasonable to expect that caries incidence can be decreased.

The practitioner must overcome certain challenges to achieve the desired degree of success. The decision to place sealant is based on caries risk analysis. The first and second permanent molars are at the greatest risk of developing caries, and the optimal time to seal them is during the early eruption. Unfortunately, there are anatomical considerations that make the placement of sealants less reliable at that time.

During the eruption process, permanent teeth erupt through the gingival tissues leaving excess tissue, an operculum, over the distal surfaces that can interfere with the success of a sealant.

Furthermore, isolation is mandatory for traditional sealants, but is extremely difficult, if not impossible, with erupting teeth.

Because moisture contamination is a contra-indication for traditional pit and fissure sealants, which require a dry field, for success, some clinicians prefer to wait for the teeth to fully erupt so that isolation can be achieved.

By this time, however, caries have often invaded the at-risk pits and fissures, and provide a good seal, then it is reasonable to expect that caries incidence can be decreased.

An advanced, resin-based sealant technology has been developed that incorporates a moisture-tolerant resin chemistry that is placed on the slightly moist tooth, allowing placement during early eruption (Embrace WetBond Pit and Fissure Sealant, Pulpdent Corporation, Watertown, Mass.).

Traditional pit and fissure sealants are hydrophilic. They repel water and cannot be applied where there is moisture. These materials are based on bis-GMA and other monomers that are primarily hydrophilic in nature and require a dry field.

Many manufacturers recommend their use with hydrophilic bonding agents as a way to overcome the dry field requirement; however, the bonding agents add considerable time and cost to the procedure, and the procedure becomes more technique sensitive.

Embrace WetBond is based on a unique chemistry that incorporates di-, tri- and multi-functional acidic acrylate monomers in a proprietary formula with a carefully designed hydrophilic-hydrophobic balance. The result is a resin-based material that is moisture tolerant and behaves favorably in the moist oral environment.

In fact, Embrace is activated by moisture. Embrace WetBond contains no bis-GMA and no bisphenol A, and is unlike hydrophilic monomers typically used in traditional sealants.

The moisture tolerant Embrace sealant does not require a bonding agent. Enamel is etched, rinsed and lightly dried. The tooth is left slightly moist, not glossy, but without any drops or pooling of water. Embrace is water miscible.

When placed on the tooth surface in the presence of moisture, the sealant spreads over the enamel surface and integrates with the tooth in a unique way. It has been noted that margins are smooth and virtually undetectable with an explorer.5,6

This tooth-integrating phenomenon can be seen with scanning electron microscopy, which shows the intimate association between the sealant and the tooth that provides an exceptional seal against microleakage and moisture penetration (Fig. 1).

After light curing, however, Embrace sealant has physical properties similar to other commercially available sealants.7-9

A longitudinal clinical study using Embrace WetBond Pit and Fissure Sealant was begun in May 2002. The study was conducted in a suburban pediatric practice. There was no prescreening of patients. Even difficult patients and children with poor oral hygiene and dietary habits were included in the study.

In this practice-based study, 554 sealed teeth were followed at recall visits for four to six years and evaluated by a pediatric dentist. Of these, 299 sealants were intact and clinically acceptable. Of the remaining teeth, 32 required resealing with no evidence of occlusal caries, and only three teeth, or less than 1 percent, developed occlusal caries.8

As a basic concept, 5–10 percent of sealant loss per year has been seen when one reviews published sealant data.9 This data reveals the importance of periodic reevaluation of sealed teeth and repulpation of sealant if necessary. This reevaluation of sealants should be standard care. When a sealant needs to be repaired or repulpated, the tooth should be treated as if an initial sealant is being placed.10

Clinical technique

Embrace WetBond requires a small change from the traditional clinical protocol because the etched enamel surfaces of the teeth should be slightly moist during sealant placement. Following these directions will ensure clinical success.

1. Examine and evaluate the occlusal surfaces, and isolate the teeth to be sealed with rubber dam or cotton rolls (Fig. 1).
2. Clean the tooth surfaces using an oil-free, water-pumice paste with a disposable prophylaxis angle in a slow-speed handpiece. Other methods for cleaning teeth before sealant placement include using a non-fluoride, pumice prophylaxis paste and an air abrasion device (Fig. 2).
3. Rinse thoroughly with an air-water spray, removing all residual paste from pits and fissures, and dry (Fig. 3).
4. Prepare questionable enamel and small lesions in the usual manner. Rinse and dry with oil-free compressed air.
5. Apply Pulpdent 35–40 percent phosphoric acid etching gel to the clean tooth surface for 15 seconds (Fig. 4). Rinse well with an air-water spray (Fig. 5). Do not disturb this surface.
6. LIGHTLY and dry remove excess water with a cotton pellet or clean compressed air (Fig. 6). Leave tooth surfaces slightly moist. Slightly moist tooth surfaces should appear shiny or glossy, but there should be no visible pooling or drops of water on the tooth surfaces. With Embrace WetBond, the typical dull, frosted appearance of the etched surface is not desired. Embrace bonds to surfaces slightly moist from saliva; however, it is best to avoid bacterial contamination.
7. Place an applicator tip on the syringe and apply the Embrace WetBond sealant to the occlusal surface. After dispensing, use a microbrush applicator to place the sealant, covering all pits and fissures and extending onto the cusp ridges. The final sealant thickness upon application should be at least 0.3 mm (Fig. 7).
8. After application, light-cure the sealant holding the light-curing probe at right angles and as close as possible to the occlusal surface. Embrace cures with all lights (Fig. 8). Curing time for a halogen light with a minimum of 500 mW/cm² is 20 seconds. More powerful lights will cure faster.
9. Evaluate the sealant for coverage, retention and occlusion (Fig. 9). The tooth is sealed and ready for function (Fig. 10).

Although the most common practice is to apply the pit-and-fissure sealant directly to the etched enamel, various studies have evaluated the efficacy of using a bonding agent before sealant placement.

The use of a bonding agent has the potential to increase sealant retention with traditional sealants,11-13 but the disadvantage is that it increases the number of steps, is more technique sensitive and adds cost in time and materials.

With Embrace WetBond Pit and Fissure Sealant, adhesive bonding agents are not required and, although saliva contamination should be avoided whenever possible, it does not
affect the bond of Embrace WetBond sealant.

Discussion

Clinically, a moisture-tolerant sealant makes sense. Unless a rubber dam is being used, the clinician is working in the oral cavity with humidity near 100 percent. This ensures that even the driest tooth surfaces contain some moisture. In addition, because the permanent first molars are the teeth at greatest risk, it is desirable to seal them immediately upon eruption when isolation is the most difficult. Therefore, a moisture-tolerant resin sealant is necessary to ensure the optimal chance for successful retention. Until now, the only moisture-tolerant sealants were glass ionomers. Their mechanism of adhesion is ionic bonding, not micromechanical retention to an acid-etched enamel surface.

In studies with glass-ionomer sealants it has been reported that the three-year retention rate is only 31 percent.11 Pardi and co-workers also reported low sealant retention rates with glass ionomers.12 The information currently available suggests that the optimal characteristics for a pit-and-fissure sealant are a resin-based material that is moisture tolerant, light-cured and lightly filled with color so that sealant detection and evaluation at recall is easily accomplished.13

The introduction of a moisture-tolerant, resin-based sealant (Embrace WetBond) has eliminated the problems seen in the past with traditional, hydrophobic resin-based sealants.

In a dental practice, pit-and-fissure sealants are best applied by trained auxiliaries using an etch-and-rinse, moisture-tolerant sealant. Adherence to the sealant technique described above can lead to success in preventing pit and fissure caries.11

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About the author

Dr. Ira D. Hoffman maintains a private practice in Montreal, Que
deb. A graduate of McGill University, he is a faculty lecturer in the Department of Restorative Dentistry. He is also a member of the University Advisory Council of the American Academy of Cosmetic Dentistry, a fellow of the Academy of Dentistry International and the International Academy of Dental Facial Esthetics.
DTSC Hygiene Webinar series

At www.DTStudyClub.com, you will find the three-part Webinar series "Simple Advanced Treatment Modalities for the Dependent Patient" with Hygiene Tribune Editor in Chief Angie Stone and Dental Tribune author Shirley Gutkowski.

Part I: Who is taking care of the dependent patient every day?
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Hygiene Tribune Editor in Chief Angie Stone and Dental Tribune author Shirley Gutkowski bring their exciting tag-team program to the Web in this first of three programs.
With their no-nonsense and humorous approach, they show you how to build the bridges between "us and them." Don’t miss this informative, scientific and entertaining program.
Part I of this three-part series will educate the attendees about who is actually responsible for oral care in nursing home facilities. Attendees will learn what a typical day is like in the life of a nursing assistant, what education they are provided and what their position is regarding oral care.
Learning Objectives:
• Understand the true daily work of the nursing assistant.
• Know what education the nursing assistant has.
• Understand who the nursing assistant is.

Part II: The Dental Profession Can Assist Primary Caregivers Help Dependent Patients
Can’t get the nursing assistants to brush and floss the dependent adults they’re in charge of? Never fear, Dental Tribune author Shirley Gutkowski and Hygiene Tribune Editor in Chief Angie Stone show you how to make an impression on caregivers that will stimulate change by shifting your own thinking.
You won’t be disappointed in quality and content of this important Web program.
Part II of this three-part series will concentrate on what dental professionals should be teaching during the nursing home staff’s required annual in-service training session.
Think you should be teaching brushing and flossing? Join us to find out!
Learning Objectives:
• Gain knowledge on how to develop an in-service training session.
• Know which simple advanced treatment modalities improve the oral health of nursing home residents.
• Understand the role xylitol plays in oral health improvement.

Part III: How to Implement Your Own Training Program Through the Adopt-A-Nursing Home Initiative
The alphabet soup of titles can be daunting to the oral care provider trying to bring the message of simple novel approaches to oral care in a facility. Hygiene Tribune Editor in Chief Angie Stone and Dental Tribune author Shirley Gutkowski bring their hard-earned knowledge and first-hand experience to this one-hour Web event.
This is the final part of the series on oral care for the dependent adult and it is just as entertaining as the first two. It covers who is working at the care facility, who to talk to, and when to call. Don’t miss this important information and round out your new perspective on caregivers and dependent adults.
Part III of this three-part series provides information on how to find a home to adopt. Discussions include:
• Who are the main players in the nursing home environment that need to be contacted?
• What should be said when contacting the facility?

In addition, complete information regarding AANH.
Learning Objectives:
• Know whom to contact at a facility to adopt the nursing home.
• Understand what to say to the facility administrators.
• Know what the mission and goals are of AANH.
Take advantage of this opportunity to earn three C.E. credits by logging onto www.DTStudyClub.com, and from the Online Courses menu choose the Dental Hygiene option. All three Webinars are offered for $95.

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• General Dentistry
  "Many orofacial injuries during sports are preventable"
In 1998, Orlando Magic center Adonal Foyle took an elbow from Utah Jazz's Quincy Lewis to teeth Nos. 8 and 9, causing the teeth to luxate back. In 2001, Dallas Mavericks' Dirk Nowitzki was elbowed by San Antonio Spur Terry Porter and tooth No. 8 was knocked out. In 2005, Mavericks’ …

• Implantology
  "Avoiding the pitfalls of implants with 3-D imaging”
  "Implants displaced into the maxillary sinus”

• Endodontics
  "Predictable apical microsurgery: Patient preparation (Part 1)"
"Linden explains canal anatomy”
"Removal of warm carrier-based products with the Twisted File”
"Anatomic stratification technique for lifelike anterior composites”

• Cosmetic dentistry
  "Aren’t you that guy on 'Extreme Makeover '?”
In an interview with Cosmetic Tribune, Dr. William M. Dorfman, the face of modern cosmetic dentistry, discusses his chosen career, his business, his television show — and his penchant for treating all of his patients as if they were celebrities.
"New smile, new life: Innovative technologies and techniques can transform a smile”
"Anatomic stratification technique for lifelike anterior composites”

• Dental hygiene
  "Pest control in gums gardening: Locally applied antimicrobials as adjuncts to nonsurgical periodontal therapy”
The focused use of chemotherapeutics as antimicrobials can enhance the outcomes of nonsurgical periodontal therapy, resulting in healthier mouths for our patients.
"Top 10 causes of tooth discoloration”

• Practice management
  "To retire or not to retire?”
I am a 1965 graduate of NYU College of Dentistry, and I practiced until 2000. I was 58 at the time and was somewhat bent on retiring in my late or middle 50s when most people thought that way.
Social security was available at age 62 then, and the average age men lived to was 66. My dad died at that age and so did most of my friends’ fathers. Thus, I figured I could have a good 10 years to live the “really good life.” Boy has that changed.
"Good patient communication can help eliminate no-shows”
"Curbing cancellations and no-shows begins chairside”
In the 10 years since the commercial launch of the Invisalign® system, Align Technology has continuously worked to improve Invisalign products to deliver the outcomes patients desire and clinicians expect.

Today, with more than 1 million patients treated, the Invisalign system enjoys broad acceptance as an effective, in-demand treatment option.

Yet despite the demonstrated efficacy of Invisalign and numerous advances in treatment over the years, the Invisalign system has remained in many ways a first-generation product.

Until now.

This fall, Align introduced innovative new and improved features in all Invisalign products, representing a significant leap forward in Invisalign treatment. The product improvements are based in part on extensive Align customer research that is focused on why dentists do not use Invisalign or why they limit their use of Invisalign to certain types of cases.

New aligner features, along with improvements in Invisalign software and clinical protocols, are designed to overcome barriers to treatment by both addressing clinical issues that dentists have traditionally perceived as challenging in Invisalign treatment, such as extrusions, rotations and certain types of root movements, and by implementing improvements and best practices identified and frequently requested by Invisalign practitioners.

Invisalign’s Optimized Extrusion Attachments, part of the next generation of Invisalign attachments, are designed to optimize aligner forces for upper and lower extrusion of anterior teeth. Using Align’s patented 3-D modeling technology, each attachment is custom designed based on the width, long axis and contour of each individual patient’s teeth.

The extrusion attachment features an active surface area that helps control the extrusive aligner force delivered and enables the aligner to engage the attachment the same way each time for more predictable performance.

The new Optimized Rotation Attachments are designed to optimize aligner forces for rotations of the upper and lower canines. The shape and placement of each attachment is automatically designed to deliver more optimal aligner forces and moments for canine rotations.

As with the Optimized Extrusion Attachments, advanced 3-D technology is used to determine the attachment's shape. As the aligner engages the attachment’s active surface area, the aligner simultaneously engages the lingual aspect of the tooth. This results in a rotational moment about the long axis of the tooth.

Power Ridges are designed to optimize aligner forces on upper incisors to deliver lingual root torque without having to bond attachments. Power Ridges can be used when uprighting retroclined incisors, such as in Class II Division 2 cases.

This feature is designed to produce optimal moment-to-force ratios to accomplish lingual root torque. Previously available only with Invisalign Teen, Power Ridges are now available for all products, making Invisalign applicable for more cases.

Invisalign’s Velocity Optimization provides more control over movements of the entire tooth, including the root. Improved ClinCheck setup protocols are designed to limit the speed of crown and root movements, including rotations, to optimal ranges.

Using digital dental reference points, ClinCheck setups are now designed to factor in a combination of root movement, crown movement and rotational speed at every aligner stage.

Previously, dentists had to identify movements that might require velocity adjustments and request those changes as part of the treatment planning process. While clinicians can still request velocity adjustments if they wish, the velocity optimization improvements in ClinCheck protocols will now be the default in case setups.

Interproximal Reduction (IPR) Protocol Improvements address a frequent clinician request regarding timing of IPR during treatment. Invisalign’s improved ClinCheck protocols are designed for IPR to be performed when the teeth are more aligned.

In crowding cases, your prescribed IPR is now set up in later stages of treatment so that tooth contacts requiring IPR may be easier to access.

A new Invisalign Attachment Kit and attachment material deliver greater bond strength, wear resistance, accuracy and ease of use.* Previously, attachment material was left to the clinician’s personal preference, and Align research determined that only 15 percent of dentists were using top performing materials for their attachments.

Clinicians can still use materials of their own choosing, but Align now offers these top performing materials as part of a convenient kit.

“We believe that all of these product improvements, as well as our commitment to constant innovation, will give doctors greater confidence in what they can achieve with Invisalign, and help deliver the outcomes they expect in more clinical situations,” said Sheila Tan, Align’s vice president and chief marketing officer.

Thus far, customer feedback supports Align’s belief.

“Learning about the improvements in anterior extrusion expanded the applicability of the Invisalign appliance for me,” said Douglas D. Boucher, DDS, a general dentist practicing in Menlo Park, Calif. “I feel a lot more confident in clinical outcomes moving forward.”

The new features are available in Invisalign, Invisalign Teen, Invisalign Assist and Invisalign Express.

For more information on Invisalign products and the new and improved features, please visit www.aligntechnology.com/improvements.

* Data on file at Align Technology
G11 digital dental camera

The PhotoMed G11 digital dental camera is specifically designed to allow you to take all of the standard clinical views with “frame and focus” simplicity.

The built-in color monitor allows you to precisely frame your subject, focus and shoot. It’s that easy.

Proper exposure and balanced, even lighting are assured. By using the camera’s built-in flash, the amount of light necessary for a proper exposure is guaranteed.

In addition, PhotoMed’s custom close-up lighting attachment redirects the light from the camera’s flash to create a balanced, even lighting across the field.

R2 dual-point flash bracket

PhotoMed’s new R2 dual-point flash bracket is designed to give you maximum flexibility in flash positioning.

Bring the flash heads in toward the lens for posterior views and mirror shots.

Spread the flash heads out to the side for anterior esthetic images and natural looking smile shots.

Each flash head can be repositioned “on the fly” with one hand.

The R2 bracket is available in Nikon or Canon configurations and will work with Nikon’s R1 and R1C1 macro flashes and Canon’s MT-24EX macro flash.

Anterior contacts mirror

The anterior contacts mirror makes it easy to photograph the overjet and anterior contact.

The inset curved end follows the curve of the arch for comfortable placement. The mirror can also be used for standard occlusal arch views.

More information about each of these products is available at www.photomed.net or call (800) 998-7765.
Marvy Masque by Mydent

Mydent International is offering Defend® Plus Marvy Masque cone masks, which are designed for use with pediatric patients.

The masks feature funny face designs to entertain youngsters and reduce dental anxiety.

They are molded, soft and manufactured with an easy breathing material.

The masks also contain a non-glare nosepiece and are made without fiberglass or latex.

Defend® Plus Marvy Masque cone masks are available in the following designs: dog, clown, rabbit and cat.

An assortment package contains 10 of each character. The masks come 50 to a box and can be purchased from most dental dealers.

New Colgate Sensitive Pro-Relief desensitizing paste with Pro-Argin® technology will offer patients comfort and convenience without compromising treatment efficacy. Colgate Sensitive Pro-Relief desensitizing paste is clinically proven to provide instant sensitivity relief that lasts for four weeks after a single application. It can be used before or after dental procedures such as prophylaxis and scaling.

When applied prior to a professional dental cleaning, this desensitizing paste will provide a significant reduction in dentin hypersensitivity measured immediately following the dental cleaning as compared to a control prophylaxis paste.1

References
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Dr. Terry Myers discusses his passion for continuing education and his interests away from the office.

Dr. Myers, how did you become interested in practicing dentistry?
As a child, I wanted to pursue a job where I could work with my hands. I was interested in building model ships and airplanes, and thought about pursuing a career as an orthopedic surgeon.

Then, in high school, I dated a dentist’s daughter and noticed that he was able to set office hours and have weekends off, unlike the surgeons I knew who spent long hours at the hospital.

Because I appreciated family life, I decided on the dental path. I also enjoyed the hands-on aspect of dentistry. Most medical positions do not have the opportunity to get that close to patients.

How do you keep up with technology advances in dentistry?
I graduated from dental school in 1987, and taught at the Advanced Education in General Dentistry program at University of Missouri in Kansas City for 16 years.

When I moved to private practice and built the office, I wanted to make sure that we offered educational opportunities to my colleagues.

We built an education center in the basement with an audio-visual and projector system that can seat 40 people for lectures and 20 for hands-on courses.

We try to offer one course per month. We’ve done courses on the Gendex cone beam and Nobel Guided Systems, and hold a 10-week dental assisting program twice a year.

I may not be a part of the university system anymore, but I still have a love for education because I believe that we all continue to learn during our lives and careers.

What do you do when you are not practicing dentistry?
Music is one of my biggest loves. I enjoy big band music, and play baritone sax in a big band. We try to make it to the Glenn Miller Festival every year at his birthplace in Clarinda, Iowa. I also play oboe and English horn in the local symphony orchestra.

My other loves are my wife, Kathy, 10-year-old daughter, Katie, and 17-year-old son, Glen, who is hoping to follow in my dentistry footsteps. I hope that I have inspired him to a career that he can really sink his teeth into!

Fortunately, some people can take the small events that increase quality of life for granted — having a conversation, tasting delicious foods and smiling without self-consciousness are daily occurrences that are rote for some, but luxuries for others.

While certain patients can maintain a happy, productive life with standard dentures, for others with special needs, dentists must find alternatives that fit with the patient’s lifestyle and budget. Everyone deserves the confidence and self-esteem that a beautiful smile can provide. With the proper equipment and new procedures, doctors can provide patients with function and fashion.

A variety of implant options offer functionality and esthetics. For one of my patients, an implant-retained denture fit her financial and physical requirements. The 64-year-old German woman has basically well-maintained diabetes, occasionally struggling with insulin levels as well as other health issues, such as skeletal back problems.

She had reached a point in her dental history where she would need her few remaining upper teeth extracted and replaced by a denture. She had been researching the possibility of denture implants. She did not want traditional dentures because she gagged quite easily, and the thick base of the denture, plus her German accent, made her speech difficult to understand. In addition, due to her diabetes, she occasionally got painful and slow-to-heal sores on her palate under her dentures.

Technology helped me to achieve the clinical care and physical appearance that this woman needed. Imaging played a big part in my treatment plan. For the diagnostic part, I used a GXCB-500™, medium field of view cone-beam unit from Gendex that gave me a three-dimensional view of her dentition (Fig. 1).

This imaging method allowed me to determine whether implants were even possible for the patient because I couldn’t identify all of the details without determining the width and height of the bone to see if a bone graft was necessary.

She had already stipulated that she did not want a bone graft. With...
out the 3-D scan, I would need to refer the case to an oral surgeon. By just looking, feeling or with a 2-D X-ray of the ridge, there didn’t seem to be enough bone in the area for a successful implant. Besides, bone, on a 2-D pan, her sinuses appeared so big that I didn’t want to chance complications.

I was able to ascertain from the 3-D scan’s cross-sections (Fig. 2) that she had enough bone to place an implant denture. During the surgical procedure, with my intra-oral digital X-ray (DEXIS), I could check if the implants were properly situated above the sinus level. My mix of imaging options gave me the vital information I needed to complete my treatment plan with confidence.

After imaging, I decided on full-arch implants on teeth Nos. 4, 6, 8, 10, 11 and 14. Because of her diabetes, the implant denture needed to be removable so that she could clean very well around it. It was very important to the patient that she did not have a prosthesis that looked like a denture. She had all of her natural lower dentition, and we were able to use a combination of shades (A2-A3.5) to maintain a natural appearance.

Trubyte Porcelain IPN teeth were used because of their natural shading from gingival to incisal edge. The Locator attachments, like little gaskets, make it easy for the patient to remove her denture for proper hygiene and re-seat it in the right place every time.

After finding out the condition and measurement of her ridge and gums, we decided on six 3.5 Nobel Replace implants of 15 mm in length. I chose the Nobel Guided Surgery protocol (Figs. 3, 4) because I had to be very precise regarding the length of the implant in relationship to her sinus as well as her small amount of bone. During the surgery, I used my digital X-ray to check the drill lengths and placements very quickly right at chairside (Fig. 5). That’s the beauty of guided surgery and digital radiography — much of the information is determined beforehand, taking away the stressful element of surprise during the procedure (Fig. 6).

Taking into account possible healing issues because of her diabetes and small amount of bone, I didn’t immediately load the denture onto the implants, but instead put on healing caps and let the area heal for about six weeks. During the surgery, I used my digital X-ray to check the drill lengths and placements very quickly right at chairside (Fig. 5).

Virginia dentist gives two patients new smiles

By Fred Michmershuizen, Online Editor

When Dr. Lisa Marie Samaha of Port Warwick Dental Arts in Newport News, Va., decided to hold a Smile Makeover Contest, she intended to award one patient with free care. But after reviewing the applications, she decided to present two awards, not one.

The practice received many compelling stories, and two exceptional individuals stood out. As a result, Michael Boyd of Hampton, Va., and Terry Cane of Williamsburg, Va., were selected to receive life-enhancing and life-saving dental treatment that began in October.

“IT was such a heartwarming presentation, for all of us,” said Abby Sharpe, who works in Samaha’s practice. “You could really tell the impact it had on our winners. They are both so deserving. “They will both be undergoing tens of thousands of dollars in treatment over the next month or so and are just so excited and appreciative.”

Samaha and her team had specific criteria for the contest winners. When reviewing the candidates, they considered whether the individuals had life-threatening levels of dental disease, or if they had damage severe enough to keep them from sharing a smile with others.

They considered the candidates’ personal economic circumstances. They also took into consideration whether the candidates had devoted their lives to helping others.

Samaha, founder of Port Warwick Dental Arts, prides herself on offering compassionate care resulting in beautiful smiles.

She provides a wide range of esthetic, reconstructive, surgical and comprehensive dental care. Her practice offers a non-surgical program for periodontal disease treatment that highlights nutrition, specialized testing and state-of-the-art laser therapy.

Tell us what you think!

Do you have general comments or criticism you would like to share? Is there a particular topic you would like to see articles about in Cosmetic Tribune? Let us know by e-mailing feedback@dental-tribune.com. We look forward to hearing from you!
four months.
For denture cases, it is important to keep current on new methods and technologies and for patients to understand their options and improve outcome through proper care.

With digital imaging and 3-D technology, I can better educate my patients by pointing out their particular areas of concern on the large computer monitor.

For extra insight, a Web site called www.denturewearers.com offers helpful information and tips for dentists and patients about the various denture-related options, denture care and how different medical conditions such as diabetes, heart disease and oral cancer affect denture choices.

Being apprised of the facts and researching the choices, such as the patient and I did, facilitates treatment acceptance and success.

For this patient, the implant eliminated the palate of the denture, which had caused much of her gagging, speech and soreness problems.

Besides functioning very well, her beautiful teeth give her the encouragement to speak with confidence and smile with teeth showing instead of pursed lips (Fig. 7).

Moreover, she has a renewed pleasure in eating because she can utilize the taste buds on her palate again.

Giving patients their smiles back always leaves a really good taste in my mouth too. **continued**
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TO BE SOMETHING BETTER
In the truest sense, freedom cannot be bestowed; it must be achieved.
— Franklin D. Roosevelt

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An introduction to lasers in dental hygiene

By Jeanne M. Godett, BDAEF, RDHEDF

What is a laser? How does it work? How long have lasers been used in dentistry? How do they benefit our patients? How are lasers integrated in dental hygiene? Are there any disadvantages to the use of a dental laser?

These and more were the questions I had when I first became interested in using laser technology. In short, this technology has simplified my dental hygiene day. I now have more time in my hygiene treatment regimen to introduce comprehensive restorative dentistry, granting my clients the dentistry they want and deserve along with the ability to preserve their investment.

What is a laser?

The word laser is an acronym for “light amplification by stimulated emission of radiation.” We can thank Albert Einstein for theorizing that photonic amplification could emit a single frequency, or stimulated emission, which explains how a laser operates. Light is a form of energy that exists as a particle, called a photon, and travels in a wave. A photon wave has three basic properties.

Velocity: The speed of light.

Amplitude: The vertical measurement of the height of the wave, from the zero axis to the peak, which describes the energy of that wave. For convenience, energy is measured in millijoules, or thousandths of a joule.

Wavelength: The horizontal distance between any two corresponding points on the wave. In dentistry, we use wavelengths that range between 450 nm and 10,600 nm.

Laser light is distinguished from ordinary light in that it is monochromatic, it can be visible or invisible and each wave is coherent and identical in physical size and shape. Laser energy is nonionizing radiation.

Lasers were introduced to dentistry in 1969 and are capable of providing results comparable to or superior to conventional techniques and instruments.

There are more than two dozen indications for laser use ranging from simple gingival troughing for homeostasis to caries detection, caries removal, tooth preparation and curing.

Laser energy can be reflected, absorbed, transmitted or scattered within the target tissue or can pass through without any effect on the tissues. The diode family of lasers range in wavelengths from 808 nm to 1064 nm. These are soft-tissue lasers and are absorbed in hemoglobin, other blood components and melanin.

The Nd:YAG 1064 nm wavelength is also a soft-tissue laser and also absorbed in hemoglobin, blood components and melanin. Hydroxyapatite does not absorb these wavelengths.

The two erbium lasers are the only hard-tissue lasers with wavelengths of 2,780 nm and 2,940 nm. This laser energy is best absorbed in water and tooth structure.

The CO2 laser is also a soft-tissue laser with a wavelength of 10,600 nm. This wavelength is best absorbed, such as the erbiunm family, in water and tooth structure. However, this laser is only used on the soft tissues. A dentist or hygienist must choose the best laser for the desired treatment.

Erbium lasers use extremely short pulse durations and can easily ablate layers of calcified tissue with minimal thermal effects.

Because of the unique absorption properties, all wavelengths have different penetration depths within the tissues. The erbium and CO2 lasers are absorbed on the surface of the target tissue where the diode and Nd:YAG lasers can reach several thousand microns deep into the tissues.

Lasers in daily practice

With the integration of lasers, I finally have the ability to achieve a higher level of health for my patients.

The first laser I use in my clinical appointment is the 655 nm wavelength laser to detect subgingival and supra-gingival calculus with the laser periio tip attached (Note that the DIAGNOdent uses a standard tip for caries detection and a separate tip for periio calculus detection, so two tools in one just by changing the tip.).

Calculus has never been easier to detect, making my clinical cus time minimal (Fig. 1). My patients leave with less sensitivity, trauma and discomfort.

Secondly, I use my diode laser to reduce the bacteria and pathogens within my client’s sulcus or periodontally infected pocket by simply taking a small optic fiber, almost half the size of a periodontal probe, and shining photonic laser energy into the sulcus.

This is what we in the laser hygiene community call laser decontamination, or laser bacterial reduction (LBR), which is the reduction of the bacteria and pathogens within the sulcus.

I then proceed with the use of ultrasonics and hand instruments for biofilm and calculus removal from the hard tissues, finishing with the use of the diode laser for laser degranulation (curettage), so again entering a diseased periodontal infected pocket with the same optic fiber.

I am able to selectively remove granulation tissue produced by infections and inflammatory diseases like periodontitis.

Today hygienists have the ability to simply and selectively remove bacteria living in our clients’ mouths.

Research shows, 98 percent of the germs that are found in the periodontal pocket are pigmented and can thus be selectively destroyed by the laser.

By simply shining photonic laser energy into our clients’ sulcular tissue, we can safely and effectively lower the bacteria in our clients’ sulcus for up to 56 days. Additionally, the light energy through biostimulation can speed up the process of wound healing and similar regenerative processes.

For a finale, I end my client’s appointment with the same 655 nm wavelengths for laser caries detection, again the KaVo DIAGNOcent. I can give my clinician the necessary information I have gained in their patient’s teeth for a higher gold standard of minimally invasive dentistry. Treating caries at its earliest inception preserves our patients’ natural enamel for their lifetimes.

My newest laser purchase has been the KaVo GentlRay 980 nm Premium. This laser has water irrigation. Water irrigation offers less tissue trauma alone, with 12 watts of gentle micro-pulsing energy.

Pulsing allows the tissues to thermally relax and cool before each additional pulse. Each pulse is taking to use micro-pulsing energy.

I personally use Closys to irrigation while lasing the tissues, producing an antimicrobial irrigation along with water cooling.

This is the only diode laser of its kind available. I am thoroughly enjoying the healthy rewards this laser has offered my clients. Having worked with and instructed on diode lasers of wavelengths from 808 nm to 1064 nm wavelengths over the past eight years, I highly recommend the benefits the 980 nm wavelength has to offer my clients.

This wavelength is also absorbed more readily in water vs. the other diode wavelengths.

Any disadvantages?

A perceived disadvantage of some practices is the initial cost. However, with proper training and laser integration (I consider this to be my specialty), the ROI (return on investment) can be less than three months.

The bottom line

I love working with dental offices throughout the country, assisting them in the integration of laser technology, offering their clients this new gold standard in technology. The offices I have worked with are seeing improved health for their clients, in conjunction, they are seeing their hygiene departments run at a profit.

I highly recommend that if you are going to use laser technology, you seek out education. The Academy of Laser Dentistry (ALD) is a...
Are children receiving prompt cleft lip/palate treatment?

The timely repair of orofacial cleft (OFC) can greatly improve a child’s medical and psychosocial well-being. The American Cleft Palate-Craniofacial Association (ACPA) has set forth guidelines for the optimal time by which primary repair surgery should be received, broken down by type of OFC.

A retrospective study, published recently in The Cleft Palate–Craniofacial Journal (Vol. 46, Issue 6, Nov. 2009) was conducted to determine whether children with OFC receive primary repair surgery within the time recommended by these guidelines.

The study, conducted in North Carolina, found that most children in that state are undergoing primary repair surgery by the recommended age. The study involved vital statistics, birth defects registries and Medicaid files for resident children with OFC born between 1995 and 2002.

The many variables analyzed fell into five broad categories: material, child and system characteristics, perinatal care region and place of residence.

The findings suggest that most (78.1 percent) North Carolina children with OFC received primary repair surgery by the time recommended by the APCA guidelines.

Percentages varied among cleft lip (about 90 percent), cleft palate (58 percent) and cleft lip and palate (89.6 percent).

According to the authors of the study, “Children whose mothers received maternity care coordination, received prenatal care at a local health department, or lived in the southeastern or northeastern region of the state were more likely to receive timely cleft surgery.”

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According to the authors of the study, “Children whose mothers received maternity care coordination, received prenatal care at a local health department, or lived in the southeastern or northeastern region of the state were more likely to receive timely cleft surgery.”

The populations least likely to receive the surgery in a timely manner were African-American/non-Hispanic and those in the southwestern region of the state. This is most likely due to the distance to the craniofacial center and the services provided by the different centers. To read the entire article, “Timeliness of Primary Cleft Lip/Palate Surgery,” visit www.pinnacle.allenpress.com/doi/abs/10.1597/08-1541journalCode=cpfj.


Results: 406 children with OFC were continuously enrolled in Medicaid during the first two years of life. Overall, 78.1 percent of children had surgery within 18 months. About 90 percent of children with cleft lip (CL), 58.0 percent of children with cleft palate (CP), and 89.6 percent of children with cleft lip and palate (CLP) received timely cleft surgery; the mean age at which surgery occurred was five months. Children whose mothers received maternity care coordination, received prenatal care at a local health department, or lived in the southeastern or northeastern region of the state were more likely to receive timely cleft surgery.
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