Ancient teeth bacteria track disease evolution

‘Modern mouth basically exists in permanent disease state’

DNA preserved in calcified bacteria on the teeth of ancient human skeletons has shed light on the health consequences of the evolving diet and behavior from the Stone Age to the modern day.

The ancient genetic record reveals the negative changes in oral bacteria brought about by the dietary shifts as humans became farmers, and later with the introduction of food manufacturing in the Industrial Revolution.

An international team, led by the University of Adelaide’s Centre for Ancient DNA (ACAD) in Australia, where the research was performed, published the results in Nature Genetics in February. Other team members include the Department of Archaeology at the University of Aberdeen and the Wellcome Trust Sanger Institute in Cambridge, United Kingdom.

“This is the first record of how our evolution over the last 7,500 years has impacted the bacteria we carry with us, and the important health consequences,” said study leader professor Alan Cooper, ACAD director. “Oral bacteria in modern man are markedly less diverse than historic populations, and this is thought to contribute to chronic oral and other disease in post-industrial lifestyles.”

The researchers extracted DNA from tartar (calcified dental plaque) from 34 prehistoric northern European human skeletons and traced changes in the nature of oral bacteria from the last hunter-gatherers, through the first farmers to the Bronze Age and Medieval times.

Dental plaque represents the only easily accessible source of preserved human bacteria,” said lead author Dr. Christina Adler, who conducted the research as a PhD student at the University of Adelaide and is now at the University of Sydney. “Genetic analysis of plaque can create a powerful new record of dietary impacts, health changes and oral pathogen genome evolution, deep into the past,” she said.

Cooper said, “The composition of oral bacteria changed markedly with the introduction of farming, and again around 150 years ago. With the introduction of sugar and flour in the Industrial Revolution, we can see a dramatically decreased diversity in our oral bacteria, allowing domination by caries-causing strains. The modern mouth basically exists in a permanent disease state.”

Cooper has been working on the project for the past 17 years with archaeologist and co-leader Keith Dobney, a professor at the University of Aberdeen. Dobney said, “I had shown tartar deposits commonly found on ancient teeth were dense masses of solid calcified bacteria and...”

• ANCIENT, page A3
I enjoy attending and speaking at dental conferences as often as my schedule allows. The big, international events are especially enjoyable, because of the broadened perspectives gained by being able to interact directly with fellow professionals from across the globe and seeing firsthand some of the latest techniques and technologies in action, perhaps long before they’re common practice here.

If you haven’t made it yet to the International Dental Show held in Cologne, Germany, every other year, I’d strongly encourage you to plan on getting to it at least once. I’ve been able to attend a number of times over the years, and have always felt the effort delivered a strong return on investment. The IDS is the largest dental meeting in the world. More than 120,000 people representing all sectors of the dental field attend. Besides the most innovative, newest products, the standard and the durable are all on display in a touchable, congenial environment. It is always held in Cologne, and this year it’s the week of March 12 through 16. Probably a bit too late now to make a last-minute decision to attend this year — but I’d encourage you to pencil in the next one two years from now. The booths in the exhibit area are the largest, tallest and most imaginative you’ll see anywhere, with several floors of highly creative displays in the individual booths. The broad range of products on display from around the world allows visitors to absorb an overview of global dentistry and its products and services. One has to be there and see it. All in the oral health field are welcome.

Another meeting I’ve had the good fortune of attending many times is the Chicago Dental Society Midwinter Meeting, just held in late February. The Chicago Midwinter is preceded by the Oral Health America Gala, a major fund-raising event that supports Oral Health America’s efforts to improve access to oral health care and education in the United States, especially among our most vulnerable populations.
food, but couldn’t identify the species of bacteria. Ancient DNA was the obvious answer.”

The team was not able to sufficiently control background levels of bacterial contamination until 2007, when ACAD’s ultra-clean laboratories and strict decontamination and authentication protocols became available.

Researchers worked with a team of dentists at the University of Adelaide’s School of Dentistry to establish a picture of microbial diversity in modern-day mouths and the relationship between bacteria in plaque and calculus.

Adler wrote, “One common cause of gum disease, porphyromonas gingivalis, had been suggested to lie behind recent rises in heart disease. However, we were able to show it had not increased in prevalence over the past 7,000 years, suggesting it was not likely to be causative. However, it may contribute to the disease by stimulating a permanent state of inflammation.”

The research team is now expanding its studies through time, and around the world, including other species such as Neanderthals.

(Source: The University of Adelaide)
The Thomas P. Hinman Dental Meeting embarks on the “Next 100 Years” in Atlanta March 21–23 at the Georgia World Congress Center. The 101st Hinman features more than 65 dental experts, more than 220 courses (including more 60 hands-on workshops), all-day educational tracks for dentists, dental hygienists, assistants and office staff, and nearly 400 companies demonstrating the latest in dentistry products and services in the exhibit hall. “We are expecting more than 32,000 dentists and dental professionals to join us for the 101st Hinman, where they’ll experience the leading dental experts, numerous courses featuring the latest in dentistry, innovative exhibits and our signature social events,” said Dr. Brad Greenway, general chairman of the 2013 Hinman Dental Meeting.

During the three-day event, the Hinman meeting will offer 60-plus hands-on participation courses, giving dental professionals an opportunity to learn new procedures and fine-tune their skills. Course topics cover a wide range of subjects, such as Botox and dermal fillers, the use of lasers and creating scans with cone-beam imaging. Another highlight is Dr. Pete Dawson and Dr. John Cranham daylong presentation on Friday, March 22, on timeless principles.

The “Business Office Bonanza” returns this year and offers courses throughout the day on Friday, March 22. Also returning for a fourth year is the “Prevention Convention,” which provides courses for the entire dental team on Thursday, March 21, and Friday, March 22. New this year is the “Clinical Team Conference,” with courses designed for dentists and staff, on Friday, March 22.

In addition, Hinman will feature nearly 400 companies showcasing new technology, equipment, products and services for the entire dental staff. New this year on the exhibit floor is a vintage car show that includes the personal classic cars owned by several Hinman members.

Other meeting highlights include:
- Thursday’s keynote session, featuring Jack Hanna of “Jack Hanna’s Animal Adventure” TV show.
- A special prize program that includes vintage-inspired jewelry, a Hinman treasure quest, gas cards, Delta Air Lines tickets, two resort vacations and more.
- The “Dental Student Networking Event & Reception,” Friday at 4 p.m., with opportunities to discuss topics not learned in school.
- Two Hinman signature parties – the “Dentist Reception” and “Auxiliary Reception” — held on Friday night in the Omni Hotel.

Interested attendees can find detailed information about the 2013 meeting online at www.hinman.org. Attendees who do not register online prior to the meeting can register on site at the meeting beginning Wednesday, March 21, at 1 p.m.

(Source: Hinman Dental Meeting)
The Thomas P. Hinman Dental Meeting, March 21-23, in Atlanta, features more than 220 courses — more than 50 of them hands-on. Topics range from “timeless principles” to a first-time-offered course on Botox and dermal fillers.

**New program highlights**

Dr. Dawson, known worldwide for his extensive contributions in the field of occlusion and restorative dentistry, returns with Dr. John Cranham, clinical director of The Dawson Academy, to provide the six-hour course, “Timeless Principles in Restorative Dentistry.” Offered on Friday, March 22, at 8:30 a.m., the course provides essential principles to transform the general practice into one that is thriving with elective esthetic and advanced restorative cases.

In Hinman’s first Botox and dermal filler training course, conducted by Dr. Louis Malkmacher and the American Academy of Facial Esthetics, attendees will learn patient assessment, best treatment techniques, safety/risk issues and how to incorporating treatment into your practice. The two-day course includes hands-on training with live patients.

In addition, Hinman has incorporated a number of new interactive programs and special courses. Among them are:

- **1-on-1 at the 101st Hinman** — In this special hour Thursday afternoon, attendees will have the opportunity to spend one-on-one time with top clinicians to ask questions, discuss case studies and learn information not shared in their lectures.
- **Interactive Panel Discussion** — This fast-paced interactive course, “Stay Out of Jail: How to Navigate Dentistry’s Danger Zones,” is led by Dr. Charles Blair and a panel with Joseph Jordan and Dr. Roy Shelburne. The Friday, March 22, course uses keypads for audience interaction.
- **Clinical Team Conference** — All-day doctor and staff tracks run from 9:30 a.m. to 4 p.m., Friday, March 22. The doctor track includes “Smile Analysis and Esthetic Touring Prior to Bleaching,” with Dr. Van Haywood and “A Snapshot of Clinically Useful Pharmacology,” with Dr. Harold Crossley. The staff track includes “Clinical Tips and Techniques!” with Dr. Wayne Kerr and “The Four S’s of Optimal Aging: Sex, Sleep, Stress and Social Networks,” with Dr. Barbara Steinberg. Both tracks wrap up with “Using Glass Ionomers Successfully,” led by Dr. Randy Huffines.
- **Social Media Bootcamp** — On Saturday, March 23, attendees can dive into the social media game with a hands-on lab. Laci Phillips leads the session from 8:30 to 11:30 a.m.
- **Cosmetic/Restorative New Product Launches** — Tricia Osuna will share with attendees cutting-edge information on products launched since last year’s Hinman.
- **TMJ Participation Course** — Dr. John Droter leads “CT/MRI Scans of the TMJ: How to Read, Interpret and Utilize Modern Imaging Techniques,” Saturday, March 23, from 9:30 a.m. to 12:30 p.m.

(Source: Hinman Dental Meeting)

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**Registration open for 2013 Greater New York Dental Meeting**

Final attendance for the 88th annual Greater New York Dental Meeting came in at 53,481, of which 18,305 were dentists representing all 50 states and 130 countries. The meeting is the largest dental meeting in the United States.

The meeting opened in the Jacob K. Javits Convention Center four weeks after Superstorm Sandy cut a path of destruction across the U.S. Eastern Seaboard. The Javits Center experienced extensive flooding on its lower level, but an around-the-clock effort had it open in time for the meeting. The GNYDM was packed with its usual vast array of the latest in technologies, resources, products — and an extensive agenda of educational opportunities.

Meeting organizers report that the reaction from attendees, exhibitors and sponsors was unanimous: Not only were the exhibit floor, clinicians and networking events well received, but sales opportunities were described as being unprecedented.

Planning is under way for the 2013 meeting, Nov. 29 through Dec. 4 (scientific meeting) and Dec. 1 through Dec. 4 (exhibit hall). The GNYDM is sponsored by the New York County Dental Society and Second District Dental Society.

The high-energy event, which never has a pre-registration fee, draws top dental professionals with an expansive exhibit hall and more than 300 educational courses, including full-day and half-day seminars, essays, hands-on workshops and a live, 430-seat, high-tech patient demonstration area.

Free registration is now open for 2013 at www.gnydm.com.

(Source: Greater New York Dental Meeting)
BIOLASE, a leading dental laser manufacturer and distributor — and distributor of Newtom and 3Shape TRIOS technologies in North America — will showcase its full line of award-winning laser systems, 3-D cone-beam devices and digital intraoral scanning technology at all major and regional 2013 trade events, including the Thomas P. Hinman Dental Meeting in late March.

The company will feature its line of laser and imaging technologies with functioning equipment to allow hands-on demonstrations and discussion of the full range of applications. “We are proud to present our award-winning systems at the Hinman Dental Meeting and beyond,” said John Bernhard, director of marketing at BIOLASE. “They represent the collective efforts of multiple teams, and they are being shared in an environment where dental professionals can spend time with these groundbreaking technologies to gain an understanding of their applications in the dental clinic.”

**EPIC diode lasers packed with category-exclusive features**

New to the Hinman Dental Meeting this year is the EPIC Total Diode Solution, the newest laser from BIOLASE. It’s described as being packed with one category-exclusive feature after another, setting a new standard in diode laser performance and value. A graphical touchscreen gives dentists fingertip access to as many as 20 common soft-tissue procedure presets — plus 20-minute full-mouth whitening and FDA-cleared temporary pain relief. Additionally, EPIC can be a financial boon for many practices because of its integrated, FDA-cleared protocols for laser hygiene and peri-oral scaling and root planning. Plus, a new Comfort Pulse setting reduces pulse length to as little as one-tenth of a second to avoid heat build-up at the surgical site — for fast tissue cutting with less patient discomfort.

**3Shape TRIOS digital scanner, full range of WaterLase all-tissue lasers**

Another addition is the 3Shape TRIOS digital intraoral scanner system.

The TRIOS digital solution, which includes a hand-held scanner, operator’s control cart and intuitive software, provides faster impression taking, improved accuracy and clinical results, reduced need for retakes and less adjustment and grinding. TRIOS’ unique features include: spray-free scanning, high accuracy optimized for an extensive range of indications, clinical scan validation, online communication with the dental lab, and intuitive Smart-Touch user interfacing.

Other products available include WaterLase iPlus, WaterLase MDX and WaterLase MD Turbo, the company’s full range of all-tissue laser devices. WaterLase iPlus represents a pinnacle of 20 years of research to improve cutting speed to match that of a high-speed drill, with a fraction of the discomfort and ancillary challenges a dental drill creates, such as microfractures, smear layer and more.

The WaterLase MDX and WaterLase MD Turbo are described as being ideal for practices seeking a basic, lower-cost entry point for all-tissue laser dentistry. Although the WaterLase MD platform was first released in 2004, there have been many improvements and refinements, including a more flexible fiber, faster-cutting handpieces and many other important improvements,” said Dmitri Bouroussov, BIOLASE chief technology officer and longtime head of the company’s innovative R&D department.

**NewTom compact CBCT technology helps increase treatment-plan acceptance**

Finally, BIOLASE now offers NewTom Cone-Beam-Computed-Tomography (CBCT) technology. The technology is relatively new to dentistry and is a more compact version of standard medical CT imaging that uses a cone-shaped X-ray beam to obtain a multitude of radiographs that construct digital 3-D models of maxillofacial anatomies. The NewTom VGi is reported to have the finest image quality of any CBCT system in dentistry, with a minimal dose of radiation to patients. Dentists using the NewTom CBCT technology report increased treatment-plan acceptance, improved diagnostic capabilities and other advantages.

**About BIOLASE**

BIOLASE is a biomedical company that develops, manufactures and markets dental lasers and distributes and markets dental imaging equipment. The company’s laser products incorporate approximately 290 patented and patent-pending inventions, including cosmetic and complex surgical applications as well as a full line of dental imaging equipment and CAD/CAM systems. BIOLASE has sold more than 21,000 lasers.

Other products from BIOLASE include cutting-edge technology at competitive prices to deliver the best results for dentists and patients.

BIOLASE’s core products include dental laser systems that perform over a broad range of procedures (including cosmetic and simple surgical applications) as well as a full line of dental imaging equipment and CAD/CAM systems. BIOLASE has sold more than 21,000 lasers. Other products address occlusion, esthetics, periodontics and other medical and consumer markets.

(Source: BIOLASE)
Endodontic rotary file system refined

DENTSPLY Tulsa Dental Specialties introduces the PROTAPER NEXT system

DENTSPLY Tulsa Dental Specialties has introduced its newest innovation and an expansion of its world renowned endodontic file system. PROTAPER NEXT is the same variable taper design found in the original ProTaper that clinicians have turned to for more than a decade, but refined to improve performance.

PROTAPER NEXT features: patented M-Wire® NiTi alloy for increased flexibility and resistance to cyclic fatigue, rectangular cross-section for greater strength; and a unique asymmetric rotary (AR) motion.

PROTAPER NEXT uses the same trusted rotary action as the original ProTaper. What’s different is how the file moves down the canal. The off-center rectangular cross-section of PROTAPER NEXT differs from the center of mass. Only two points of the cross-section touch the canal wall at a time, reducing the torsional stress on the file. The result is a fully tapered and predictable shape achieved with greater procedural efficiency.

The single-use and pre-sterilized PROTAPER NEXT files also feature shorter handles (11 mm) and are available in 21-, 25- and 31-mm lengths. Four sizes of color-coded and precision-matched absorbent points, gutta-percha points and obturators fit all PROTAPER NEXT prepared canals. Together they represent the PROTAPER NEXT system-based approach to root canal therapy. For more information about the latest endodontic innovation from DENTSPLY Tulsa Dental Specialties, visit www.tulsadentalspecialties.com/protapernext.aspx or call (800) 662-1202.

About DENTSPLY Tulsa Dental Specialties

DENTSPLY Tulsa Dental Specialties describes itself as being the premier producer and marketer of endodontic dental systems in North America. It is a division of Pennsylvania-based DENTSPLY, a leading developer, manufacturer and marketer of products for the dental market.

For details, visit www.tulsadentalspecialties.com or call (800) 662-1202. DENTSPLY International is a leading manufacturer of dental and other healthcare products. The company believes it is the world’s largest manufacturer of professional dental products.

For more than 110 years, DENTSPLY’s commitment to innovation and professional collaboration has enhanced its portfolio of brand-ed consumables and small equipment. Headquartered in the United States, the company has global operations with sales in more than 120 countries. Visit www.DENTSPLY.com to learn more about DENTSPLY and its products.

(Source: DENTSPLY)
Use an online ‘ecosystem’ to find, attract and keep patients

The digital age is completely changing the way dental practices and patients interact. The days of low-tech marketing efforts are long gone.

The need for personal contact from a patient’s perspective has been rendered less important with the advent of digital communications, as patients increasingly state they prefer the convenience of online, on-demand information. Interestingly, 93 percent of patients find it more convenient to find answers online compared with calling the office.

Patients have embraced the digital age, and practices must adjust to their patients’ preferences and be where their patients are — online. A digital strategy focused directly on patient engagement is now imperative to grow and maintain a long-term, sustainable practice.

There are four key outcomes that drive a sound patient-engagement strategy. Each of the outcomes is interrelated and work in concert to position a dental practice for sustained growth and stability.

**New patient acquisition**
The first step in acquiring new patients is making them aware of your practice. Be where your prospective patients are — online. This includes an optimized website, having an established presence in the social media world, and the ability to be present on search results.

An optimized website is the cornerstone of a successful patient engagement strategy. Achieve this by building your site based on patient behavior and ensuring that it can be easily found by prospective patients within your region. This includes content, design and search engine optimization.

**Practice loyalty**
While finding prospective patients helps offset attrition, it’s always easier to keep a patient than acquire a new one. To effectively manage a dental practice for profitability it is imperative that you retain relationships with existing patients. Gain practice loyalty by responding to patient preferences.

A digital patient communication system offers a secure site with a comprehensive list of online services, such as automated reminders, automated calling, invoice review and online payment.

**Increased treatment plan adoption**
This same portal also provides a new level of education and understanding for your patients. It lets patients review advanced treatment plans and helps them articulate the benefits of the procedure recommendations. Suddenly the dental practice is transformed from the role of
Expert Dental CE: New name with the same expert courses

Among latest additions to course lineup: ‘Smile Design for Anterior Esthetics and Laminate Veneer Preparations’

All would agree that Expert Dental CE (www.expertdentalce.com) is easier to say and remember than the mouthful: xpAPce. “While we liked the notion that xpAPce was not pronounceable,” says xpAPce Co-Founder Alan A. Winter, “and people did remember that it was something like ‘xp@%', they could never quite get it right. We were lucky enough to get the domain name that reflects our original name and mission, so from now on, we will function under Expert Dental CE while retaining the original corporate name that no one needs to say.”

Additional upcoming courses will soon be available in oral pathology with Dr. Ian Sivskey, oral medicine with Dr. Federico Brugnami, Drs. Peter Cathro and Geoffrey Heithersay will provide courses on instrumentation and treating resorptions — additions to xpAPce’s comprehensive endodontic module.

xpAPce’s new price schedule and annual subscription makes courses more attractive than ever.

Smile-design course added

Another highlight: Dr. Graz Giglio, president of the N.Y. Academy of Prosthodontists, delivers two programs on “Smile Design for Anterior Esthetics and Laminate Veneer Preparations.”

The elearning takes place in a unique format: an online dental community. Dental professionals can earn C.E. credits, visit vendors at their leisure, view new products, download PDFs, contact a sales rep, attend a meeting and more.

Visit the Education and Vendor Hall for a list of scholars and courses — and to see the vendors that have booths inside the community.

For information about becoming a vendor, contact info@xpapced.com. For a snapshot of both of the organization’s websites, visit www.xpapced.com, where all courses and vendors are listed.

Dr. Graz Giglio

Reflecting a new name, www.expertdentalce.com points to www.xpapce.com. Find C.E. courses, new products, expert speakers such as Dr. Graz Giglio, above, and a community of dental professionals. Photos/Provided by xpAPce

Courses also are available live and on demand on the Dental Tribune Study Club website, www.dtstudyclub.com

(Source: xpAPce)

Universal composite is free of ‘aggravating techniques’

DENTSPLY Caulk says TPH Spectra doesn’t require the ‘techniques’ typically needed to overcome handling obstacles

Dentsply Caulk has introduced TPH Spectra™ Universal Composite, which according to the company provides clinicians with their preferred composite handling — without the “aggravating techniques” required to overcome handling obstacles associated with many composites.

Whether practitioners prefer spreadable or packable handling, Dentsply Caulk reports that TPH Spectra has handling preference covered with TPH Spectra LV (Low Viscosity) and HV (High Viscosity).

The new shading system for TPH Spectra provides seven VITA-based shades that cover the entire VITA shade system. This reduction in shades allows practices to carry fewer inventories in the office and enables practitioners to be confident that the chameleon shading ability of the composite will blend the material into the surrounding tooth structure, making the restoration indistinguishable from the tooth, according to the company.

To learn more about new TPH Spectra, visit www.tphspectra.com or contact (800) 532-2855.

(Source: Dentsply Caulk)

+ECOSYSTEM, page A8

Dental service provider to trusted advisor — it’s this latter role that helps patients make the decision to invest in their oral health and enrich their lives.

Referral acceleration

Patient referrals are, for many practices, one of the most important new patient drivers. In a recent Sesame survey, an astounding 41.4 percent of patient referrals from surveyed practices came from friends and family members.

The continued success of your practice requires happy patients who refer their friends and family. While the first step is to encourage patients to tell their friends and family, one of the best ways to drive more referrals is to make the experience, and ultimately practice production, collections and profitability.

These benefits drive the key outcomes that define a successful patient engagement strategy. Automation delivers more consistent patient compliance and a more predictable schedule and production for the practice. And patients prefer it: 74 percent of patients said having anytime online access to information makes them more likely to stay with a practice.

Sesame Communications provides a complete digital solution that works across all four key outcomes and positions your dental practice for sustained growth and success. Sesame has created the only cloud-based platform that addresses all areas of patient relationship management. By creating this online “ecosystem” your practice will attract and retain more patients, drive higher treatment plan adoption and reduce the instance of no-show appointments.

Learn more at the Hinman Dental Meeting by stopping by booth No. 1646.

(Source: Sesame Communications)
DENTSPLY International Family of Brands
for a lifetime of oral health

Suraflow®
A one-of-a-kind low-stress flowable material that reduces posterior composite placement time.

Microscope® RDH Freedom™ Cordless Proply System
Offers a balanced, lightweight design that eliminates cord drag while increasing accessibility in mouth.

ATLANTIS™ Crown Abutment
Optimizes function and aesthetics for patient-specific, single-tooth, screw-retained restorations.

Cercon® Full Contour Zirconia
Preps like gold, looks like a natural tooth, and lasts like a PFM.

patient-preferred solutions
DENTSPLY's innovation process and rigorous commitment to clinical research ensure that our new products benefit practitioner and patient alike.

Polodent® Plus
Sectional Matrix System
Delivers fast, predictable and accurate Class II restorations.

GuttaCore® Crosslinked Gutta Percha Core Obturators
First gutta-percha core designed to provide dense 3D fills, be easy to remove and create post space.

You've Got One Smile to Last You a Lifetime...
We'll Make Sure It Does.

Our success tends to make a lot of people smile. Through the pursuit of better dentistry, we enable dental professionals to deliver better quality care – which in turn, can enable their patients to lead healthier, happier lives. Whether it's impressions and restorations, orthodontics, endodontics, implants, prosthetics, to overall oral hygiene, DENTSPLY is dedicated to making it better. For over 100 years and counting, we remain proud partners with dental professionals in providing innovative products that both advance the practice of dentistry and meet the oral health needs of patients.

Visit our DENTSPLY Team at Booth #1227

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Clinical

How hygienists can support patients’ overall body health

Use the power of cross coding

By Marianne Harper

H ave you lost the excitement? Are you content with what you might now perceive as the same-old, same-old every day? Day after day you may be performing hygiene procedures over and over again, all the while knowing you are helping your patients but perhaps you simply don’t feel as though you are truly making a significant difference in their overall health. If you feel that level of frustration, or even if you don’t, but you are interested in advancing your career, then read on to discover some ways in which you can make a significant difference in the health of your patients.

As you are aware, dentistry is becoming recognized as a medical discipline. We in the dental field are in a unique position to support our patients’ overall body health. Our patients who maintain their regular recare schedules are quite probably seen by us more frequently than they are seen by their primary care providers. “Around 99 percent of adults see their physicians in a year while 64 percent see their dentists, which means we see 25 percent more patients than they do.”

Update recare forms

Hygienists can be key players in this opportunity. By thoroughly questioning their new patients and by providing and reviewing medical history forms that are updated with the most current medical questions, hygienists can begin an evaluation of their patients’ medical state.

In addition, our established patients may have had a change in their medical history since their last appointment, so a recare update form is an efficient way to inquire about their health. If your practice is not familiar with recare update forms, here is a simple process.

- See OVERALL, page D2

Embrace it: Help your patients navigate orthodontics with ease

Between 1982 and 2008, the number of people getting braces in the U.S. increased by 99 percent, according to the AAO Patient Census Study conducted by the American Association of Orthodontics. This dramatic growth has resulted in a large number of patients looking for information to prepare for orthodontic treatment and guide them through the often challenging process. To address this growing need, Crest and Oral-B have launched Embrace It! (www.embraceit.com), a complete online resource for parents and patients preparing for or maintaining braces.

Embrace It! helps answer braces-related questions, including what to expect, how to care for them, and how to address financial concerns. An “Ask-the-Expert” feature even connects users with an oral care expert to answer their questions. Embrace It! was designed with parents in mind, to make the tooth-straightening process a little less mysterious. “After they leave the office, patients may feel overwhelmed with questions about the treatment and best products for their oral health condition,” says Dr. Jennifer Salzer, a New York-based orthodontist and mother of four, who is featured on the website. “Embraceit.com has a wealth of information on orthodontic treatment, presented in a user-friendly format to help patients and parents navigate the braces experience and feel confident with their mouths during the process.”

To ease the transition to braces, Crest and Oral-B offer OrthoEssentials, the ideal collection of oral care products for someone with braces including simple education tools to guide proper use and produce results that exceed expectations. With OrthoEssentials, patients can steer clear of common problems such as gingivitis, tartar and demineralization, which can result in additional time and expense — and get the most beautiful and healthy smile possible.

For patients in the tween age group particularly, getting braces is the perfect time to re-establish proper oral care techniques and routines to inspire confidence in having a healthy smile. To help tween patients through this awkward phase, Crest and Oral-B have updated their line of tween-friendly Pro-Health FOR ME oral care products to include the Oral-B Pro-Health FOR ME Electric Powered Toothbrush. With a built-in two-minute timer and multiple brush heads for sensitive teeth and gums, it enables patients can to power the gunk away — something orthodontist can appreciate.

For more information on Embrace It!, you can visit www.embraceit.com. To learn all about OrthoEssentials and Crest and Oral-B Pro-Health FOR ME products, visit www.dentalcare.com.

(Sources: Crest and Oral-B)
Commentary: Not all hand-held X-ray systems are created equal

By Joel Gray, PhD

As a recent article on (www.dental-tribune.com) points out, there are some safety issues with hand-held X-ray units made in China and Korea, as well as elsewhere outside of the United States. There are two sources of radiation from an X-ray system—leakage radiation from the X-ray tube and scattered radiation from the patient. The leakage radiation is minimized by placing highly absorbing material, such as lead, around the X-ray tube. The major issue with the hand-held X-ray units is the scattered radiation, that is X-rays that are scattered from the patient towards the operator.

In fact, about 20 to 30 percent of the X-rays are scattered from the patient toward the person holding the device. The X-ray units from outside the United States, which are under FDA scrutiny, do not provide any protection from X-rays scattered from the patient. These systems therefore look like a true camera that you hold with both hands.

There is no shielding provided by these hand-held systems, that is, the user’s hands are exposed to all of the X-rays scattered from the patient. Consequently, the user’s hands are going to receive a radiation dose that will probably exceed the radiation-protection limits for skin and extremities. Therefore, these units should not be hand-held.

We evaluated one hand-held X-ray unit manufactured in the United States (Nomad, Aribex Inc) and compared staff doses with those for the same staff using conventional wall-mounted systems prior to acquiring the hand-held systems (Gray et al. 2011). This hand-held system uses a proprietary shielding material around the X-ray tube, resulting in leakage radiation levels that are virtually immeasurable. In addition, it has an integral leaded-acrylic shield that protects the user from radiation scattered from the patient.

The results of our study indicated that the users of the hand-held X-ray system received lower radiation doses than they did when they were using conventional wall-mounted X-ray systems.

Buyers should be aware that not all hand-held X-ray systems are created equal and not all of those being sold on the web have been reviewed by the FDA. Hand-held X-ray units should have sufficient shielding to minimize leakage radiation from the X-ray tube and an integral shield to protect from radiation scattered from the patient.

• See OVERALL, page D3

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 an article about in Hygiene Tribune? Let us know by e-mailing feedback@dental-tribune.com. We look forward to hearing from you!

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Dental practices should be cross coding for the following:
- Trauma procedures
- Oral surgical procedures
- TMJ procedures
- Sleep apnea procedures
- Medically necessary endodontic procedures
- Medically necessary implant and periodontal procedures
- Exams, radiographs and diagnostic procedures for any medically necessary dental procedure

More cross-coding procedures
The full scope of cross coding is much more extensive than just these tests. There is no guarantee that these tests would be covered by the plan. According to the Centers for Medicare and Medicaid Services, “the existence of a code does not, of itself, determine coverage or non-coverage.”

It is certainly worth the effort of a phone call to determine coverage. I always advise practices that cross code and receive negative responses to encourage their patients to complain to their employers. Insurance contracts are between the insurance company and the employer, so dental practices have little power to make any plan changes. However, the more that complaints are issued, the more likely that medical insurance carriers will begin to see the necessity for including these types of procedures in their plans.

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Positive changes to your career
Between implementing disease testing and cross coding, a hygienist will significantly make positive changes to his or her career. These hygienists will not only help patients obtain optimal health, but they can also help make procedures more affordable.

Patients will be able to see that their dental practice truly cares about their health and will have more confidence in the practice. This is a true win-win situation. The dental practice will value the contributions of these hygienists, and hygienists will rarely face each day with that “same-old, same-old” feeling.

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