The new standard of care in orthodontics

Part 1

By Dennis J. Tartakow, DMD, MEd, EdD, PhD, Editor in Chief

Still in the early stages of the new millennium, we are in an era of dentistry and orthodontics where more accurate diagnoses are possible thanks to technological advances in imaging and scanning. We now have treatment capabilities that were not possible only a decade ago. Treatment outcomes have also improved with advances in periodontal treatment and operative dentistry. Diagnosis and treatment advances have improved the quality of dentistry and saved or prolonged permanent dentitions for millions of individuals. Such changes in the standards of care.

• See STANDARD, page 15
Mechanism of tooth movement
Orthodontic tooth movement is mediated by specific reactions at a cellular level that take place in the tissues surrounding a tooth. Cellular, chemical and mechanical reactions bring about the structural changes that prompt tooth movement. Bone is resorbed on the pressure side and deposited on the tension side of a tooth. An acute inflammatory response with periodontal vasodilation occurs. Necrotic collagen fibers (cAMP), calcium, collagenase and prostaglandins mediate tooth movement as a response to orthodontic force. Chemically, local inflammatory mediators can pass through the bloodstream, reach the mechanically stressed tissues and interact with local cells. This can have an inhibitory effect on orthodontic tooth movement (Dravidivanam, 2011).

Orthodontic patients often use over-the-counter analgesics to control the discomfort associated with tooth movement as well as to treat other ailments (Salmassian, Oesterle, Shellhart and Newman, 2009). Many of these pharmacological agents are known to systemically influence bone and the velocity of tooth movement by interfering with prostaglandin production and the inflammatory process. The pressure-tension zones are responsible for resorption and deposition occurring in three stages: alterations in blood flow associated with pressure in the periodontal ligament (PDL), formation of activated mesenchymal cells and activation of cells (Salmassian, et al., 2009). After force is applied, there is an increase of prostaglandin E and prostaglandin F2alpha, forming a gingival exudative reaction. This is a critical step in increasing the number of osteoclasts, the rate of bone resorption and orthodontic tooth movement, and is the step that is affected by NSAIDs medication (Salmassian, et al).

Process of orthodontic tooth movement
In order to appreciate how NSAIDs can affect the rate of orthodontic tooth movement, one must understand the complex process. Tooth movement due to orthodontic forces is induced by prolonged application of mechanical forces, creating pressure and tension zones in the periodontal ligament and alveolar bone (Gameiro, Pereira-Neto, Magnani and Nouver, 2007). Bone is depleted of bone calcium in the tension zone and resorbed by osteoclasts in Howship’s lacunae in the pressure zone (Knop, Shintcovsk, Retamoso, Ribeiro and Tanaka, 2011).

Remodeling occurs in dental and periodontal tissues, including dental pulp, periodontal ligament, alveolar bone and gingiva. These tissues, when exposed to mechanical loading, express significant macroscopic and microscopic changes. On a cellular level, orthodontic tooth movement is characterized by initial acute inflammation, followed by a chronic inflammatory process (Krishnan and Davidovich, 2006). The acute inflammatory process that characterizes periodontal inflammation consists of periodontal vasodilation and migration of leukocytes. This inflammation is mainly exudative, indicating that the plasma and leukocytes are exiting the capillaries in areas of parodontal strain. These migratory cells produce a variety of cytokines that act as local stimuli for releasing inflammatory cells directly and indirectly with the population of resident parodontal cells. Cytokines are responsible for evoking subsequent events that are responsible for remodeling that accommodate tooth movement that can persist until the next orthodontic treatment (Knop, et al., 2011). These target cells make up the functional units known as Howship lacunae. COX-2, on the other hand, is regulated by inflammatory mediators and creates prostaglandins that play a role in pathophysiological and inflammatory processes, including pain. Studies have also found that these prostaglandins not only mediate inflammation but also participate in bone formation and induction of bone resorption through activation of osteoclasts (Sari, et al., 2004).

It is during the acute inflammatory phase of orthodontic tooth movement that patients experience painful sensations and reduced chewing function. Ninety to 95 percent of orthodontic patients report experiencing this discomfort (Patel, et al., 2010). Indications of this phenomenon can be seen in the gingival exudative reaction and the acute inflammatory catabolism of the bone. The role of prostaglandins in this process is well documented (Marquez-Orozco, 2006). Therefore, prostaglandins play a significant role in mediating orthodontic tooth movement. The discomfort associated with archwire placement and subsequent tooth movement can be controlled by inhibiting the inflammatory response. This makes nonsteroidal anti-inflammatory drugs a logical choice for treating this type of pain. However, NSAIDs are also powerful inhibitors of prostaglandin synthesis, which recent studies have shown to be responsible for delaying or inhibiting orthodontic tooth movement. This area of research is critical to the field of orthodontics because it is important for orthodontists to be aware of it in order to find the analgesic of choice for treating patients experiencing discomfort that will not prolong the patient’s orthodontic treatment. The orthodontist can then educ the patient about proper pain management during treatment.

Clinical studies on effects of various analgesics on orthodontic tooth movement
Nonsteroidal anti-inflammatory analgesics such as aspirin, ibuprofen and naproxen have been found to reduce the rate of orthodontic tooth movement. Research shows these effects result from diminishing the number of osteoclasts through inhibition of biosynthesis of prostaglandins when they act over the cyclooxygenase-mediated catalysis of prostaglandin synthesis (Marquez-Orozco, 2006). When the number of osteoclasts are diminished, there is a decrease in bone resorption and, therefore, a reduction in the rate of tooth movement.

Histological studies were performed comparing bone in the pressure zone from rats that had been administered these drugs, with bone from rats that received acetaminophen or a control, while undergoing orthodontic tooth movement. NSAIDs diminish bone (Fig. 1) showed less remodelled areas, less and smaller osteoblasts, indistinguishable osteoclasts in the pressure region, abundant parallel layered osteocytes, reduced Howship lacunae (Knop, et al., 2011), and no observed growth lines (Arias and Marquez-Orozco, 2006). The control and acetaminophen groups (Fig. 2) showed abundant remodelled areas, distinguishable multinuclear osteoclasts, mesenchymal appearing osteogenic cells, epithelial osteoblasts and normal appearing trabeculation. Numerous growth lines were also apparent, typically concentric around osteons. The results of the histological analysis of the acetaminophen and control groups are indicative of normal, uninhibited orthodontic tooth movement (Arias and Marquez-Orozco, 2006).

Acetaminophen as the drug of choice
Acetaminophen is a nonopioid analgesic in the family of paracetamol derivatives. The exact mechanism of action of acetaminophen has not been determined. Acetaminophen differs from other nonsteroidal anti-inflammatory drugs and prostaglandin inhibitors because although it has similar antipyretic and analgesic properties, it exhibits little effect on the central nervous system level without inhibiting peripheral prostaglandin secretion via cell membranes as typical NSAIDs do. Acetaminophen, being inactive as an anti-inflammatory agent in peripheral tissues, does not inhibit prostaglandin synthesis (Arias and Marquez-Orozco, 2006). Beyond the fact that it is not detrimental to orthodontic tooth movement, acetaminophen is a readily available, over-the-counter, inexpensive analgesic that has been found to be equally effective in reducing the rate of orthodontic tooth movement. Research shows these effects result from diminishing the number of osteoclasts through inhibition of biosynthesis of prostaglandins when they act over the cyclooxygenase-mediated catalysis of prostaglandin synthesis (Marquez-Orozco, 2006). When the number of osteoclasts are diminished, there is a decrease in bone resorption and, therefore, a reduction in the rate of tooth movement.
Not only can you choose where to have your server, but the next version of topsOrtho will give you even more to love:

- **High-def reporting.** This focus on patient statuses and appointment dispositions allows for closer patient tracking by using a different way of entering, gathering, and monitoring patient statistics.

- **topsChecklist.** With this iPad application, you can create checklists for any task. For example, you can collect patient medical histories by handing a patient or account holder an iPad, which they can use to fill out and sign the forms.

- **Enhanced treatment notes.** The Treatment Notes section now includes a new treatment status column, next appointment, and disposition. It also allows you to approve notes, indicate treatment method, self-grade treatment timing, and use a checkbox to mark appointments as starting or ending treatment.

- **Automatic backup.** Your practice data will be backed up automatically to an off-site location.

Contact us for a sneak peak at how our next release will help your practice!

Phone: +1 (770) 627-2527
E-mail: sales@topsOrtho.com

(Ask us about the secret weapon that will revolutionize your ability to see what's happening in your practice.)
ANALGESICS, Page 4

‘With acetaminophen being the most commonly used OTC medication in the United States, it is important that patients are informed about guidelines for its usage. Overdose of acetaminophen is the most common cause of acute liver failure.’

as ibuprofen and a placebo in controlling discomfort after archwire placement (Salmassian, Oesteer, Shellhart and Newman, 2009). Therefore, acetaminophen might be the drug of choice in treating mild to moderate discomfort associated with orthodontic treatment.

NSAID use and the orthodontic practitioner

Clinicians are responsible for comprehensive evaluation of a patient’s medical history and for its use as an integral part of the patient’s diagnosis. This includes an understanding of how a patient’s medication — prescription or over-the-counter — will affect his or her treatment.

Given the frequency of NSAID use in this country, clinicians in the dental field are likely to encounter patients who are using these drugs regularly. Furthermore, the United States is likely to hold tremen-
dous growth because of the aging popula-
tion that is facing conditions such as arthritis, for which many of these drugs are being used by patients of all ages, this issue of increased NSAID use is more preva-
lent than ever (Turpin, 2009).

Common analgesics prescribed

Prescription and over-the-counter use of analgesics among adults in the United States is extremely high. Most individuals take some sort of anti-inflammatory drugs that have analgesic, anti-inflammatory and anti-inflammatory action. They are used in treating headaches, arthritis, sports injuries, menstrual cramps and other illnesses. Aspirin, a drug con-
sidered to be in the NSAID category but with less adverse effects, is also often taken regularly by patients in treating patients of all ages, this issue of increased NSAID use is more prevalent than ever (Turpin, 2009).

In a survey of American adults, OTC analgesics were shown to be the most frequently used of all medications and are taken by 20 percent of the adult population in a given week (OTC Medica-
tions, n.d.). The non-prescription analgesics acetaminophen, aspirin and ibuprofen are the most frequently used drugs in the United States (Eline Survey, 2006). In any given week, 25 percent of adults in the United States report use of acet-aminophen, ibuprofen, or a combination used for both its anti-inflammatory and analgesic proper-
ties. NSAIDs are also used in children to treat mild to moderate acute pain where inflammation is the source (Garanian and Graudins, 2006). Acetaminophen is the first drug of choice for analgesia and treatment of febrile illness in single-dose therapy for children because its analge-
sic and antipyretic efficacy is equivalent to NSAIDs but with less adverse effects. The effects of aspirin and NSAIDs are non-
aminoic or any alternating regimen of these two in treating fever in children is not recommended as it may potentiate the risk of increased GI bleeding in young children (Gazar-
ian and Graudins, 2006).

Adverse side effects of commonly used analgesics

In spite of the therapeutic efficacy and widespread usage of aspirin and NSAIDs, there are unwanted and serious side ef-
effects that occur in 5-15 percent of reg-
note; these are mostly related to the risk of increased NSAID use and the orthodontic practitioner.

In children, it is uncommon to have serious toxicity associated with NSAID use; however, similar effects that oc-
rer in 5-15 percent of regularly taking aspirin or NSAIDs. In children, it is uncommon to have serious toxicity associated with NSAID use; however, similar effects that occur in 5-15 percent of regularly taking aspirin or NSAIDs.
Are In-House Payment Plans Too Much To Handle?

OrthoBanc Can Help!

Visit us at these meetings to learn how . . .

OrthoVoice, Las Vegas, NV, September 20-21
RMSO, Colorado Springs, CO, September 27-29
SAO, Hilton Head, SC, October 3-5
SWSO, Dallas, TX, October 11-12
PCSO, San Diego, CA, October 18-19
NESCO, Rio Grande, Puerto Rico, November 15-17

Call 888-758-0585 today or visit www.orthobanc.com.
NSAIDs should be given with food to reduce mild gastrointestinal symptoms that can occur. Hepatitis is another side effect that can occur in children during NSAID treatment, but is most common with ibuprofen. Therefore, liver function in children should be monitored in those receiving long-term NSAID treatment. Incidence of renal toxicity in pediatric patients is low, with 0.2-0.4 percent prevalence in children with juvenile idiopathic arthritis (Gazarin and Graudins, 2006). CNS effects, including headache, skin reactions and bronchospasm, can also occur in children using NSAIDs. Long-term NSAID use in children can also prolong bleeding time through inhibition of platelet aggregation (Gazarin and Graudins, 2006).

Discussion

Knowledge of the effects of NSAIDs on orthodontic tooth movement must encourage dental professionals to take a step back and focus on patient care starting with the medical history. Consideration of medications taken by patients that can interfere with tooth movement is important in order to reduce negative effects of prolonging orthodontic treatment. Many studies on NSAIDs, such as those by Knop, Shinicot, Retamoso, Ribeiro and Tanaka, as well as Arias and Marquez-Orozco, have been conclusive in showing that NSAIDs slow down tooth movement, while blocking the inflammatory response through inhibition of prostaglandins. In spite of the fact that these studies are scientific and well-designed, there is some uncertainty when extrapolating data and applying it to humans in a clinical scenario. Weaknesses include animal subjects, variability in experimental design, drug administration technique and force characteristics (Bartzela, Turg, Motschall and Maltha, 2009).

The purpose of this research should include a design for further studies analyzing the effects of NSAIDs in humans undergoing orthodontic treatment. With the information provided today, acetaminophen appears to be the analgesic of choice for orthodontic patients because it has been shown to have no effect on tooth movement, while being equally as effective as other NSAIDs in controlling orthodontic discomfort.

Summary

The practice of orthodontics is based on tooth movement through bone in response to application of mechanical forces. The bone remodeling that takes place occurs through an inflammatory process that is mediated by prostaglandins. Many orthodontic patients use OTC analgesics such as NSAIDs to control the discomfort associated with the inflammatory process, unaware that studies have shown these NSAIDs inhibit orthodontic tooth movement. Chemicals in the drug can pass through the bloodstream, reach the mechanically stressed tissues and interact with local cells. In doing so, NSAIDs inhibit prostaglandin synthesis, therefore inhibiting the rate of orthodontic tooth movement as well. It is suggested that practitioners be aware of all medications taken by patients that could interfere with tooth movement in order to reduce the negative effects of prolonging orthodontic treatment. Research has shown that traditional NSAIDs, such as ibuprofen and aspirin, decreased the rate of orthodontic tooth movement. Acetaminophen, an inactive inflammatory agent, had no effect. Acetaminophen should, therefore, be considered the analgesic of choice for patients undergoing orthodontics, unless contraindicated by the patient’s medical history or physician.

References

Pacific Dental Conference
Canada’s Premier Dental Conference

Join us in Vancouver, BC
Inspiriting speakers
Fantastic networking
Unforgettable location!

Future Conference Dates
Vancouver Convention Centre
March 6-8, 2014 – West building
March 5-7, 2015 – West building
March 17-19, 2016 – West building

www.pdconf.com

The Pacific Dental Conference would like to introduce our newest addition to our extensive line-up of Continuing Education opportunities. We will now be offering quality Hands-On Courses that you enjoy at the annual conference – year round!

Visit www.pdconf.com and click on the PDC365 icon to discover more information on our PDC365 Hands-On Courses.
Treating the cause of malocclusions, not the consequence

By German Ramirez-Yañez, DDS, MDSc, PhD

Extraction versus non-extraction treatment in orthodontics has been a matter of controversy since the beginning of the specialty. Edward H. Angle debated, “The best balance, the best harmony, the best proportions of the mouth in its relation to the other features require, in all cases, there shall be the full complement of teeth, and each tooth shall be made to occupy its normal position.” Later, Tweed swung the pendulum toward extractions in the mid-1930s, reaching a peak in the United States during the ’60s. However, added to a better understanding on the biology of the mouth and the physiology of various tissues in the cranio-cervico-mandibular system, the development of new techniques, insights in early treatment and the probability of combining fixed and functional appliances has swung the pendulum again to the side of non-extractions.

Today, there is a high prevalence of malocclusion (approximately 80 percent), and dental extraction continues to be included in treatment plans. Extractions might give enough space for tooth alignment and third-molar eruption if present; however, teeth are moved into a theoretical ideal position, which is not necessarily a natural nor a stable position. So, professionals treating malocclusion use a retainer at the end of active treatment (which needs to be in place for a long period), expecting that the cranio-cervico-mandibular system will adapt to this non-physiological situation. But this does not occur in most cases.

Relapse occurs when the patient discontinues use of his or her retainer because, although teeth are aligned, the muscles in the system continue to exert as much force as they had prior to treatment. Although it has been reported that a physiological force delivered by the facial and masticatory muscles may not affect the position of teeth, in a situation where those muscles deliver a non-physiological force on the structures of the system, it will definitively affect the position of the teeth.

As it was stated by Graber, “In a fight between muscles and bone, bone loses.” In other words, a muscular dysfunction present at the beginning of treatment,
and not corrected during the course of treatment, will continue delivering non-physiological forces to the jaws and teeth, producing a relapse.  

It is important to understand that fixed appliances were designed to move teeth but not to control and improve muscular activity in the masticatory, facial and tongue muscles. Furthermore, brackets were not designed to improve nasal breathing. Also, only a few functional appliances produce that effect. Therefore, issuing a diagnosis that determines the factors causing the malocclusion — using a combination of various techniques to correct all factors involved — allows for better treatment to be performed, while significantly reducing the number of extractions required.

There is little justification for the profession to continue extraction-based orthodontics on its patients and then ask them to wear a retainer appliance or a bonded wire for long periods of time. The dental profession has to understand that the cranio-cervico-mandibular system is active and dynamic.

Moving teeth would be the ideal solution if we were working on a static system, but we are not. Treatment of malocclusion should deal with the causative factors, dysfunction and altered muscular force, as well as with the consequences: tooth misalignment. In this way, a stable result will be achieved.

Therefore, any treatment intending to correct a malocclusion must aim to improve oral function while reeducating the masticatory and facial muscle’s activity during function — naturally positioning the teeth without extractions.

References

2) Ramirez-Yañez GO, Guarrim J. Combining functional and fixed appliances to improve results in open bite treatment. Func Or thod 2003; 4-9.

About the author
Germain Ramirez-Yañez, DDS, MDSc, PhD, is assistant professor on the faculty of dentistry at the Department of Preventative Dental Science, University of Manitoba, Winnipeg, Manitoba, Canada.
3M True Definition Scanner allows you to move into digital orthodontics with ease

By 3M Unitek staff

Providing a better patient experience and better oral care through digital technology, 3M Unitek has announced the availability of the 3M™ True Definition Scanner for use in orthodontic practice—a complete digital impression system that uses 3-D-in-motion video technology to deliver a true replica of the oral anatomy with precision and accuracy. The digital process brings improved productivity, better oral care and, ultimately, a better patient experience.

More accurate and more consistently accurate than other systems on the market, according to 3M Unitek, the powerful 3-D-in-motion video technology delivers full-arch scanning in phenomenal detail. Orthodontists can display digital impressions immediately for analysis and treatment planning, with secure cloud-based storage of unlimited patient scans and access to open STL (three-dimensional) files that can be readily imported into a variety of digital workflows for increased office productivity and efficiency.

Open architecture gives orthodontists the flexibility to work with any lab and their choice of appliances, the company says. When used to create customized Incognito System Appliances, the system provides seamless transfer of information to the Unitek Treatment Management Portal (TMP), enabling full case management and direct interaction with 3M Unitek.

The 3M True Definition Scanner platform features:

- Lightweight, ergonomic, intraoral scanning wand that is ideally balanced to feel comfortable in the hand
- HP® Workstation with a high-performance central processing unit (CPU)
- Touch-screen display
- Streamlined rolling cart for easy transport
- 3M Connection Center, a secure, cloud-based, digital hub that accommodates storage of impression files and connection to laboratory services
- Unitek Treatment Management Portal connection for Incognito System Appliances

The 3M True Definition Scanner reinforces a long-standing commitment to innovation in orthodontics from 3M Unitek, particularly with regard to improved control over treatment outcomes and increased patient comfort and satisfaction, the company says.

In conjunction with availability of the 3M True Definition Scanner, 3M Unitek has also added new features to its Unitek TMP to enhance ease of use and functionality. Updates include improved tools for evaluating digital setup models and digital model file export capabilities. Unitek TMP provides a suite of treatment management resources for orthodontists managing Incognito braces and utilizing digital study models.

The new 3M True Definition Scanner, together with Unitek TMP, allows for a full digital workflow for the Incognito Appliance System that offers precise, 3-D setup review and model overlay capabilities, easy customized ordering and advanced communications and messaging, the company says.

For more information about the 3M True Definition Scanner, contact your sales representative or visit www.3MUnitek.com/TrueDefinition.

* 3M, Incognito and Unitek are trademarks of 3M. HP is a registered trademark of Hewlett-Packard Company.

Reference

Beyond the desktop: Why your practice’s website should be optimized for any device

By Diana P. Friedman, CEO and president, Sesame Communications

Today’s prospective patients are using their smartphones, laptops and tablets to search for and check out practices like yours. To turn these site visitors into patients, your practice website must be mobile friendly, accurately present the information consumers are seeking, accurately represent your brand and provide a clear call to action no matter which device the visitor is using.

Upgrading your practice’s website to adopt certain design principles, also known as “responsive design,” will enable your site to look and function effectively across all devices and screen sizes. This can significantly impact new patient flow, referral success and, ultimately, case starts and profitability. Here are three ways your practice can benefit from doing so.

1. Improve prospective patient experiences

Mobile devices have become more advanced, and consumers now expect more out of their web-browsing experiences. On a typical day, a prospective patient might browse the web on a smartphone, a laptop and a tablet, each with a distinctive screen size and web browser platform. No matter which device your patients use, they want to have an optimal experience with your website, not a version that has limited functionality on other devices. In fact, 61 percent of those who visit a website that isn’t mobile-friendly will leave the site to visit a competitor.1

By optimizing your website experience for mobile users, responsive designed sites ensure that your practice puts its best online foot forward, on every device and screen size, every time.

2. Increase social media referrals

You work hard to create a great experience for your patients. Make it easy for them to share their experience with their social media networks!

If a new patient has a great first visit at your orthodontic practice, he might post a status update on Facebook from his smartphone, which includes a link to your website. Several of his friends — some on smartphones, some on tablets, others on laptops — might then see his post and click the link. With responsive design, everyone on your patients’ social networks will view your site exactly as it was designed to be viewed, ensuring you make a great first impression online.

3. Be better prepared for the future

New devices and screen sizes are constantly entering the marketplace, and your patients will continue to take advantage of them. If your site has a responsive designed framework, you won’t have to worry about building another app or adding another separate website for a specific device category.

Invest in a responsive site today, and your practice will continue to garner increased visitors and new patient calls regardless of what new devices come to market.

Reference

D4D Technologies will be doing business as E4D Technologies

By E4D staff

D4D Technologies LLC, best known for its E4D brand of dental solutions, recently announced that the company will begin to do business as “E4D Technologies LLC.” While the company has been using the name “D4D Technologies” since it was established in 2003, it has always branded its products’ “E4D,” as in E4D Dentist™, E4D Labworks™, E4D Studio™, E4D Compass™, E4D Sky™ and E4D Compare™.

“The timing to unify the company name with our global branding coincides with the launch of our next-generation E4D NEVO scanner and design center and our 10-year anniversary as a company,” said CEO Mark Quadling. “NEVO represents the ‘Natural Evolution of Digital Dentistry’ so this is the ideal time to also recognize the evolution of the company with its new name. The D4D that my brother Henley and I started 10 years ago with Basil Haymann has evolved into a global player with products changing dentistry around the world, through private and group practices, institutions, and universities.”

“The E4D brand has become synonymous for many dental professionals with leadership and evolution in digital restorative dentistry,” said Gary Severance, DDS, CMO. “By focusing on ‘E4D’ in every aspect, we can reinforce and strengthen our relationship with our customers and the broader dental community. We are also introducing a new look and logo with the E4D NEVO that reflect the exciting performance and plug-and-play capabilities of this new technology.”

The company name change and brand focus is a further step forward in the evolution of the company and its growing suite of digital solutions for dentistry, the company said.

The launch of the E4D NEVO at the E4D Business of Dentistry Conference in Las Vegas from Aug. 8-10 (www.businessofdentistry.com/e4d) showcased leading clinicians and E4D operators who shared both early experience with NEVO as well as their years of dental CAD/CAM expertise.

* While the company’s legal name remains D4D Technologies, it will begin to do business as E4D Technologies to assist in clarification and establishment of a consistent brand identity.

About E4D

Headquartered in Richardson, Texas, E4D Technologies asserts it is taking the dental profession to a higher level of productivity, patient comfort and convenience with its E4D restorative systems. The innovative, technologically advanced, ultra-fast E4D NEVO Scanner for digital impressions is the latest addition to its CAD/CAM system for restorative dentistry. Plug-and-play connectivity to the laptop computer design center enables operators to easily customize restoration designs and send them wirelessly to the precision mill that uses the latest restorative materials to produce fine esthetic restorations. E4D’s open platform and E4D Sky communication network enable dental professionals to choose a custom solution to fit their needs, the company said.

E4D has expanded the possibilities in dentistry with E4D Compass for restorative-driven implant solutions and E4D Compare adaptive learning technology for teaching institutions. Henry Schein is the exclusive distributor. Contact E4D at www.e4d.com or www.facebook.com/CadCamDentist.
Yankee Congress expands on team-development day

28,000 expected at 2014 gathering

Organizers of the 2014 Yankee Dental Congress invite dental professionals to join 28,000 fellow professionals from Jan. 29 to Feb. 2 at the Boston Convention & Exhibition Center.

With a general theme centered on the concept of overall health starting with oral health, the YDC meeting offers the chance to explore and discover best practices, products and resources to improve your practice, increase your knowledge and better serve your patients.

Organizers describe Yankee Dental Congress 2014 as being the best opportunity in New England for every member of the dental practice to participate in a wide variety of programs.

YDC 2014 highlights include:

• The Ritz-Carlton Leadership Center — Back by popular demand, this program provides performance and practice excellence by developing your leadership skills and creating the best possible service for your patients. Courses include “The Fire Within — Igniting Passion for Ritz-Carlton Performance Excellence,” and “Legendary Service with a Smile,” both presented by Jennifer Blackmon.
• Hands-on cadaver programs — This unique opportunity enables participants to attend hands-on courses using cadavers while exploring topics that cover areas such as anesthesia, crown lengthening and anatomy.
• “Evolutionary Dentistry” — Hear about the research and activities at the Manton Cave Dig in Israel and the discussion about the relationship of evolutionary biology to modern dental problems in a session led by Mark Hans, DDS, and Bruce Latimer, PhD.
• The Pankey Institute: Update 2014 — Discover new techniques and innovative approaches in treatment planning that will have a valuable impact on your practice. The series includes three courses featuring speakers Gregory Di Lucchi, DDS, Matthew Messina, DDS, and Kenneth Myers, DDS.
• “Master the Skills of Marketing Your Practice in One Day” — A one-day symposium designed to help expand your practice with the power of marketing. Courses include “High Energy Marketing to Excel: Your New Patient Numbers,” “Secrets of Social Media Success and Online Marketing,” “Get Noticed, Get Booked, and Grow Your Practice” and “Best Practices for Leveraging Social Media to Engage Patients.”
• Dental Team Playbook: Strategies for Success (an expansion on the popular team-development day) — Your entire dental team can benefit from this one-day program with courses tailored to dental assistants, hygienists and office personnel. Team members can learn from experts in their respective fields. Presenters include Lois Banta, Amy Kirsch, RDH, Shannon Pace Brinker, CDA, Diane Petersen, RDH, and Anastasia Turchetta, RDH.
• Social media hot spot — Learn how effectively utilizing social media such as Facebook, Instagram, LinkedIn and Twitter can help improve practice performance by drawing new patients in and keeping current patients connected to your dental practice.

For more information, please visit www.yankeedental.com.

(Source: Yankee Dental Congress)

Events

OrthoVOICE gears up for fourth annual meeting

OrthoVOICE 2013 is set for its fourth annual meeting, which will be Sept. 19–21 at Planet Hollywood in Las Vegas.

As our meeting continues to redefine the meeting experience, this year a host of fresh speakers will accompany seasoned lecturers to bring a variety and dimension often not found at other orthodontic meetings.

OrthoVOICE has applied for CERP accreditation and will offer C.E. credits for all lectures at this year’s meeting with full registration. Doctors and team members may choose to register for the Exhibit Hall Only Pass, allowing access to the trade show floor and all social activities.

OrthoVOICE is committed to developing a community of orthodontists, team members and companies who value and embrace practice-changing experiences through personal relationships, sharing of ideas and forward-focused techniques.

This year’s speakers include Dr. Katherine Vign, Dr. Neal Kravitz, Dr. Dan Bills, Dr. John Pobans, Nancy Hyman and Andrea Cook.

OrthoVOICE is committed to delivering a high level of commitment required and the time involved to become an orthodontist, no one is in a better position to determine treatment options than the clinician. We not only look for reproducible studies that give us a high degree of confidence in what we do, we also self-police.

All doctors in all specialties should be held to high standards of excellence in education as well as clinical performance. Yet, that no longer seems to be the case, which sets a very dangerous precedent in this country going forward.

It appears completely logical that orthodontists themselves, both individually and as a group, set the standard of care, and that goes for the health insurance commitment as well.

Health insurance companies have been able to take over control of orthodontics through contracted arrangements with doctors. When a doctor agrees to participate with a health insurance company and becomes a provider, he or she also becomes obligated to the terms and limitations set forth by the insurance company, which is not in the health-care business but rather in the “keep the premium dollars” business.

That means insurance companies have a vested interest in keeping down the costs of care in order to maximize the profits. The insurance company/orthodontist relationship can become controversial, contentious and argumentative as a result. The doctor, by contrast, must hold to his “oath” for providing the best possible care while also adhering to the theory of doing no harm.

(To be continued in the next edition of Ortho Tribune.)

Reference

ead-o.average;=e17f278d2b759b727b21270

STANDARD, Page 3

evidence-based treatment protocols only come about as a result of enormous dedication, time, research and practice and are passed on via education for new doctors who become knowledgeable and skillful practitioners.

The term minimal intervention (Mount & Ngo, 2000) is relatively new in dentistry and has been introduced to suggest to the profession that it is time for change not only in operative dentistry but all specialties. Regardless of which phase of dentistry, treatment should begin with identification and elimination of disease first and foremost and with surgical and more invasive considerations not only as a last resort but with the removal of as little natural bone and tooth structure as possible. Orthodontics must acknowledge the primary of prevention first and foremost as well.

Society demands a great deal from doctors who are responsible for maintaining and improving the health and welfare of patients. The practice of orthodontics requires a tremendous amount of education, dedication and knowledge from four years of college to four years of dental school to residency and sometimes fellowship training. In addition, orthodontists must complete continuing education credits every year in different aspects of medicine, dentistry, ethics, etc. The stress and strain of studying and training to become a doctor cannot be diminished; however, the satisfaction it delivers when a patient has a successful outcome makes it worth every bit of its demanding commitment.

The orthodontist is trained to deliver the absolute best care, and make no mistake, we know what we’re up against; the public expects unconditional expertise and the best from us. Errors in judgment, diagnosis and skill are not tolerated. We must think and think clearly to establish an accurate diagnosis and implement a protocol that has the best chance for a positive outcome. For this, we turn to peer-reviewed seminars, studies, training workshops and mentorship after completion of our residencies. It is a profession that places high demands for excellence and expects quality assurance from all practitioners.

So, given the high level of commitment required and the time involved to become an orthodontist, no one is in a better position to determine treatment options than the clinician. We not only look for reproducible studies that give us a high degree of confidence in what we do, we also self-police.

All doctors in all specialties should be held to high standards of excellence in education as well as clinical performance. Yet, that no longer seems to be the case, which sets a very dangerous precedent in this country going forward.

It appears completely logical that orthodontists themselves, both individually and as a group, set the standard of care, and that goes for the health insurance commitment as well.

Health insurance companies have been able to take over control of orthodontics through contracted arrangements with doctors. When a doctor agrees to participate with a health insurance company and becomes a provider, he or she also becomes obligated to the terms and limitations set forth by the insurance company, which is not in the health-care business but rather in the “keep the premium dollars” business.

That means insurance companies have a vested interest in keeping down the costs of care in order to maximize the profits. The insurance company/orthodontist relationship can become controversial, contentious and argumentative as a result. The doctor, by contrast, must hold to his “oath” for providing the best possible care while also adhering to the theory of doing no harm.

(To be continued in the next edition of Ortho Tribune.)

Reference
