A toothbrush of Buzz Aldrin, a crew member of Apollo 11, was recently auctioned for $22,705, prompting some renewed interest in dental hygiene in space. Interestingly, more than 40 years after that mission’s historic moon landing, astronauts are using similar everyday oral care products in space. For an update, Dental Tribune spoke with former NASA dentist Dr. Michael H. Hodapp about potential dental emergencies in space and how astronauts will maintain oral health on multiyear missions in the future.

Do you know how many dentists are employed by NASA?

Because of the recent cutbacks of NASA’s budget, they have closed the NASA dental clinic, so there are no dentists contracted by the agency at this point. Astronauts seek dental care by private practitioners and are followed closely by NASA-employed flight physicians.

How did you become involved with the agency?

In 1994, another dentist working for NASA informed me that a position had become available to care for the astronauts and their families at NASA and asked me if I would be interested. After a series of interviews, I was awarded the position. I served NASA as a contractor for over a decade before I went back into private practice in 2004.

Do you know how many dentists are employed by NASA?

Interview with former NASA dentist Dr. Michael H. Hodapp

By Dental Tribune International
However, I am still called occasionally as a consultant for dental issues aboard the International Space Station, and future exploration-class missions.

How important is oral health for astronauts in general?

Oral health is a primary concern for astronauts and goes hand in hand with general health. All astronaut candidates are initially screened for dental issues prior to selection, and all those selected are expected to adhere to a meticulous oral hygiene routine and maintain good oral health. The primary goal is prevention. Yet, even with the highest standards in prevention, the potential for a dental emergency in space still exists. A recent analysis of all medical conditions determined that the one condition most likely to result in death while in flight on the International Space Station is a dental abscess.

Russian cosmonaut Yuri Romanenko suffered two weeks of incapacitation due to tooth pain during the Salyut 6 mission in 1978. When were dental emergencies first included in mission protocols?

Unfortunately for Romanenko, according to reports, the Soviets did not have a dental contingency protocol at that time. The Russian space program has since made provision for such emergencies, however.

During the U.S. Mercury program, the flights were so short that there was no need for an in-flight dental emergency protocol, and prevention was the primary focus. Owing to the extended time spent in space during the Gemini program, a toothbrush was added to flight kits as a preventative measure. Apollo missions then incorporated a digestible dentifrice and floss, as well as antibiotics. Instrumentation like forceps and temporary filling materials was first introduced when the Skylab space station was launched into orbit in the early 1970s and has been part of the emergency kits ever since.

How frequently are astronauts given pre-flight checkups?

Once candidates are accepted, they undergo a thorough oral exam annually. The astronauts are classified into three categories: Class I astronauts have good oral health and are not expected to require dental treatment or re-evaluation for 12 months, Class II astronauts have some oral conditions that if left untreated are not expected to result in a dental emergency within 12 months, and Class III astronauts have an oral condition that if left untreated is expected to result in an emergency within 12 months. All astronauts are expected to retain a minimum Class II status, and only astronauts with Class I status prior to launch are considered for the International Space Station.

In addition to annual exams, astronauts undergo pre-flight exams 18 to 21 months before launch. During this exam, the astronaut undergoes a thorough clinical and radiographic exam, including bitewing and panoramic X-rays. Candidates are then to be completed 90 days prior to launch. The astronaut undergoes an additional exam to rule out any hidden pathology or any unreported recent oral injuries to 30 to 90 days before launch. The astronaut is also expected to follow a meticulous oral hygiene routine during flight.

No in-flight dental emergency has ever been reported by NASA. What problems do you think are most likely to occur?

While the chances of a dental emergency occurring in space are low, the potential is always there. For instance, when astronauts move large objects, the inertia of mass and velocity can result in either a medical or dental emergency or both. Besides breaking a tooth, other considerations include luxation, grinding, splitting teeth or the fracturing of a cusp while chewing. Even with the most meticulous dental exam and hygiene program, there is always a possibility that a tooth abscess could form due to trauma, hidden caries or a failing root canal.

Which dental emergencies are astronauts trained to handle by themselves?

There are two crew medical officers (CMOs) aboard every mission. Copies of two pages from the Apollo Operations Handbook showing information on the contents of the Oral Hygiene Set are included. The very point of the rubber tip has broken off but is present in the case. Signs of use, otherwise very fine condition. (Source: Heritage Auctions)

If you missed out on the bidding on a toothbrush Buzz Aldrin took to the moon, you can still make an offer. The winning bidder, who got the piece of space memorabilia for $22,705 in the late-April auction, immediately put it up for resale.

Details are available through Heritage Auctions (www.ba.com). Here’s how the auction house describes the item, which was among an extensive collection of space memorabilia auctioned from the estate of Steven R. Belasco, who was a top executive at Colgate for much of his business career: “A light blue Lactona S-19 model ‘Tooth Tip’ toothbrush, 6.5” long. Included also is the original 8” x 1.5” plastic pouch in which it flew with a piece of Velcro on the back for ease of storage. Used throughout the mission, including in the Lunar Module Eagle while on the moon. Copies of two pages from the Apollo Operations Handbook showing information on the contents of the Oral Hygiene Set are included. The very point of the rubber tip has broken off but is present in the case. Signs of use, otherwise very fine condition.”

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 Dental Tribune? Let us know by sending an email to feedback@dental-tribune.com. We look forward to hearing from you!

If you would like to make any changes to your subscription (name, address or to opt out) please send us an email at feedback@dental-tribune.com and be sure to include which publication you are referring to. Also, please note that subscription changes can take up to six weeks to process.

See SPACE, page A3

Lunar toothbrush: $22,705

A toothbrush and pouch used by astronaut Buzz Aldrin’s on the Apollo 11 moon-landing mission brings more than $20,000 at auction. Photos/Provided by Heritage Auctions.
such as Streptococcus mutans among crew members. It was concluded that this was due to the dehydrated diet that astronauts consume. This could be a potential contributor to oral health issues during extended missions, especially if a crew member begins to lapse in proper oral health care.

Dental emergencies in space would be challenging to handle as well. A mission to Mars would require a one-way flight duration of six to nine months. Owing to the alignment of earth and Mars, the nominal mission would spend either 30 days or a year and a half on the Martian surface. Were an oral emergency to occur during the outbound flight, there would not be a safe-return-to-earth capability. Not enough fuel could be carried to counteract all the forces of launch that propel the crew on their voyage. In essence, all emergencies would have to be handled by the CMOs either in flight or on a planet with a little more than one-third of the gravity of earth.

In space, “for every action, there is an opposite and equal reaction” has special meaning to the treating CMO and the crew member receiving treatment. Just the act of giving an injection would send the crew member and CMO darting away from each other if proper techniques were not followed. The luxury of gravity does not exist, and simple procedures can become major challenges without it. Consider for a moment trying to give CPR without the force of gravity holding you in place.

Working in the oral cavity poses special concerns, since the very act of breathing not counteracted by gravity would have a tendency to draw anything loosely held within the oral cavity back into the lungs.

There is also the concern of the limited medical skills of CMOs, and the one-way communication delay with ground support of 20 to 25 minutes. In other words, it could take 45 minutes for a flight physician to deliver instruction to the treating CMO. Prayers would be in order for the afflicted crew member.

What measures are being considered to overcome these problems?

Recent discussions in relation to exploration-class missions have proposed instrumentation for semi-annual dental exams and cleaning for each crew member, as well as additional equipment for the diagnosis and treatment of dental emergencies. Some of the equipment considerations include a high-definition intraoral camera system, a method for detecting interproximal decay and osseous infections while limiting radiation, as well as a battery-operated dental handpiece and headlight.

Material considerations include an intermediate restorative material that is easy to use, does not require special equipment for mixing or curing, releases fluoride, and could last for the duration of an exploration-class mission. The U.S. Navy is currently conducting research on a restorative material for field use that fits this description.

A glass ionomer restorative material is also under consideration, although this would require special packaging to allow for controlled mixture by hand in a microgravity environment.

Discussion about medications indicated that all drugs would need to be freshly manufactured and would require special packaging to maximize shelf life, especially those medications that are sensitive to moisture and radiation. Software considerations include training videos for the crew members to review and train to keep abreast during their travel.

President Obama speaks of sending humans to Mars as early as 2030. Do you believe that these plans are realistic?

It is my understanding that there are no definitive plans for a manned mission to Mars in the near future. Recent cuts to NASA’s budget have slowed progress for a manned mission to the red planet. Our closest neighbor is explored using robotics, and there is much to learn about Mars prior to risking the lives of humans on such a distant journey.

However, planning and research for manned exploration-class missions is still being conducted, and the Orion project is still in progress. There are so many hurdles to overcome before such a journey could be undertaken. Currently, NASA is formulating plans for a three-month mission to rendezvous with a near-earth asteroid. This would be a scientific mission requiring a one-month flight to rendezvous with the asteroid, conduct research and fly back to earth.

If NASA offered you the opportunity to go on a three-month mission like that, would you accept it?

Since I was a young boy I have looked to the heavens and been fascinated by its beauty and have always dreamed of going into space. Given the opportunity, I would go in a heartbeat.
Nashville’s newest meeting facility hosts Academy of General Dentistry meeting

The Academy of General Dentistry 2013 Annual Meeting and Exhibits is one of the first major events being held at Nashville’s 1.2-million-square-foot Music City Center, which just opened at the end of May.

The Music City Center bills itself as the city’s “front porch.” Located in the heart of downtown, it’s steps from the historic Ryman Auditorium, Broadway honky tons and other musical venues that have launched thousands of careers and given Nashville its “Music City” moniker.

Taking full advantage of the Music City Center’s location, the AGD Presidential Concert is being held at the Ryman on Saturday, June 29. Described by event organizers as “an intimate evening of entertainment,” the concert honors the AGD’s latest Masters, Fellows and Lifelong Learning and Service Recognition (LLSR) recipients. Sponsored by the AGD Foundation, the Presidential Concert features musical guests T. G. Sheppard, Kelly Lang and Brinn Black. Tickets are $50, with proceeds benefitting the Interfaith Dental Clinic’s mission to provide comprehensive dental care to underserved communities.

Originally built as the Union Gospel Tabernacle in 1892, the Ryman is designated as a Nashville historic landmark. It is perhaps best known as the former home of the Grand Ole Opry and continues today as an iconic musical entertainment venue.

In addition to being so close to so many of Nashville’s top attractions, musical and otherwise, the Music City Center has added its own contributions to the area’s offerings. More than 70 interior and exterior locations at the complex were earmarked for display of public art as part of the master planning process. The center’s governing body, the Nashville Convention Center Authority, budgeted $2 million to finance the purchase of artworks for the convention center. The collection covers a broad spectrum of artistic media, such as paintings, suspended pieces, works on paper, new media, mosaics and light-based works.

The exhibit hall at the meeting is open from 4:30 to 7:30 p.m. on Thursday (welcome reception from 5:30–6:30 p.m.), 10 a.m. to 6 p.m. on Friday (networking reception from 5–6 p.m.) and from 10 a.m. to 3 p.m. on Saturday. Some of the exhibit hall hours are structured to be fully dedicated to the exhibit hall, with no competing events taking place during those time periods.

Thursday morning’s keynote speaker at the opening general session is forensic anthropologist Bill Bass, PhD, with “Life as a Forensic Anthropologist.” Bass is the founder and former director of the Forensic Anthropology Center (FAC) at the University of Tennessee, Knoxville. Known as “The Body Farm,” the FAC is the world’s only laboratory devoted to the study of human decomposition.

With Jon Jefferson, Bass is the author of the best-selling Body Farm mystery novels, the latest of which is “The Inquisitor’s Key,” released in May 2012. Bass is also the author or co-author of more than 200 scientific articles, as well as a critically acclaimed memoir about his career titled “Death’s Acre.”

Registration is now open for the Academy of General Dentistry 2013 Annual Meeting at www.agd.org.
Greater New York Dental Meeting redesigns exhibit floor, adds tech pavilions

Registration is now open for the 2013 Greater New York Dental Meeting (GNYDM). Organizers of the 89th annual meeting anticipate the largest attendance yet. New for the 2013 meeting will be a redesign of the exhibit floor—with the addition of new technology pavilions and a unique dental laboratory exhibition.

The exhibit floor and the diverse continuing education programs are the centerpiece of the expansive annual meeting. Attendees are able to walk the exhibit floor for free (no preregistration fee) and meet with more than 600 companies selling the newest products and advanced technologies.

The education program will include 300 full- and half-day seminars, essays and hands-on workshops. Among the specialty programs are topics including orthodontics, endodontics, cosmetic dentistry, pediatric dentistry and implant dentistry.

The GNYDM is introducing three new hands-on educational pavilions, including lasers, CAD/CAM and cone-beam/CT/X-rays. Each of these pavilions will house multiple companies providing information on the latest technologies that can be used in the dental office. Attendees will be able to instantly compare all the products in one location, while also becoming more familiar with the state-of-the-art technology by attending morning and afternoon educational programs presented at each pavilion.

The GNYDM and Aegis Publishing, Inside Dental Technology, have announced a ground-breaking partnership in laboratory technology. Collaboration 2013 will provide a designated laboratory exhibit area on the GNYDM exhibit floor, specialized education, demonstrations, digital dentistry and technology that will engage technicians and dentists side-by-side in an integrated, hands-on experience.

The GNYDM continues to offer a modern, high-tech free “live dentistry” arena daily from Sunday through Wednesday. The interactive “live” program features top clinicians performing dental procedures on actual patients on stage, in front of 600 attendees. It all takes place right on the exhibit floor. Attendees are encouraged to arrive early because seats fill quickly.

The GNYDM is the largest dental congress and exhibition in the United States, registering 53,481 attendees from all 50 states and 130 countries in 2012.

There is never a pre-registration fee at the GNYDM. Dental professionals are invited to be part of the 2013 meeting to experience the energy of an event that draws top dental professionals from around the world. And you’ll also get to see all that New York City has to offer during one of its most beautiful times of the year, Nov. 29 through Dec. 4.

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

(Source: Greater New York Dental Meeting)
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 promotes 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 Manot Cave Dig in Israel and discuss the relationship of evolutionary biology to modern dental problems 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 Lauri, 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 Explode 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 Peterson, 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.

You can visit www.yankeedental.com for more information.

(Source: Yankee Dental Congress)

Boston’s Yankee Dental Congress expands on team-development day

28,000 expected at 2014 gathering

The bustling exhibit hall at the 2013 Yankee Dental Congress reflects the meeting’s strong attendance figures — nearly 30,000. Photo/Provided by Yankee Dental Congress

Pacific Dental Conference combines education, networking, scenic locale

Early booking recommended for conference hotels, which fill quickly

The 2014 Pacific Dental Conference, from March 6–8 (Thursday, Friday, Saturday) in Vancouver, British Columbia, features a varied selection of open C.E. sessions, hands-on courses and a live dentistry stage.

The variety of topics covered by more than 150 speakers means the entire dental team can access the latest information on dental technology, techniques and materials. Speakers in the 2014 lineup include John Kois, Greg Psaltis and Glenn van As.

Highlights

With the University of British Columbia Faculty of Dentistry celebrating its 50th anniversary, the PDC will present the “UBC Speakers Series,” featuring UBC alumni addressing a variety of topics.

The Live Dentistry Stage is back on the Exhibit Hall floor, with demonstrations on Thursday and Friday. Saturday’s “So You Think You Can Speak?” features 50-minute presentations by speakers who responded to the call for presentations and were accepted by the meeting’s scientific committee.

The Exhibit Hall should be busy, with more than 300 companies projected to fill approximately 600 booths. Exhibit Hall hours are 8:30 a.m. to 6 p.m. on Thursday; 8:30 a.m. to 5:30 p.m. on Friday.

Registration and lodging

Special hotel rates are available to PDC attendees, with early booking recommended to ensure availability. Reservations can be made directly with conference hotels through the links on pdconf.com. Registration opens Oct. 15 with early bird rates for all members of the dental team.

(Source: Pacific Dental Conference)
Er:YAG and Nd:YAG dual wavelength-optimized periodontal therapy protocol

Combination dramatically improves outcome of laser-assisted treatments

By Harvey S. Shiffman, DDS

This protocol involves using the Fotona Lightwalker/Powerlase (LasersDentistry, www.Eamed.com, San Clemente, Calif) family of lasers containing both Er:YAG and Nd:YAG laser wavelengths and the PIPS (photons-induced photocoustic streaming) technology. PIPS® is an Er:YAG photoacoustic wave that enables removal of calculus, destruction of biofilm and decontamination of the cemental root surfaces in an atraumatic manner. This allows for bone regrowth and reattachment.

History of lasers in dentistry

The possibilities for laser use in dentistry did not occur until 1989 with the production of the American Dental Laser for commercial use. This laser, using an active medium of Nd:YAG, emitted pulsed light and was developed and manufactured by Dr. Terry Myers.7

Though inappropriate for use on dental hard tissue, the availability of a dedicated laser for oral use gained popularity among dentists. In 1989, experimental work by Keller and Hibst using a pulsed Er:YAG (2,940 nm) laser, demonstrated its effectiveness in cutting enamel, dentin and bone, and these then became commercially available soon after.

Of the currently available hard-tissue lasers, Er,YAG lasers have a significantly higher affinity for water versus Er:Cr:YSGG lasers and are much more effective in most dental procedures.9 Er:YAG lasers have proved beneficial in the removal of granulation tissue and calculus and are an effective tool in periodontal therapy.8

Treatment with Nd:YAG lasers is effective for connective tissue reattachment to cementum and periodontal regeneration.10 The Nd:YAG wavelength is able to kill the bacteria that are a part of the pathogenesis of periodontal disease.2 The combination of the two wavelengths in a single treatment makes optimum use of the unique laser-tissue interaction characteristics of each wavelength. Nd:YAG laser energies are supreme for coagulation and deep disinfection, while Er:YAG is uniquely efficient at gently removing the infected tissue and calculus from the root surface, along with its bactericidal effects. Combined, they can dramatically improve the outcome of laser-assisted treatments.

Case study

Patients who consented to treatment during this case study ranged from 40 to 80 years of age. The patients were not specifically selected, but represented the population typically treated in the office, made up of approximately 75 percent adults.

These patients had a variety of preexisting health conditions, including high blood pressure, diabetes and coronary artery disease.

Cases varied from single pockets to full-mouth treatments. Patients had pocketing ranging from 2 to 10 mm with moderate to severe horizontal and angular bone loss. Pockets 6 mm deep had collagen placed while those more than 6 mm had Novabone™ (Novabone Products) placed with a liquid Atrisorb™ (Zila) membrane and sealed with Periaryl™ (Glitsitch). Occlusal discrepancies were addressed in all cases, and full-mouth cases had full coverage orthotic appliances fabricated (Glideroll Comfort hard/soft). Patients were instructed to avoid brushing or flossing the area treated and avoid granular foods such as strawberries, poppy seeds and sesame seeds, etc., for one week. Patients were given Periexid™ (3M ESPE) rinse and doxycycline 100 mg for seven days.

Follow-up appointments occurred at one and two weeks post-treatment for removal of Periaryl™ and biostimulation. In addition, de-epithelializing the pockets was completed based on the initial pocket depth during these one- and/or two-week follow-up appointments. Patients were brought back for periodontal maintenance after two months.

At all follow-up appointments, there were limitations on sub-gingival scaling. No probing was permitted for a minimum of six months to avoid damage to the new attachment.

Case No. 1

A 74-year-old female presented with no known allergies. The patient had no history of significant medical conditions or habits and was taking no medications at the time of treatment. The patient had a Class I occlusion with significant crowding. Her chief complaint was her swollen and bleeding gums. She presented with a 7 mm pocket on the mesial bucal of #7, 6 mm on the direct lingual and 6 mm on the distal lingual. Pre-operative radiographs showed a significant osseous defect.

Eight months after “wavelength optimized periodontal therapy” (WPT) treatment, probing depths were 2 mm in the previous locations, and was almost entirely free of sub-gingival calculus. Post-operative radiographs showed significant bone fill of the previous defect.

Case No. 2

This 62-year-old male patient had a full-mouth case with pocketing ranging from 2 to 10 mm in multiple locations. The patient reported no known allergies and was taking prescription medications that included Metropolol, Crestor, Ramipril and HCTZ. The patient’s chief complaint was his bleeding and painful gums. The diagnosis was moderate to severe periodontal disease in all four quadrants and he consented to treatment.

Two-year postoperative probings and radiographs showed significant pocket reduction, reattachment and osseous fill in defects. Unfortunately, Dentrix periodontal charting only goes to 9 mm so the charts were modified for 10 mm pockets as needed. Pre-operative pocketing (Fig. 4) was as high as 10 mm in two locations. Figure 5 shows significant improvement at the 22-month post-operative follow up.
The upper right 7 to 10 mm pockets regained 5 mm of attachment and bone fill, the upper left segments regained 4 to 7 mm, the lower left regained 5 to 6 mm, the lower right regained 3 to 5 mm.

**Conclusion**

Clinical, radiographic and probing evidence suggest that when followed correctly, WPT protocol is a strong and reliable tool for restoring periodontal health. However, it should be noted that occlusal considerations and orthotic appliances in full-mouth cases can have a great impact on outcomes. Patient maintenance and re-care can also dramatically affect the success of therapy.

The Lightwalker dual-wavelength laser has been proven to have strong benefits in periodontal therapy. Having the ability to offer patients a minimally invasive laser treatment with minimal bleeding, swelling and discomfort increases patient compliance and case acceptance versus traditional periodontal surgery. This seems to be especially true in patients who have had a history of traditional invasive periodontal surgery.

**References**


**Author disclosures**

The author has no financial interest in any of the companies mentioned in this article and received no compensation for writing this article.
Shofu will be demonstrating its revolutionary product BEAUTIFIL Flow Plus during the Academy of General Dentistry Annual Meeting at booth No. 319 this year. In addition to superior adaptation, tootpaste and mouthwash, recharge the teeth, yet delivers superior shear and tensile bond strength compared with leading phosphoric acid etched systems.

BEAUTIFIL Flow Plus now available in B1, B2 and C2

BEAUTIFIL Flow Plus restorative is ‘changing dentistry for the better’

Shofu will be demonstrating its revolutionary product BEAUTIFIL Flow Plus during the Academy of General Dentistry Annual Meeting at booth No. 319 this year. In addition to superior adaptation, BEAUTIFIL Flow Plus provides precision stacking capabilities that rival leading hybrids, adds more shade choices. It just stays put. It just stays put.

One of the many distinguishing features of BEAUTIFIL Flow Plus is that it stays where you put it. Older-generation flowables tend to spill out of the prep. BEAUTIFIL Flow Plus provides precision stacking capabilities that rival leading hybrids, adds more shade choices.

Flexible consistency of BEAUTIFIL Flow Plus provides superior adaptation to the tooth structure when compared with hybrids, according to the company. High filler content and unique chemical properties ensure that clinicians have all of the material strength found in leading hybrids. Internal studies confirm that compressive strength, flexural strength, toothbrush wear and other mechanical properties are clinically equivalent to leading hybrids on the market. Using this new approach, dentists can achieve better adaptation, with a stronger material and fewer, less-complicated steps. It just stays put.

One of the many distinguishing features of BEAUTIFIL Flow Plus is that it stays where you put it. Older-generation flowables tend to spill out of the prep. BEAUTIFIL Flow Plus provides precision stacking capabilities that rival leading hybrids, adds more shade choices.

Flexible consistency of BEAUTIFIL Flow Plus provides superior adaptation to the tooth structure when compared with hybrids, according to the company. High filler content and unique chemical properties ensure that clinicians have all of the material strength found in leading hybrids. Internal studies confirm that compressive strength, flexural strength, toothbrush wear and other mechanical properties are clinically equivalent to leading hybrids on the market. Using this new approach, dentists can achieve better adaptation, with a stronger material and fewer, less-complicated steps. It just stays put.

One of the many distinguishing features of BEAUTIFIL Flow Plus is that it stays where you put it. Older-generation flowables tend to spill out of the prep. BEAUTIFIL Flow Plus provides precision stacking capabilities that rival leading hybrids, adds more shade choices.
Expert Dental CE instructors reflect international focus

When Expert Dental CE says it is international, it means it. With 25 percent of its course scholars from outside of the United States and past course takers from countries such as India, Spain and Egypt, Expert Dental CE walks its international talk.

“We are not internationally oriented because it is trendy, but because it allows us to bring to our customers, in the United States and elsewhere, the best educators we can find, wherever they may be,” says Bill Martin, managing director and chief operating officer of Expert Dental CE.

As for whether this international focus also translates into serving dentists worldwide, Martin said: “We have found that dental professionals from around the world, particularly in developing countries, are searching for high-quality C.E. that is independent from commercial sponsorship, focused exclusively on the teaching of practical and sustainable skills, and that includes highly-skilled educators from the United States and beyond, well-known or not. That fits nicely with the Expert Dental CE approach and mission.”

Below is a list of some of Expert Dental CE’s international educators and their courses:

Peter Cathro (New Zealand): “Instrumentation: The Science and Art” and “Solutions, Energization & Delivery Systems.”

Markus Troeltzsch and Matthias Troeltzsch (Germany): “Successful Treatment of the Diabetic Patient” and “Management of Pregnant Patients in the Daily Office.”

Catalina Mendez (Colombia): “Obturation: Basis, Objectives and Techniques.”

Geoffrey Heithersay (Australia): “Endodontics and Trauma Management in the Age of Implants.”

Ahmed Hashem (Egypt): “Perforations: The Endodontic Dilemma.”

Stefan Fickl (Germany): “Management of the Extraction Site.”

Federico Brugnami and Alfonso Caiazzo (Italy): “Buccal Plate Preservation: A Predictable Solution to Anterior Aesthetic Management.”

To view more information about the scholars above or their courses — or to explore Expert Dental CE’s 110-plus-hour course library — you can visit www.expertdentalce.com.
Lasers 4 Dentistry
a division of Technology 4 Medicine, LLC

LIGHTWALKER AT
Erbium & Nd:YAG
PHAST™ PIPS™ Laser Endo
Dual Wavelength Perio Protocol
The Endo, Perio, Soft & Hard Tissue Laser

LIGHTWALKER AT, A CLASS OF ITS OWN,
NOTHING COMPARES:

20 Watt Er:YAG Hard & Soft Tissue = Faster Cutting
15 Watt Nd:YAG = Proven Perio Wavelength
QSP & VSP Technology = Faster More Precise & Comfortable Procedures
50µs Er:YAG Pulse Duration = Fewer Shots & Less Anesthesia
OPTOflex Articulated Arm Delivery System = Enhanced Efficiency & Reliability
Xrunner™ Scanner Ready
Options for Snoring, Facial Aesthetics and Dermatological Procedures
Internal Air Compressor, Eliminating External Airlines
Optional Green High Visibility Aiming Beam

The Lightwalker Will Change Your Practice,
Call Today

AGD - Nashville, 27-29 June, Booth #919
California Dental Association - San Francisco, 15-17 Aug
Ohio Dental Association - Columbus, 19-22 Sep, Booth #730
AAP Perio Meeting - Philadelphia, 28 Sept-Oct-1, Booth #110
ADA - New Orleans, 31 Oct -2 Nov
Greater New York Meeting, 1-4 Dec

Call us at 949-276-6650
See more at T4Med.com
Aribex adds a color, upgrades features on NOMAD Pro 2

Aribex, manufacturer of the newly released NOMAD Pro 2 handheld X-ray system, has introduced a new color option, black with gray trim, of the NOMAD Pro 2 into the U.S. dental and veterinary markets.

The traditional white with light blue trim Pro 2 model will continue to be available, and both models can be purchased from most major dental equipment dealers.

"Dental offices are adding more color and variety to their practices," said Ken Kaufman, general manager of Aribex. "The NOMAD Pro 2 is the future of intraoral dental radiography, and, as such, our customers deserve an additional sleek choice of color to best match the décor of their practices."

Although the addition of the black model is new, the acceptance of handheld, battery-powered, untethered X-ray is not," Kaufman said. "Upending a market void of significant improvements for decades, the NOMAD is now preferred over traditional wall-mounted intraoral X-ray machines. It is more economical, improves workflow, reduces FMX time and just flat-out makes sense."

The Pro 2 features a newly designed charging cradle, an upgraded communication system using infrared technology, an increased scratch- and moisture-resistant screen and several other improvements to electrical and industrial components.

New from DENTSPLY Caulk: Palodent Plus EZ Coat Matrices

Palodent Plus EZ Coat Matrices have a micro-thin, nonstick finish that is designed to make matrix removal easier. Photo/Provided by DENTSPLY Caulk

Palodent® Plus, DENTSPLY Caulk’s newest sectional matrix system, is designed to make contact creation easier and more predictable by utilizing optimized ring, band and wedge technology to consistently provide accurate contacts. The Palodent Plus EZ Coat Matrices have a micro-thin, nonstick finish that, according to the company, makes matrix removal easier. Also, greater matrix curvature helps to improve the anatomical accuracy of the restoration and avoid interference with the ring during placement.

For more details, you can visit www.palodentplus.com or call (800) 532-2855.

(Source: DENTSPLY Caulk)
Dental marketing in 2013: Your website is your smile

By Patrick Goodness, CEO
The Goodness Company

In a recent survey conducted by www.match.com, more than 5,000 American single adults, both male and female, were asked how they judge members of the opposite sex for attraction and compatibility. Seventy-one percent of women and 58 percent of men rated the smile as the most important attribute for measuring attractiveness.

For those in the dental marketing industry, this report comes as no surprise. Additional support for the importance of a beautiful smile comes to us from a survey by the American Academy of Cosmetic Dentistry (AACD).

This survey concludes that nine out of every 10 adults in the United States consider an attractive smile to be an important social asset and eight out of 10 believe that an unattractive smile makes a person less appealing to the opposite sex.

Is your website’s first impression attracting the right patients?

It is clear that a beautiful, white smile is critical to overall attraction and to making a successful first impression. But in the world of dental marketing, how important is your dental clinic’s website in making the critical first impression and to attracting the right patient?

According to Dr. Hong Sheng, who conducted an in-depth eye-tracking research study at Missouri University of Science and Technology, it takes a website user less than two-tenths of a second to form a first impression when viewing a website and only 2.6 seconds for a user’s eyes to land on an area of a website that impacts his or her first impression.

What draws the most attention on websites?

According to the study (Science Daily, Feb 15, 2013), the website locations that drew the most attention of study subjects were as follows:

• Logo: Subjects viewed the logo for about 6.48 seconds before moving on.

• Main navigation menu: Subjects viewed the main navigation menu for an average of 6.44 seconds.

• Search box: Subjects viewed the search box for just over 6 seconds.

• Facebook and Twitter links: Subjects spent about 5.95 seconds viewing these links.

• Main home page image: Subjects’ eyes fixated on the main home page image for an average of 5.94 seconds.

• Written content: Subjects spent 5.59 seconds viewing written content.

• Bottom of a website: Subjects spent about 5.25 seconds viewing this area of the home page.

What is abundantly clear is that a company’s website is an essentially critical tool for demonstrating consumer attractiveness. Put simply, your website is your online smile.

Nearly 90 percent of professionals use company websites as their primary tool for gathering information and forming impressions prior to contacting a vendor for purchases. In today’s Internet-savvy marketplace, the failure to have a high quality, professionally designed dental website, filled with critical content is a failure to reach almost 90 percent of your target market.

Invest in your online smile

Time and again I hear dentists telling their patients the importance of quality dental work and the value of investing in the best dental care for future health and happiness. Yet, a cursory review of thousands of dental practice websites across the U.S. reveals a surprising lack of investment in quality dental website design, dental branding and informative dental procedure content.

In short, the dental industry’s online smile is a bit stained and missing a few teeth.

As a dentist or dental clinic owner, your success in the increasingly competitive dental marketplace is predicated on your ability to communicate with potential patients about what makes you different and most importantly what makes you better than your competitors. This is a valuable element of results-driven dental practice marketing.

Build a patient base that knows you, likes you and trusts you

An investment in quality branding and website development for your dental practice is critical to building patient base that knows you, likes you and trusts you. That’s the foundation of health care relationship marketing.

The AACD reports that nearly half of all participants surveyed said they would like to make some improvement in the appearance of their smile. If your branding is out of date, your website needs a makeover or it’s time to rethink your marketing approach. Seek the advice of a professional dental marketing agency to help you craft a dental marketing plan that delivers results and will prepare your practice for years of success.

If you’re not convinced that this article applies to you, please take an honest look at your logo, website and marketing materials and ask yourself, “Would I be impressed with my first impression?” It’s never too late to make an improvement to your online smile.

The Goodness Company


‘In short, the dental industry’s online smile is a bit stained and missing a few teeth.’
OCO BIOMEDICAL INTRODUCES:
THE COMPLETE LINE

Stop by BOOTH 810 to sign up for a Complimentary Educational Course.*

*Offer limited to 2013 AGD, 6/27/13 to 6/29/13

With the simple and economical **Complete Packaging**, you now have everything you need to restore the worlds only patented immediate load implant. **Complete Packaging** available for OCO Biomedical SDI, 3.0, ISI, TSI, ERI, Engage™ & MACRO™ dental implants.

[ THE NEXT GENERATION OF DENTAL IMPLANT TECHNOLOGY™ ]

(800) 228-0477
www.ocobiomedical.com

© 2013 OCO Biomedical Inc.

Designed and Manufactured in Albuquerque, NM
ISO 13485:2003 CERTIFIED 0344
ADHA celebrates profession’s 100th anniversary in Boston

American Dental Hygienists’ Association 90th annual meeting runs June 19–25

The ADHA’s annual meeting — The Center for Lifelong Learning at the 90th Annual Session — is being promoted as a celebration of a century in practice, “100 Years of Dental Hygiene: Proud Past, Unlimited Future.” The events run from June 19–25.

With 2013 marking the 100th anniversary of the dental hygiene profession, event organizers anticipate the meeting being the biggest in the organization’s history.

From the first hygienists trained by Dr. Alfred Fones in 1913 to the leading innovators of today, ADHA will extol the progress and accomplishments of dental hygienists in the oral health care field over the past 100 years. Dental hygienists from across the country and around the world are being invited to come together to prepare themselves to be the pioneers that make the next century of practice as successful as the previous one.

CLL at the 90th annual session hosts more than 30 continuing education courses taught by nationally renowned speakers, with six separate career tracks for professionals at all stages of their career, and the possibility of earning up to 20 C.E. hours at one event. Tracks include clinical practice, public health, education, research, professional development, new practitioner and a separate student track. In addition, the exhibition hall features more than 125 companies displaying information and products representing the latest in oral health.

Plenary sessions, on Thursday and Saturday, juxtaposed with a powerful tale of oral-cancer survival — prompt Hygiene Tribune’s editor in chief to reflect on the power of touch in a high-tech world. Photos/Patricia Walsh, Hygiene Tribune

Commentary
A simple act of kindness

By Patricia Walsh, RDH
Editor in Chief

This time last year I went up to Nantucket island just off the Massachusetts coast to celebrate the arrival of spring. The daffodil festival is a weekend event benefiting local charities. It allows residents and tourists alike to get a little silly. There are costume contests and goofy hats for both men and women. There’s a dog parade, a kid’s parade and an antique car parade. All of which are adorned with, you got it: daffodils.

A colorful island with traditional cobblestone streets, no matter what the season, a slower kinder spirit prevails on Nantucket. I keep a sticker on my iPad as a reminder of this way of life to offset my sometimes sterile electronic world. The oval “travel” sticker reads “A Random ACK of Kindness” — “ACK” being the code for Nantucket Memorial Airport.

Eva Grayzel spoke at our local hygiene study club recently. A non-smoker who was diagnosed with late-stage oral cancer, she was given only a 15 percent chance of survival. One of the best speakers I’ve ever heard. She inspires us to do what we already know how to do but sometimes fail to do in between the computer entries, switching plastic on light handles, the wipe down, the missing chart, the perio readings, the referral slip, the cranky last patient. She inspires us to take a deep breath, forget about our “routine” for a few extra minutes, and gather up strength to remember our humanness. More importantly, to remember the humanness of our patient and the fragility of life.

After hearing Eva speak, you get the feeling you really might just be holding your patient’s life in your gauze square. After you tell the patient that you are going to wrap his or her tongue up like a little burrito, did you look underneath? Suspicious lesions need to be rechecked at a later date with scheduled appointments. When we specifically tell the patient that we are performing an oral cancer check, we are telling the patient that we care. We are also verbally emphasizing the importance of the exam, rather than just going through the motions. If they go elsewhere, and the exam isn’t done, they will remember your proper oral cancer examination as the gold standard.

Many of us have extra bells and whistles that can be very entertaining to the patient as an adjunct to our exams, but the down-and-dirty is this. There is no replacement for definitive palpitations — the human touch.

Taking the time to roll out the lip, feel the floor of the mouth, touch the palate and caress the neck is so very important.

Photos/Patricia Walsh, Hygiene Tribune
Superior visualization can mean superior outcomes for patients

Orascoptic has loupes designed specifically for dental hygienists

For more than 30 years, Orascoptic has been designing and manufacturing award-winning dental loups with the goal of improving the overall performance, safety and comfort of dentists and dental hygienists around the world.

Orascoptic’s vision is to see every health care procedure in the world performed with superior visualization, under the best ergonomic conditions for the clinician, in order to drive the best patient outcomes.

The company strives to achieve its vision through the products it brings to clinicians. Much of the inspiration behind Orascoptic’s innovative products stems from its willingness to keep challenging the status quo.

Company representatives say that as long as health care professionals need superior visualization to deliver superior patient care, Orascoptic will be on the forefront of the technology that delivers such superior visualization.

Orascoptic is aware of the specific needs of hygienists. It maintains a certified hygienist on its staff to support new product development and help developers understand the challenges that hygienists face throughout their careers.

Company representatives say they realize that dental professionals want to provide the best possible care for their patients, and the company’s goal is to empower the dental team with quality crafted products to support that goal. The company also understand the repetitive stress and strain that a dental profession’s body is subjected to on a daily basis.

Magnification — loups

Orascoptic is the No. 1 loupes in dental hygiene, according to the company. It invites hygienists to experience the difference that high-quality optics can make for procedures.

Orascoptic’s award-winning loups set the industry standard for high definition loupes, according to the company. Known for quality craftsmanship, Orascoptic loups deliver clear resolution over a deep and wide viewing field.

The repetitive stress and strain that your body is subjected to on a daily basis can take its toll — and Orascoptic loupes are designed to help you practice in comfort. Research has shown that the use of loupes has been associated with decreased back and neck pain, as well as reduced eye fatigue.

Each Orascoptic loupes is custom manufactured for your unique working distance, angle of declination and facial geometry. You will be practicing in maximum comfort all day long with loupes built just for you.

The company is so sure that clients will love their Orascoptic loupes that it offers a 45-day money-back trial period. All Orascoptic telescopes are also backed by a lifetime warranty, giving purchasers peace of mind — and helping to ensure that its clients will be enjoying their loups throughout their careers. You are invited to choose the magnification that is right for you.

Orascoptic’s award-winning Hilos 2 is recognized as the top-selling dental loupe in the U.S. and sets the standard for high-definition loupes, according to the company. The top-selling, award-winning 2.5x loupes boasts lightweight, high definition optics and a generous field size.

While many loupes for hygienists compromise resolution near the edges of their viewing field, the Dimension 3 set the standard for edge-to-edge resolution over a decade ago. The company describes the 2.5x-power loupes as being economically priced and “tried and true.”

Illumination — LED headlights

An Orascoptic LED headlight could be the perfect companion to your loupe system. The company’s headlights are designed to make it easier to navigate your work area and see the critical details that can be missed with the naked eye. Your patients can expect a more thorough exam, and in turn, better oral health.

Dental LED headlights provide even, shadowless lighting across the oral cavity to enhance visualization, improve depth of field and reduce eye fatigue.

Orascoptic used the latest in advanced technology to create the award-winning Endeavour headlight, a high-resolution LED headlight system.

Endeavour is the company’s lightest and smallest light system. It combines power, comfort, and increased illumination, delivering up to 4,000 foot-candles of white light, while being lightweight to ensure performance for six weeks to process.

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 Hygiene Tribune? Let us know by emailing feedback@dental-tribune.com. We look forward to hearing from you!

If you would like to make any change to your subscription (name, address or to opt out) please send us an email at database@dtstudyclub.com. We look forward to hearing from you!
NEW

Orascoptic

XV1

ELEVATING DENTISTRY

Shattering the status quo

The world’s FIRST wireless loupe + headlight in one

Come by Booth #211 to be among the first to see the Brand New XV1 from Orascoptic

Orascoptic

800 369 3698  orascoptic.com
extra comfort. The device’s low heat output ensures the safety of both practitioners and patients. It features a “gumdrop” miniature light that delivers a high-quality focused beam for better visibility, as well as advanced “Capacitive Touch” controls that enable easy adjustment.

**XV1: World’s first and only wireless loupe and headlight in one**

The XV1 is the world’s first and only wireless loupe and headlight in one, providing superior visualization through superior magnification and illumination, according to the company. This new innovation seamlessly combines Orascoptic’s award-winning loupes with its award-winning headlight, and enables dental professionals to deliver superior procedural outcomes with greater ease and less strain on their bodies.

The XV1 features a lightweight and completely cableless design; and by removing the heavy and bulky belt packs of past headlights, the XV1 is ergonomically designed for comfort, function and style.

All electronics are completely contained within the custom-built frame itself, so there are no visible wires or cables. Rechargeable batteries power the XV1 for a full day’s work, delivering up to 4,000 foot-candles of light. XV1 features “Capacitive Touch” controls on both temple arms to eliminate the need for knobs or buttons that can be bacteria traps. The lightweight counter-balance design enables clinicians to practice in comfort all day long, delivering superior patient care.

The Orascoptic XV1, left, is the world’s first and only wireless loupe/headlight in one.
Some will thank you for the massage. Some may not like having their tongues depressed to see the tonsillar area. Try to remember Michael Douglas. Beyond the tongue is where his tumor was hidden from routine view.

The rise of HPV lesions is in all the news and statistically lumped into the “oral cancer” category. The fact remains that its occurrence is usually down beyond the soft palate in “WNL never-never land” (We Never Looked).

Not long ago, I had an appointment with a well-respected ENT. For the first 10 minutes of the appointment I don’t think the doctor ever looked up once from his iPad while tap-tap-tapping his initial exam and interview notes. It was obvious he was enjoying his new toy. Electronic data entry is a wonderful thing, but it needs to be injected with the right amount of eye contact.

Fortunately, my throat issue had a simple solution. When you hear a gut-wrenching tale of survival from an oral cancer survivor such as Eva, it makes you cherish the human touch over medical or electronic devices. Too, it’s important for us to remember that a computer is only as good as the person entering the information.

I hope that any patients of mine who may find themselves on the long and rocky road through oral-cancer treatment and recovery will think of me as a hygienist with compassionate eye contact who sometimes lovingly tapped on their arm — not an iPad.

I want patients of mine to remember me as someone who relied first on her knowledge of normal head and neck anatomy and secondly on the dazzle of adjunct oral cancer detection-assistance measures. The human touch should not be obsolete.

Twenty-five years ago, the dentist I worked for was absolutely giddy over his new intraoral camera. He printed out two pictures of a new patient’s broken tooth. He placed one in the chart and handed the other to the baffled patient. Her response was, “I didn’t want a picture of my tooth, I wanted my tooth fixed.” I felt sorry for the both of them. Whatever latest tests and devices show up in our offices to assist us in oral cancer detection, we should not be distracted away from the time needed for our actual physical “hands-on” examinations.

For further information about Eva Grayzel and her six-step screening program for oral cancer, please go to her website, www.sixstepscreening.org.

Reviews: Reformulated Gelato Prophy Paste recommended by 4 in 5 dental professionals

Keystone Industries’ newly reformulated Gelato Prophy Paste has received positive reviews from the dental field.

The Gelato Paste was recently evaluated in more than 2,500 uses by 35 consultants. Overall, the paste received a 91 percent clinical rating. Forty percent of consultants found Gelato Prophy Paste better than other prophy pastes they had used, and 43 percent found it to be equivalent. Sixty-three percent of consultants would switch to Gelato Prophy Paste, and 80 percent would recommend it.

Reviewer comments included “easy to rinse” and patients “liked the flavor variety.” One tester said it “does not feel gritty in the mouth.” Keystone Industries considers the review to be significant because it strives to provide the best product possible.

According to the company, Gelato Prophy Paste provides smooth, pliable and splatter-free application. The 1.23 percent fluoride ion Gelato paste is described as being effective for high-luster polishing and stain removal, while remaining gentle on the enamel with minimal enamel loss.

For convenient use and to eliminate cross-contamination, Gelato Prophy Paste comes in boxes of 200 individual disposable cups. The cups include a prophylaxis ring for ease of application on the patient’s teeth. For more options, the paste comes in 12-ounce jars (exports only).

The paste is available in four different grits (fine, medium, course and x-course) for various stain removal needs. Typically, hygienists use the fine grit for routine use and the medium grit gives a little more stain removal power. The coarse pastes are required for removing moderate to heavy stains.

For information on any Keystone product, contact Keystone Industries at (800) 333-3131 or visit www.keystoneind.com.

(Source: Keystone Industries)
FINALLY, AN INJECTABLE HYBRID RESTORATIVE FOR ALL INDICATIONS

BEAUTIFIL Flow Plus

NEW SHADES! Visit us Booth #319

- Indicated in classes I, II, III, IV & V
- Physical properties rival hybrids
- Stackable & sculptable; stays put
- Self-polishing “leveling-effect”
- High radiopacity, beyond enamel

BEAUTIFIL Flow Plus is the next step in the evolution of restorative materials, combining the delivery of a flowable and the strength, durability, and aesthetics equal to or better than leading hybrid composites.

Visit www.shofu.com or call 800.827.4638

Shofu Dental Corporation • San Marcos, CA