HINMAN EDITION

DENTAL TRIBUNE

The World's Dental Newspaper · U.S. Edition

MARCH 2011 www.dental-tribune.com VOL. 6, NO. 5

ENDO TRIBUNE
The World's Endodontic Newspaper · U.S. Edition

Critical thinking
Could this be the missing link in endodontic education? ▶ *page 1B*

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America's Toothfairy fifth anniversary

By Fred Michmershuizen, Online Editor

Hundreds of dental industry leaders were on hand during the Midwinter Meeting in Chicago as the National Children's Oral Health Foundation (NCOHF), known as America's Toothfairy, held its fifth anniversary celebration Feb. 24 at the Hyatt Regency.

The mission of the NCOHF is to eliminate pediatric oral disease and promote overall health and well being for millions of children from vulnerable populations.

The NCOHF is a comprehensive resource provider for non-profit community programs that deliver critical preventive, educational and treatment services.

Among those speaking at the reception were NCOHF board member Dr. Gordon Christensen and NCOHF President and CEO Fern K. Ingber, who both expressed thanks to the association's corporate underwriters, whose contributions allow 100 percent of donations to go directly to children's oral care services.

The NCOHF provides vital financial, product and technical support to a growing national network of not-for-profit Affiliate programs and volunteer dental professionals delivering critical oral health services for underserved children.

All NCOHF affiliate partners use a comprehensive preventive, restorative and educational model to break the cycle of pediatric dental disease and improve children's overall health. DT

From left: Mike Cohen, Mike Orecchia, David Lang and Dan Parrilli. (Photos/Mark Eisen, Dental Tribune)

Dr. Gordon Christensen, left, and Fern K. Ingber.

Hinman's southern hospitality

Take a sneak peek at what there is to look forward to at the Hinman Dental Meeting, March 24–26, in Atlanta. The event has a long-standing reputation of excellence, offering the highest quality continuing education delivered by the industry's foremost experts and served with southern hospitality that only Hinman can provide. (Photo/Fred Michmershuizen, Online Editor)

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Oral Health America holds annual gala

By Fred Michmershuizen, Online Editor

Founded in 1955, Oral Health America (OHA) is a national non-profit organization dedicated to changing lives by connecting communities with resources that increase access to dental care. Funded by charitable contributions, the association also provides education and advocacy for all Americans, especially those most vulnerable.

OHA held its 21st annual Gala and Benefit at Chicago's Field Museum on Feb. 23, during the recent midwinter meeting. The evening featured a reception, an auction and raffle and dinner, followed by music and dancing.

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Osteoporosis and bisphosphonates

The administration of bisphosphonates, via an IV or orally, is an important distinction

By David L Hoexter, DMD, FACD, FICD

If used appropriately, bisphosphonates are a tremendous tool in treating osteoporosis. There is currently a great deal of confusing information over when and how to safely use them.

Clearing up the confusion is important because more than 30 million people in the United States are currently suffering from osteoporosis, and if they are not treated, they are at risk for osteoporotic fractures that seriously jeopardize their lives.

At present, bisphosphonates are the best tool to reduce bone loss and significantly reduce the chance of these fractures. It is estimated that 24 percent of patients with osteoporotic fractures not treated by bisphosphonates will die because of these fractures.

Recently, reports of osteonecrosis of the jaw (ONJ) associated with bisphosphonates have caused fear about using bisphosphonates. The reports by Dr. Marx and later by Dr. Ruggerio related osteonecrosis lesions after oral surgical procedures were done on patients in hospitals under IV bisphosphonate administration.

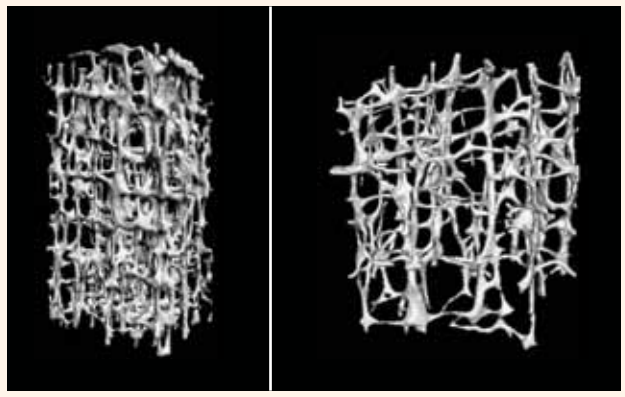

Fig. 1a (left): A cross section of normal, healthy bone.

Fig. 1b (right): A cross section of osteoporotic bone.

(Photos/Provided by Dr. David Hoexter)

This article seeks to clarify some of the unknowns, or innuendo, surrounding the fear of using bisphosphonates. As it was once wisely written: "We have nothing to fear but fear itself."

Identifying the problem

Today we have acquired fear about using certain medication for osteoporosis. Namely, bisphosphonates and their relationship to osteonecrosis. Osteonecrosis is defined as the death of bone tissue due to an impaired blood supply. When the diagnosis of osteonecrosis is made, the cause is listed as definite causes and possible causes.

Definite causes includes: alcohol abuse, atherosclerosis, decom-

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Tell us what you think!

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Chair of the OHA Gala Committee Genevieve M. Bauer welcomes attendees at the annual Oral Health America Gala on Feb. 23. (Photo/ Mark Eisen, Dental Tribune)

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Genevieve M. Bauer, chair of the OHA Gala Committee, welcomed attendees. Also speaking were Dr. George Zehak, chair of the Chicago Dental Society Foundation, Dr. Keith Suchy, chair of the OHA board of directors, and Beth Truett, president and CEO of OHA.

About 800 people attended the event, which raised $500,000 for Smiles Across America, NSTEP (National Spit Tobacco Education Program), the Wisdom Tooth Project, Medical Dental Dialogues and the Campaign for Oral Health Equity. DT

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The World's Dental Newspaper · US Edition

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Published by Dental Tribune America

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pression sickness, Guacher's disease, high doses of corticosteroids, radiotherapy, sickle cell disease and tumors.

Possible causes include: blood clotting disorders, Cushing's syndrome, diabetes mellitus, fatty liver, gout, lipid disturbances, pancreatic cancer, pancreatitis, smoking, systemic lupus and erythematosis.

Brittle bones and fractures are more prevalent as the population lives longer. It is estimated that 20 to 30 million people have concerns about their osteoprosis and are taking medications to cease or prevent their osteoporosis. The medications to aid opsteoporosis are in general called bisphosphonates.

When clinical reports of associations of bisphosphonates to osteonecrosis were distorted, it started a reaction that caused people to associate all bisphosphonates and all levels of strengths and dosages in one grouping. It is as if one were to claim all antibiotics are the same and only one strength were to be used for all instances.

There is a benefit to being made aware by Marx and Ruggerio, and now drug makers are also aware of the possibility of ONJ and include this information in their listing of possible side effects for bisphosphonates.

However, the result of this information has also caused people to hesitate in their efforts to prevent or inhibit osteoporosity. Suddenly, lawyers have come to the fore who claim to specialize in representing patients using bisphosphonates who wish to instigate a lawsuit and actually advertise to acquire plaintiffs who have been harmed by using bisphosphonates.

In addition, some physicians now hesitate to prescribe bisphosphonates for fear of legal consequences, leaving the patient to deteriorate further.

Oral surgeons at dental meetings are also showing more osteonecrotic lesions in their presentations. However, the causes of these necrotic lesions are not necessarily from bisphosphonates.

Clinical reports of osteonecrosis associated with bisphosphonates was brought to dentists' awareness by oral surgeons (Marx and Ruggerio) some 30 years after the use of bisphosphonates were first released to the public and received FDA approval.

Oral bisphosphonates were first approved and released in 1970, and clinical reports of oral necrosis were published after 2003. The clinical reports independently provided proof of oral necrotic bone lesions resulting when treating patients in hospitals that were under some regime and hospitalized.

Only after oral surgical therapy, while in the hospital, these patients presented necrotic oral lesions and their sequela.

While I do appreciate the reporting of such information and now avoid having patients acquire further trauma, I found myself asking: "What were these patients doing in a hospital environment to begin with?" As reported, the patients were all hospitalized for cancer therapy and undergoing chemotherapy. Their resistance factors certainly may, under those circumstances, be altered.

The method of receiving bisphosphonates while being treated in a hospital was not, as most commonly accepted, orally, but rather intravenously.

Intravenous bisphosphonates have been used for Paget's disease, hypercalcemia associated with malignancy and with antineoplastic bone lesions associated with breast cancer and multiple myeloma. The strength and dosages of the medication used with the IV was close to four times the recommended oral dosage.

There are, of course, protocols for treating hospitalized patients, and they were all followed. Yet, these reports are being interpolated to encompass all modes of bisphosphonates delivery systems.

However, there are positive results from using oral bisphosphonates when administered at the proper dosage. Emphasis must be placed upon differentiating the reported results from all intravenous delivery of bisphosphonates as well as the recognition of different dosages.

In my practice, I have patients who are taking oral bisphosphonates. I treated them for periodontal disease with surgical intervention with positive results over the years.

The same goes for patients that continued taking their oral bisphosphonate medication when I placed implants and achieved successful results.

Dr. M. Jeffcoat reported a three-year study comparing patients taking oral bisphosphonates with non-medicated patients. Each group received the same number of implants inserted. The results were the same for each group:

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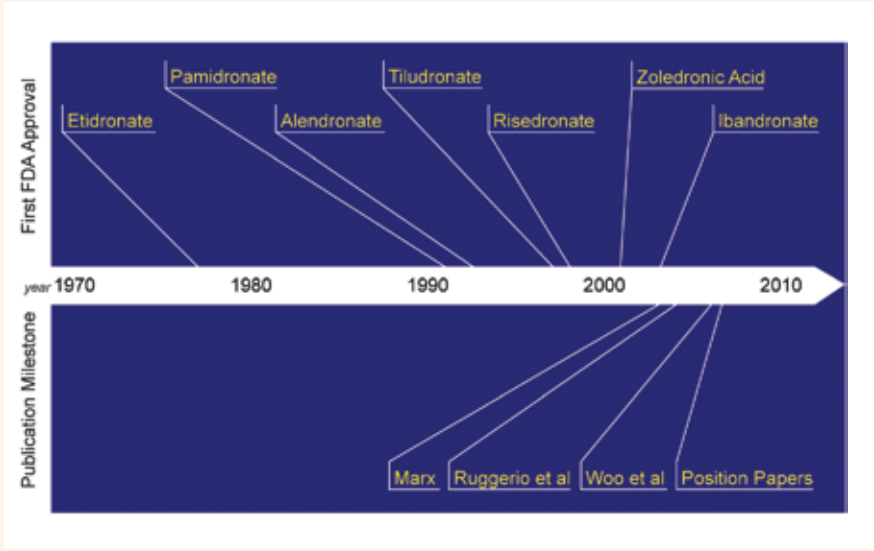

Fig. 2 (Illustration provided by Dr. David Hoexter)

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approximately a 98 to 99 percent acceptance.

The millions of patients that have osteoporosis and need assistance are the ones that we are trying to aid, not deter. Let our profession encourage and inform patients of all the facts pertaining to bisphosphonates. Indeed, I have apprehensions of unknown possibilities for those taking various medications.

As such, in the case of oral bisphosphonates, what might be the accumulative effects of taking this medication for five or 10 years?

A recent report from University of Southern California showed a 96 percent success rate of people using oral bisphosphonates with osteoporosis. A new acronym for bisphosphonate-associated osteonecrosis, BON, has become popular in discussions.

It behooves us to share this knowledge with our patients. In particular, we must clearly note the difference in administration of bisphosphonates via an IV or orally when discussing the use and safety of these drugs.

So-called "drug holidays" are not the answer. There is no supporting data that stopping the use of bisphosphonate medication for a set amount of time reduces the risk of developing BON.

Perhaps standardizing a bone turnover marker test and getting a base line of bone metabolism, a DTX information gathering radiograph — definitely as the American Dental Association suggests with osteoporosis — and trying to avoid oral pathology by undergoing regular oral examinations by a dentist and increasing good oral hygienic techniques by using power toothbrushes or hand toothbrushes, and avoiding alcohol rinses would decrease risk.

There are millions of people who need, or will need, treatment for osteoporosis. Let us help ourselves with knowledge, not fear. Let us start by recognizing the different administartion methods, oral as opposed to IV, as well as their dosage differences.

Perhaps with knowledge and statistical studies we can help eliminate this fear. DT

About the author

Dr. David L. Hoexter is director of the International Academy for Dental Facial Esthetics, and a clinical professor in periodontics at Temple University, Philadelphia. He is a diplomate of implantology in the International Congress of Oral Implantologists as well as the American Society of Osseointegration, and a diplomate of the American Board of Aesthetic Dentistry.

Hoexter lectures throughout the world and has published nationally and internationally. He has been awarded 11 fellowships, including FACD, FICD and Pierre Fauchard. He maintains a practice at 654 Madison Ave., New York City, limited to periodontics, implantology and esthetic surgery.

He can be reached at (212) 355-0004 or *drdavidlh@aol.com*.

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Get ready for the Hinman Dental Meeting

By Fred Michmershuizen, Online Editor

The 2011 Thomas P. Hinman Dental Meeting — the 99th — will be held March 24 to 26 at the Georgia World Congress Center and Omni Hotel in Atlanta. The theme of the Hinman meeting is "Quality Continuing Education Served With Southern Hospitality," and organizers say this year's event will not disappoint.

Some of the highlights of Hinman 2011 include the following:

• At least 60 leading authorities in the field of dentistry.

• More hands-on courses (60-plus) offered than ever before for the entire dental team.

• All-day educational tracks for dental hygienists, assistants and office staff.

• New "Business of Dentistry" track for dentists.

• Multiple one-hour courses, allowing for more time on the exhibit floor.

• Hinman Eatery, located at each end of the exhibit hall.

• A Dentist Reception to be held on Friday night.

Education in Atlanta

No matter what your area of interest, there are courses available just for you. Specialty educational tracks include those for dentists, hygienists, assistants and business office staff.

The Hinman Dental Meeting utilizes a computerized accreditation process. Attendees who register for courses will receive a ticket listing the course and speaker for each class and a C.E. scan ticket. These tickets can be stored in the badge holder.

Be sure to make note of the C.E. code announced at the conclusion of each course and keep the C.E. scan ticket and your badge number included in your registration materials. C.E. certificates can be printed out at the conclusion of each course, at the end of the meeting or from *www.hinman.org* for up to six months following the meeting.

The Thomas P. Hinman Dental meeting is an Approved PACE Program Provider (FAGD/MAGD Credit) by the Academy of General Dentistry.To receive AGD credit, include your AGD number where indicated on the registration form.

Upon processing your C.E. codes for credit, your completed information will be submitted to the AGD following the 2011 Hinman Meeting.

Table clinics

Table clinics are complimentary tabletop presentations, which are each 10 minutes in length and are given by volunteers from the dental community. Spend a minimum of one hour and attend at least six table clinics to receive one hour of continuing education credit. C.E. cards for table clinics will be available at the table clinic desk in Exhibit Hall A3. Table clinic presenters will stamp the card at the completion of each presentation, and a code will be provided for CE credit as you exit. Enter behind the 2700 aisle.

Exhibit hall

The exhibit hall is a great place to see the latest dental products, technologies and meet people. Free Internet access is available in the Cyber Café, and complimentary morning and afternoon snacks are also provided.

Make sure you check out some of the table clinic presentations, several of which are presented by dental students.

And don't miss the closing party in the exhibit hall on Saturday from 2 to 4 p.m. and enjoy a complimentary cocktail.

The exhibit hall will be open on the following dates and times:

• Thursday, March 24, 9 a.m. to 5:30 p.m.

• Friday, March 25, 9 a.m. to 5:30 p.m.

• Saturday, March 26, 9 a.m. to 4:30 p.m.

Special events

The meeting also offers several fun events to attend. Be sure not to miss:

• Auxiliary Reception on Friday. This gathering is filled with free food, drink and dancing.

• Dentist Reception on Friday. This event has a spread of food and a live band.

• "Up on the Roof" party on Saturday at STATS in the Luckie Marietta District.

Other things to do include a Thrashers hockey game, taking a cooking class and much more.

More information on the 2011 event is available online, at *www.hinman.org*.

(Source: The Hinman Dental Society of Atlanta)

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Air-Flow kills biofilm

Subgingival application of the Air-Flow method allows smooth, efficient removal of bacteria in the periodontal pocket

Fig.1: Perio-Flow handpiece and nozzle for subgingival use. (Photos/ Provided by EMS)

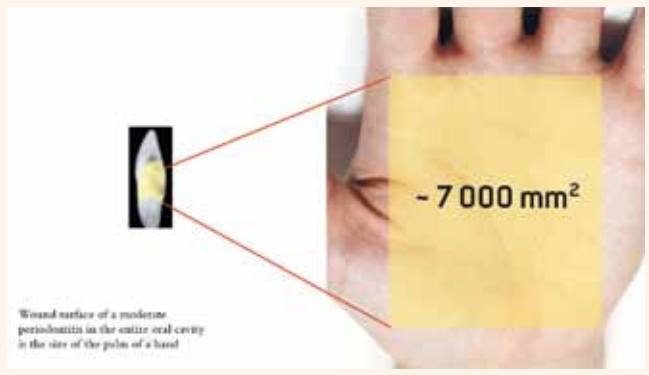

Fig.2: Wound surface of moderate periodontitis in the entire oral cavity.

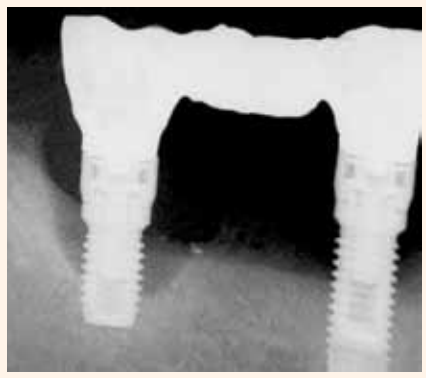

Fig. 3: Implants are a poor investment without regular periodontal disease management.

Biofilm is a dirty word

Thousands of bacteria strains deep down in the periodontal pocket are responsible for the development of various diseases. The magnitude is enormous and so is the need for periodontal disease management.

No need to mention the increased risk factor on systemic diseases such as diabetes, stroke or premature birth.

Swiss-based Electro Medical Systems (EMS) is well known for Air-Flow®, the original method for supragingival air polishing. Yet, too few dental professionals are aware of the unique subgingival application of this mix of powder and air.

"Air-Flow goes subgingival," says EMS, and brings the point home. A unique nozzle delivers the air-powder mixture deep into the pocket where rinsing water washes out the eliminated biofilm. The device and consumables go hand in hand for extraordinary results without any stress or risk for the patient, according to the company.

The patented single-use Perio-Flow nozzle has been especially designed for use in deep periodontal pockets (up to 10 mm). According to EMS, it creates optimum but gentle turbulence in subgingival areas and prevents soft-tissue emphysema via three horizontal nozzle outlets for air-powder mixture and one vertical nozzle outlet for water.

Abrasive — a bad idea?

There is also the Perio Flow Method, and the company has specific features for its periodontal use. The glycine-based grain is extra-fine (25 µm). In addition, the grains have a particularly low specific density (d 50).

As a result, the original Perio-Flow Method is highly effective when it comes to abrading harmful biofilm, but will not do any harm to the tooth surface or dentin, explains the company.

According to EMS, it is important to lay this misconception to rest: abrasion is not wrong, as long as, from the gingival crest to the deepest periodontal pockets, it has no adverse effects on the tooth.

A representative from EMS said that the company is very enthusiastic about the growing market acceptance of the Perio-Flow Method and that the company is proud to go beyond the boundaries of conventional periodontal disease management.

If your patients only knew

The wound surface of moderate periodontitis in the entire oral cavity equals the size of the palm of a hand. No wonder it affects the entire immune system, often with dramatic effects on the body as a whole.

Four out of five patients suffer from a form of periodontitis (30 percent severe).*

If they knew that periodontitis is the most common cause of tooth loss, wouldn't they ask for a way to prevent it?

Implants, too, come loose with the withdrawal of bone tissue. According to EMS, regular prophylactic treatment with the original Perio-Flow Method is proven to prevent peri-implantitis and its costly aftermath.

Thus, the implant patient is and continues to be a patient, too. DT

* *German Oral Health Survey, 2006*

Solving one of dentistry's challenges: fear of injections

Of all the procedures performed on a routine basis, the one procedure that is universally perceived by patients as the most fear- and anxiety-provoking is the dental injection. In spite of the significant advances made during the past 100 years, our profession has yet to conquer one of the greatest challenges of dentistry — or has it?

Milestone Scientific, Inc., after spending the past decade responsibly and methodically studying this problem, now believes that with the introduction of its new product, the Wand/STA System instrument, it has finally conquered this age-old problem.

The Wand/STA System instrument represents the world's first and only technology that uses the patented Dynamic Pressure Sensing (DPS) technology that accurately and safely performs a pressure-regulated intra-ligamentary dental injection.[1]

The new Wand/STA System can also perform all traditional dental injection techniques, i.e., inferior alveolar block, supra-periosteal infiltration, etc. All techniques are performed more efficiently, more effectively and virtually painlessly.[2,3]

Milestone's new technology incorporates visual and audible real-time feedback, giving clinicians an unprecedented level of control and information when performing a dental injection.

The Wand/STA replaces the antiquated heavy metal dental syringe with an ultra-lightweight disposable handpiece weighing less then 10 grams for superior ergonomics and tactile control.[4] The experience for both patient and dentist is one that is significantly less stressful.[5]

Milestone Scientific, Inc. created and defined a new category of dental instruments called C-CLAD (Computer-controlled Local Anesthetic Delivery) systems.

These are the only dental injection instruments that have the published scientific data that substantiate the claim of eliminating or reducing pain perception when performing a dental injection.[6–9] This technology has undergone the rigors of clinical testing that has been performed in numerous universities and research centers throughout the world for more then decade.

According to the company, these studies are published in some of the most highly respected dental journals in the profession. No other instrument, technology or device developed specifically to reduce pain and anxiety while performing a dental injection can currently make that statement.

With the introduction of C-CLAD technology, several newly defined injections were also introduced to dentistry.[10] The Wand/STA System has been optimized to perform these new dental injections.

The first of these techniques, the anterior middle superior alveolar (AMSA) nerve block, published in 1997 by Friedman and Hochman, is a contemporary technique to achieve maxillary pulpal anesthesia of multiple maxillary teeth from a single palatal injection without producing the undesired collateral anesthesia to the lip and face.[11]

Subsequently, Friedman and Hochman introduced a second injection, named the palatal-approach anterior superior alveolar (P-ASA) nerve block, in[12] which pulpal and soft-tissue anesthesia of the central and lateral incisors are achieved by a single palatal injection.[13]

The general reduction in pain perception for all injections has led to innovative ways to producing more efficient and effective dental anesthesia.

In addition to the new dental injection discussed above, The Wand/STA System instrument improves the success rate of traditional injections such as the inferior alveolar nerve block.[14]

(Photo/Provided by Milestone)

Holding the Wand handpiece, with a pen-like grasp allows the clinician to easily rotate while simultaneously moving the needle forward, increasing accuracy by decreasing needle deflection.[15]

Added to the ability to use the new multi-cartridge injection feature, the Wand/STA instrument provides numerous advantages when performing traditional injection techniques.

The introduction of the Wand/STA System instrument represents a material improvement over previous versions of this technology.

Numerous innovative new features are available in the Wand/STA System. They include automatic purging of anesthetic solution that primes the handpiece prior to use, automatic plunger retraction after completion of use, a multi-cartridge feature allowing multi-cartridge injections and reduction of anesthetic waste.

Milestone Scientific has developed a novel training feature in the Wand/STA System instrument, providing clinicians with spoken instructional guidance on the use of the instrument, thereby substantially reducing the initial learning curve.

The Wand/STA System instrument is today's most advanced C-CLAD technology and represents the next generation of computer-controlled drug delivery instruments for dentistry. DT

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