



Matt Mullin

Bisphosphonate Questions Answered

Treating patients who take bisphosphonates continues to raise questions not only in dentistry but in medicine as well.

Dentists may have questions about managing patients on bisphosphonates — a class of drugs used primarily for the prevention and treatment of osteoporosis that have been associated with a rare side effect called bisphosphonate-associated osteonecrosis of the jaw.

For those dentists with questions, the ADA developed “Dental Management of Patients Receiving Oral Bisphosphonate Therapy: Expert Panel Recommendations.” The recommendations apply to patients taking oral bisphosphonates specifically and not intravenous bisphosphonate medications, where the risk for developing BON is higher.

Peter Jacobsen, PhD, DDS, vice chair of the ADA Council on Scientific Affairs and a member of the expert panel that developed the recommendations, advised

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Nine Stars USA Introduces Trashcans for Dentist Offices

Nine Stars USA recently launched its stylish, revolutionary line of hands-free, stainless steel infrared trashcans to the medical and dental community. Detecting motion within 10 inches and automatically opening the lid as users approach, the trashcans eliminate contact with dirt and potentially harmful bacteria.



New models include: DZT 42-1, an 11-gallon can measuring 14.5 inches wide and 27.5 inches tall; DZT 65-1, a 17-gallon can measuring 18.25 inches wide by 32.2 inches tall; and DZT 80.1, a 21-gallon can measuring 18.75 inches wide and 32.25 inches tall. For more information go to ninstars.com or call 866-9STARS-8.

Networking May Net New Patients to Your Practice

Establishing a rapport and showing interest in new acquaintances may be the key in attracting new patients to one's practice.

In an issue of the *Journal of the Michigan Dental Association*, Theodore Schuman, a business expert, presented 10 ways dentists can bring in new patients to those in associate and solo practices. Among the tips: Learn people skills; introduce yourself to everyone you meet; and get active in the community.

“Your personality can be a powerful advertising tool,” he wrote.

Since existing patients refer 70 percent of a practice's new patients, asking for referrals is recommended. And while some dentists may feel uneasy asking for referrals, it doesn't have to be awkward. A comment such as “Mrs. Jones, you're an excellent patient. I wish I had a dozen patients like you,” may even do the trick.





“Treating gum disease during pregnancy has been shown to be safe and effective in improving women’s oral health and minimizing potential risks.”

ANANDA P. DASANAYAKE,
BDS, MPH, PHD

New Evidence Shows Perio Disease Could Lead to Type 2 Diabetes

A dental research team from New York University has found evidence that expectant moms who have periodontal disease have increased chances of developing gestational diabetes mellitus compared to their counterparts with healthy gums.

Ananda P. Dasanayake, BDS, MPH, PhD, a professor of epidemiology and health promotion at the NYU’s College of Dentistry, led the study that followed 256 women through their first six months of pregnancy at New York’s Bellevue Hospital Center. Of that number, 22 women developed gestational diabetes and had notably higher levels of inflammation and periodontal bacteria than their colleagues who did not have periodontal disease.

It is believed the inflammation associated with perio disease is a factor in the onset of pregnancy-related diabetes because it may interfere with the proper functioning of insulin that regulates glucose metabolism.

“In addition to its potential role in preterm delivery, evidence that gum disease may also contribute to gestational diabetes suggests that women should see a dentist if they plan to get pregnant, and after becoming pregnant,” said Dasanayake. “Treating gum disease during pregnancy has been shown to be safe and effective in improving women’s oral health and minimizing potential risks.”

Published in the April issue of the *Journal of Dental Research*, the research underscores the importance of good oral health for expectant mothers. A grant from the National Institute of Dental and Craniofacial Research supported the study.

“In the future,” Dasanayake said, “we can expect to see more research on the link between these two conditions involving other high risk groups, such as Asian and Native American women.”

Those who have had gestational diabetes are at a higher risk of later developing Type 2 diabetes. Asians, Hispanics and Native Americans are at the top of the list for greatest risk.

Early Intervention Makes Strides in Children With Speech Impairments

A parent-implemented program that stimulates the speech of children under the age of 3 who have cleft lips and palates has made some gains, according to a new study published in *The Cleft Palate — Craniofacial Journal*, a bimonthly publication of the American Cleft Palate-Craniofacial Association.

An estimated 1 in every 600 newborns, or 7,000 children a year, have a cleft lip and palate, CLP, the most frequent birth defects in the United States.

The participants in the study were 10 mother-child pairs in which the child had CLP and 10 other mother-child pairs of youngsters did not have clefts. The age range for children was 14 to 36 months. A bulk of the questions centered around whether parents could be trained to deliver an early intervention program for children with cleft palate as well as to what degree the effectiveness of the program.

The finding? Mothers could be trained to deliver a reliable intervention. A decrease in the use of glottal stops, increased speech accuracy, and more sound inventories were found in the children with clefts. While the speech gains did not surpass those made by the children who did not have clefts, the results have implications for service delivery models in cases where the services of speech-language pathologists are limited.

To read the entire study, go to: <http://allenpress.com/pdf/10.1597-06-085.pdf>.



Cosmetic Dentistry Plumps up Otherwise Flat Dental Office Revenue

Cosmetic dentistry has emerged despite the relatively flat growth in the dental revenue, this according to a new survey from the American Academy of Cosmetic Dentistry in an issue of *Managed Dental Care*.

According to U.S. Census Bureau data, dental office revenue increased only 4.4 percent between 2005 and 2006, nearly almost 2 percentage points less than in 2004. Yearly revenue for the profession is at \$87.4 billion, evenly divided between insurance payments and private pay. (Medicaid and other unspecified payers account for relatively little.)

But according to the article in *Managed Dental Care*, AACD research showed cosmetic dentistry revenues between 2005 and 2006 grew 15 percent, to \$2.75 billion.



Spellex Releases 2008 Version of Premium Dental Spelling Software

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Spellex Premium Dental adds more than 30,000 terms to your spell checker. The dental spelling dictionary covers terms from all areas of general and hospital dentistry, including preventive dentistry, oral diagnosis, temporomandibular disorders, restorative, esthetic, and implant dentistry. Spellex Dental also includes oral pathology, radiography, orthodontics, endodontics, prosthodontics,



pedodontics, and periodontics. Prices start at \$69 for single users and \$355 for 10 user licenses. To order or request product information or a free evaluation copy, go to spellex.com or call 800-442-9673.

It's All About Timing

Surgical timing has been a hot topic with various cleft centers all over the globe preferring early closure when the child is about 3 to 6 months old. One researcher, however, Damir Matic, MD, MSc, using data compiled over the past two decades is saying the optimal time to close the cleft at the alveolus in patients with either one- or two-sided clefts is at age 8 or 9 prior to canine tooth eruption.

"We close the lip at 3 months of age; we close the palate at 1-year old, but we don't touch the gum until they are 8 or 9, a time that corresponds to when the adult teeth start to appear," said Matic.

Matic, a scientist with Lawson Health Research Institute in London, Ontario, also is a craniofacial/plastic surgeon at London Health Sciences Centre and a professor in the department of surgery at the Schulich School of Medicine and Dentistry at The University of Western Ontario.

The study represents a significant breakthrough in cleft research involving an unprecedented sample size of 136 children. Matic and his team looked at a large group of children who had the cleft repair performed early and then compared that group

to another large group of children who had the repair performed when they were older.

"Cleft is the most common facial anomaly and the second most common congenital anomaly among children," Matic said. "Our research is clinically based in terms of looking at how we can make our repairs better in light of our current knowledge and past discoveries. Based on our data, the downside of early closure is much worse than any potential benefits, and repairing the cleft prior to this time (7-9 years) will damage facial growth."

Parts 1 and 2 of the study looked at bone production and facial growth in unilateral clefts. This study was presented in 2006 and 2007 to the American Cleft Palate Association, the largest society dedicated to cleft research in the world. Matic's research won best paper in the Junior Investigator Competition out of hundreds of submissions from all over the globe.

The third part of the study examined



how the repair affects bone production and facial growth in patients with bilateral clefts. These findings were presented at the ACPA meeting in Philadelphia recently. Matic was involved in a panel discussion/debate regarding his research where he recommended the later closure, according to a press release. The overall majority of the participants voted with Matic, leading to a change in recommendation in the way cleft palates will be treated in hospitals around the world.



When ALD was administered, none of the implants were lost, and the quality of the bone density improved to 50 percent.

Study: Alendronate Enhances Success of Implantation

Estrogen deficiency negatively affects implant osseointegration in rats' maxillary bone, according to a new study published in the latest issue of the *Journal of Oral Implantology*. Additionally, results also yielded that alendronate, ALD, an aminobisphosphonate, may improve the quality and quantity of bone available for a successful implant.

Bisphosphonates, such as ALD, although controversial, are worthy of investigation for the enhancement of implant osseointegration, the structural and functional connection between living bone and an implant, in patients with low bone mass who are already taking bisphosphonates for osteoporosis, the study said, adding patients may receive additional benefits and be acceptable candidates for

dental implants without needing to change their medication regimen and possibly as a result of their medication regimen.

The implants placed in rats with a deficiency in estrogen did not osseointegrate. The likelihood of losing the implants was 50 percent at two weeks; at four weeks 13 percent of the implant surface remained in contact with bone. The use of ALD helped to improve the bone-implant contact to 85 percent of the initial value. When ALD was administered, none of the implants were lost, and the quality of the bone density improved to 50 percent. Overall, ALD enhanced the osseointegration of implants.

To read the entire study, "Effect of Ovariectomy and Alendronate on Implant Osseointegration in Rat Maxillary Bone," go to <http://www.allenpress.com/pdf/i1548-1336-34-2-76.pdf>.

Automatic Receptionist for Dental by Troll Software

Troll Software has announced its scheduling system for dental offices. Keep in touch with patients and let them confirm and reschedule their appointments back into the schedule with your permission. Troll



Software truly automates filling open spots in your schedule using e-mail, Web, and text messaging interfaces. Contact your practice management software vendor for more information, go to trollsoftware.com or call 877-876-5576.

UPCOMING MEETINGS

2008

Sept. 6-9	94th annual meeting, American Academy of Periodontology, Seattle, Wash., perio.org/meetings .
Sept. 12-14	CDA Fall Scientific Session, San Francisco, 800-CDA-SMILE (232-7645), cda.org .
Sept. 24-27	FDI Annual World Dental Congress, Stockholm, congress@fdiworldental.org .
Oct. 16-19	American Dental Association 149th Annual Session, San Antonio, Texas, ada.org .
Oct. 25-29	American Public Health Association Oral Health Section's annual meeting and exposition, San Diego, www.apha.org/meetings .

2009

May 14-17	CDA Spring Scientific Session, Anaheim, 800-CDA-SMILE (232-7645), cda.org .
Sept. 11-13	CDA Fall Scientific Session, San Francisco, 800-CDA-SMILE (232-7645), cda.org .
Oct. 1-4	American Dental Association 150th Annual Session, Honolulu, Hawaii, ada.org .

To have an event included on this list of nonprofit association continuing education meetings, please send the information to Upcoming Meetings, CDA Journal, 1201 K St., 16th Floor, Sacramento, CA 95814 or fax the information to 916-554-5962.

Honors

Charles J. Goodacre, DDS, dean of Loma Linda University School of Dentistry, has received the 2008 Gies Award from the ADEA, which recognized him for outstanding innovation by a dental educator.

A. Jeffrey Wood, DDS, San Francisco, Calif., professor and chair of the department of pediatric dentistry at the University of the Pacific Arthur A. Dugoni School of Dentistry, was named president of the California Society of Pediatric Dentistry.

Raymond Melrose, DDS, FACD, was awarded the St. George National Medal of Honor for his more than 30 years of



Charles J. Goodacre, DDS



A. Jeffrey Wood, DDS



Raymond Melrose, DDS, FACD

outstanding contributions to the American Cancer Society. The award, the society's highest national honor, is given to a remarkable volunteer who has made a significant contribution to the achievement of the society's goals over an extended period of time.

Incorrect C.E. Price

Two prices were listed incorrectly for continuing education programs in the June issue of the *Journal*. The correct price is \$119 for nonmembers for the following two programs from the California Academy of General Dentistry: "Pediatric Dentistry and Minor Orthodontic Treatment" on Sept. 21 by John N. Groper, DDS, and "Exquisite Complete and Implant Retained Overdentures Calibrated for the General Practitioner" on Dec. 7 by Joseph Massad, DDS.

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dentists to read the recommendations and urged them to communicate with physicians when treating these patients.

"Knowledge about bisphosphonates and osteonecrosis is still evolving," said Jacobsen. "We still don't really know the incidence of osteonecrosis of the jaw in dental patients nor how to most effectively manage it. But research and treatment experience is moving quickly and the ADA is closely monitoring all publications on this topic to ensure our panel recommendations are current and accurate."

He added that cancer patients being treated with intravenous bisphosphonate drugs are "clearly at risk for developing BON" and "should have a dental evaluation ideally before, but certainly within the first several months of beginning IV therapy."

The incidence of BON in patients taking the oral form of bisphosphonates is much lower.

In January, an alert from the Food and Drug Administration warned of additional side effects from bisphosphonates, including the "possibility of severe and sometimes incapacitating bone, joint, and/or muscle (musculoskeletal) pain." The alert

indicated "bisphosphonate use might be responsible for severe musculoskeletal pain in patients who present with these symptoms" and asked health care professionals "to consider temporary or permanent discontinuation of the drug(s)."

"Bisphosphonates have a history of coming up with unexpected things," said Robert Recker, MD, in a Jan. 28 article of the *American Medical News*. Recker, director of the Creighton University School of Medicine Osteoporosis Treatment Center, added he was frustrated that dentists have told patients to get off the drugs. "The truth is bisphosphonates are among the safest drugs we prescribe in osteoporosis," he said.

In a letter to the *AM News*, James Bramson, DDS, former ADA executive director, said the ADA recommendations do not suggest patients should stop taking these drugs prior to dental procedures, but instead that "dental treatment should not generally be modified solely on the basis of bisphosphonate therapy."

"The ADA recommendations stress that the incidence of bisphosphonate-associated osteonecrosis of the jaw is very

low," Bramson wrote, and "patients may also benefit from having a dental exam prior to beginning oral bisphosphonate therapy."

Bramson concluded that the ADA recognizes that discontinuation of these drugs is a serious medical decision and that "the ADA recommends that dentists encourage patients to consult with their treating physician about any health risks associated with use of these drugs."

In 2006, the ADA Council on Scientific Affairs released recommendations encouraging dentists to talk with a patient's treating physician about any health risks and recommended that patients have a dental exam prior to beginning oral bisphosphonate therapy. In some cases, patients may want to schedule dental treatments before starting bisphosphonate therapy.

"The use of these drugs is a serious medical decision," said Jacobsen. "They provide a very real and measurable benefit by decreasing bone fractures in patients with osteoporosis. All drugs have side effects and any drug has a risk-to-benefit balance that needs to be considered."



Antibody Could Signal a New Way to Create a Healthier Mouth

A recently discovered antibody could be a beacon of healthier gums and teeth, said researchers at the University of Michigan School of Dentistry.

According to Charles Shelburne, an assistant research scientist, the antibody is to a protein called HtpG, the “bug” that makes it is *Porphyromonas gingivalis*, an important pathogen in periodontal disease.

“What has been seen in periodontal disease over the last 30 to 40 years is that patients with periodontal disease have higher levels of antibodies to the bacteria associated with periodontal disease, but what we know is that those antibodies aren’t usually protective,” said Dennis Lopatin, principal investigator and senior associate dean of the university’s School of Dentistry. “It’s like being vaccinated against the wrong strain of the flu. The healthy patient makes high levels of the antibodies but to the right part of the bug.”

Researchers discovered that the HtpG antibodies were present in lower amounts in individuals with periodontal disease, and higher concentrations in those with healthier gums and teeth. And, not only were the HtpG antibodies present in higher amounts in people with healthier gums, those patients with the antibodies responded better to periodontal treatment. National Institute of Dental and Craniofacial Research funded the project.

“We’re in a position now where we have a potential tool that gives insight as to how the patient will respond to treatment,” Lopatin said. “In the United States we spend \$8 billion to \$12 billion a year caring for people with serious periodontal disease. From a public health standpoint, it’s very important to identify those people who not only need therapy but will actually respond to a specific type of therapy.”

In the end, this discovery may lead to interventional therapy, halting periodontal disease from starting or progressing, said Lopatin.



Soredex Scanora 3-D With HD Panoramic Takes Dentistry to the Next Level

Instrumentarium Dental unveiled the new Soredex Scanora 3-D X-ray, true panoramic imaging technology that produces high quality images. Soredex Scanora 3-D combines a three field of view cone beam with high-definition panoramic imaging in a single system to produce anatomically correct images of teeth, bone

and soft tissue, plus the highest quality panoramic images. Dental professionals will find the system especially effective for implant procedures, oral surgery, and TMJ analysis. For more information, call 800-558-6120 or go to soredexusa.com/scanora3dpr.

FDA OKs Drug to Reverse Local Anesthetics in Dental Settings

The Federal Drug Administration has issued an approval for the use of OraVerse in children and adults. The drug is the first of its kind to reverse local anesthesia used for dental procedures.

In several clinical studies, patients received a placebo or an OraVerse injection following their dental work under local anesthesia. Forty-one percent of OraVerse patients regained regular feeling in their lower lip and 59 percent reported normal sensation in their upper lip within an hour after taking the drug. In comparison, 7 percent of the placebo patients felt a return to normal lower lip sensation within the hour and 12 percent said they regained feeling in their upper lip in the same timeframe.

OraVerse is not recommended for children less than 33 pounds or under the age of 6.

A news release by Novalar, makers of OraVerse, said the most common side effect was pain at the injection site and there were no serious side effects noted in the clinical studies. While arrhythmia and tachycardia might occur when similar drugs such as OraVerse are administered intravenously, it is uncommon when the drug is injected into the gums, according to Novalar’s press release.

