# MPLANT TRIBUNE

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

February 2009

www.implant-tribune.com

Vol. 4, No. 2

### A simple, esthetic and inexpensive technique for a custom implant abutment

By John M. Highsmith, DDS, AAACD, DICOI

In implant reconstruction, the dimension from the implant platform to the crest of tissue, especially in esthetically critical areas, is often more than 2 mm.

Many implant manufacturers supply a straight abutment for cement with the implant, which significantly can reduce the cost to the dentist. However, these abutments tend to have a margin about 1 mm tall, which limits their use to relatively thin tissue.

The problem with using a short margin abutment with thick tissue is that the margin ends up in an area where it can be impossible to clean up all the excess cement, leading to periodontal infection ("cementoma"). There are several options available currently:

- Purchase an abutment with a taller machined margin, which the dentist can prep to the desired height and contour. This can work, but there is the additional expense of the abutment and the possibility of the metal abutment showing through thin tissue.
- Zirconia abutments, which can be either prepared or custom milled, such as the Atlantis abutment. These work well but add expense to the case. The zirconia is also always a white color.
- A third option is herein described, where the straight abutment is modified with porcelain to



Fig. 1: Preoperative appearance.

create a custom abutment at minimal cost and improves esthetics.

This patient desired a dental implant to replace tooth #8. She was referred by another general dentist for this treatment, and she was not interested in other cosmetic treatment of her other teeth (Fig.

The tooth had a split root that rendered it unrestorable (Fig. 2). The tooth was removed and a denture tooth bonded to place as a temporary. Eight weeks after extraction, a flap was raised and the implant placed (Fig. 3) (13 x 3.7 mm ScrewPlant, Implant Direct).

Due to the buccal bone loss, some grafting was required over the implant. A core of autogenous bone was harvested (Fig. 4) past

 $\rightarrow \Pi$  page 6

AD



### AO's meeting showcases presentation innovations

The Academy of Osseointegration's 2009 Annual Meeting will introduce presentation innovations, designed to enhance the value of the Feb. 26-28 event for attendees at the San Diego Convention Center.

"High-definition projection will be featured again this year in the main ballrooms on a 20-foot by 60foot screen; the largest transportable seamless screen available for the convention center," said AO Executive Director Kevin P. Smith.

Innovations introduced this year include electronic signage and live presentation of sessions from the main ballrooms from a special viewing area in the exhibit hall. Four electronic digital signs will be located in strategic places throughout the convention center.

"These new electronic signs will enhance the communication features of the annual meeting, giving attendees up-to-date information on last-minute program or



The San Diego Convention Center. (Photo courtesy of stock.xchng.)

meeting changes and reminders about social gatherings and other special events," Smith said.

Signs located in the meeting section of the convention center will display information about the current and upcoming plenary session programs. Announcements will be posted throughout

→ IT page 18

AD

### The first 3-D membrane is finally here



866-901-5050 www.osseoustech.com Stop by booth1217 to learn more.



Osseous Technologies

Dental Tribune America Address Service 213 West 35th Street Suite #801 New York, NY 10001

Requested

PRSRT STD PAID Permit # 306 Mechanicsburg, PA

# Study: laughing gas found to be more effective under hypnosis

The pain-relieving effects of nitrous oxide — laughing gas — may be enhanced by suggestion or hypnosis, according to a new study by University College London (UCL).

The study, published online in the journal Psychopharmacology, found that the nitrous oxide boosted imaginative suggestibility by approximately 10 percent, despite participants' expectations regarding the effects of the drug. The findings indicate that dental patients may benefit from being coached to relax while undergoing sedation.

"Nitrous oxide is one of the most widely used yet least well understood anaesthetic gases and until recently, relatively little was known about how it worked inside the body," Dr. Matthew Whalley, honorary research fellow at UCL, stated. "Many dentists use laughing gas to relieve discomfort in their patients, but our study suggests that combining the gas with instructions and suggestions to help them to relax and become absorbed in imagery, for example, might enhance the pain-relieving effect."

Whalley said an estimated number of 500 dentists in the UK have been trained to use hypnosis, and find that their patients respond well to being spoken to in a quiet, hypnotic manner.

The new findings suggest that these effects could be further enhanced with laughing gas, he added.



Hynosis may enhance the effects of nitrous oxide. (Photo courtesy of stock.xchng.)

# JOP study: preserving your gum line can improve your 'bottom line'

Faced with plummeting investments and an unsteady job market, many Americans are feeling the effects of the recent economic crisis. In fact, a recent study by the American Psychological Association found that more than 80 percent of Americans rank money and the economy as significant causes of stress. And while chronic stress can lead to a host of health problems, including a weakened immune system and increased blood pressure, it can also take its toll on periodontal health. If left untreated, periodontal disease may result in even more serious, and potentially expensive, overall health complica-

### Stress and your smile

According to David Cochran, DDS, PhD, president of the American Academy of Periodontology and Chair of the Department of Periodontics at the University of Texas Health Science Center at San Antonio, stress can make an individual more susceptible to harmful habits that negatively impact oral health. "Stress may lead an individual to abuse tobacco or alcohol, and to possibly even neglect his or her oral hygiene. These lifestyle choices are known risk factors for the development of periodontal disease,

which has been connected to several other chronic diseases, including heart disease and diabetes."

A study published in the February Journal of Periodontology (JOP) confirmed that stress may interfere with oral hygiene.

In the study, 56 percent of participants self-reported that stress led them to neglect regular brushing and flossing. In addition, the hormone cortisol may also play a role in the connection between stress and gum disease. Chronic stress is associated with higher and more prolonged levels of cortisol; previous research has found that increased amounts of cortisol in the bloodstream can lead to a more destructive form of periodontal disease.

"During periods of high stress such as what we are currently experiencing in this economic climate, individuals should seek healthy sources of relief such as regular exercise, eating a balanced diet, and getting adequate sleep," Cochran said. "Doing so can help maintain a healthy mouth, and potentially help ward off other negative health concerns."

### Preserve your gum line, improve your bottom line

Reducing stress in an effort to

avoid gum disease may not only help sustain overall health, but it might also help your pocketbook as well.

A study published in the December 2007 JOP found preventing periodontal disease may be one way to help lower your total health care expenses.

In the study, patients with severe periodontal disease had 21 percent higher health care costs as compared to those with no periodontal disease. Severe periodontal disease (periodontitis) involves bone loss and diminished tissue attachment around the teeth. And because past research has shown that periodontal disease may lead to other serious health conditions, striving to maintain oral health may help diminish the need to incur additional health care expenses, and ultimately help reduce overall health care spending.

"In these stressful times I encourage my patients to pay even more attention to their teeth and gums," Cochran said. "And in turn, since preventing gum disease may help reduce overall health care expenses, maintaining a healthy mouth may actually be a stress reliever in itself."

(Source: American Academy of Periodontology)

# 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 more articles about? Let us know by e-mailing us at **feedback@dtamerica.com**. If you would like to make any change to your subscription (name, address or to opt out) please send us an e-mail at **database@dtamerica.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.

### IMPLANT TRIBUNE

Publisher

t.oemus@dtamerica.co

President

Peter Witteczek p.witteczek@dtamerica.com

Chief Operating Officer Eric Seid e.seid@dtamerica.com

Group Editor

Robin Goodman r.goodman@dtamerica.com

Editor in Chief Sascha A. Jovanovic, DDS, MS sahara@jovanoviconline.com

Managing Editor/Designer Sierra J. Rendon s.rendon@dtamerica.com

Managing Editor Endo Tribune Fred Michmershuizen f.michmershuizen@dtamerica.com

Managing Editor Ortho Tribune Kristine Colker

k.colker@dtamerica.com

Account Manager Humberto Estrada h.estrada@dtamerica.com

Marketing Manager Anna Wlodarczyk a.wlodarczyk@dtamerica..com

Marketing & Sales Assistant Lorrie Young l.young@dtamerica.com

C.E. Manager Julia Wehkamp j.wehkamp@dtamerica.com

Design Support Yodit Tesfaye y.tesfaye@dtamerica.com

Dental Tribune America, LLC 213 West 35th Street, Suite 801 New York, NY 10001 Phone: (212) 244-7181, Fax: (212) 244-7185



### **Published by Dental Tribune America**

 $\ \, {\mathbb O}\ \,$  2009, Dental Tribune International GmbH. All rights reserved.

Dental Tribune makes every effort to report clinical information and manufacturer's product news accurately, but cannot assume responsibility for the validity of product claims, or for typographical errors. The publishers also do not assume responsibility for product names or claims, or statements made by advertisers. Opinions expressed by authors are their own and may not reflect those of Dental Tribune International.

### **Editorial Advisory Board**

Dr. Sascha Jovanovic, Editor in Chief

Dr. Bernard Touati

Dr. J.T. Krauser

Dr. Andre Saadoun

Dr. Gary Henkel

Dr. Doug Deporter Dr. Michael Norton

or. muchaet mort

Dr. Ken Serota

Dr. Axel Zoellner Dr. Glen Liddelow

Dr. Marius Steigmann

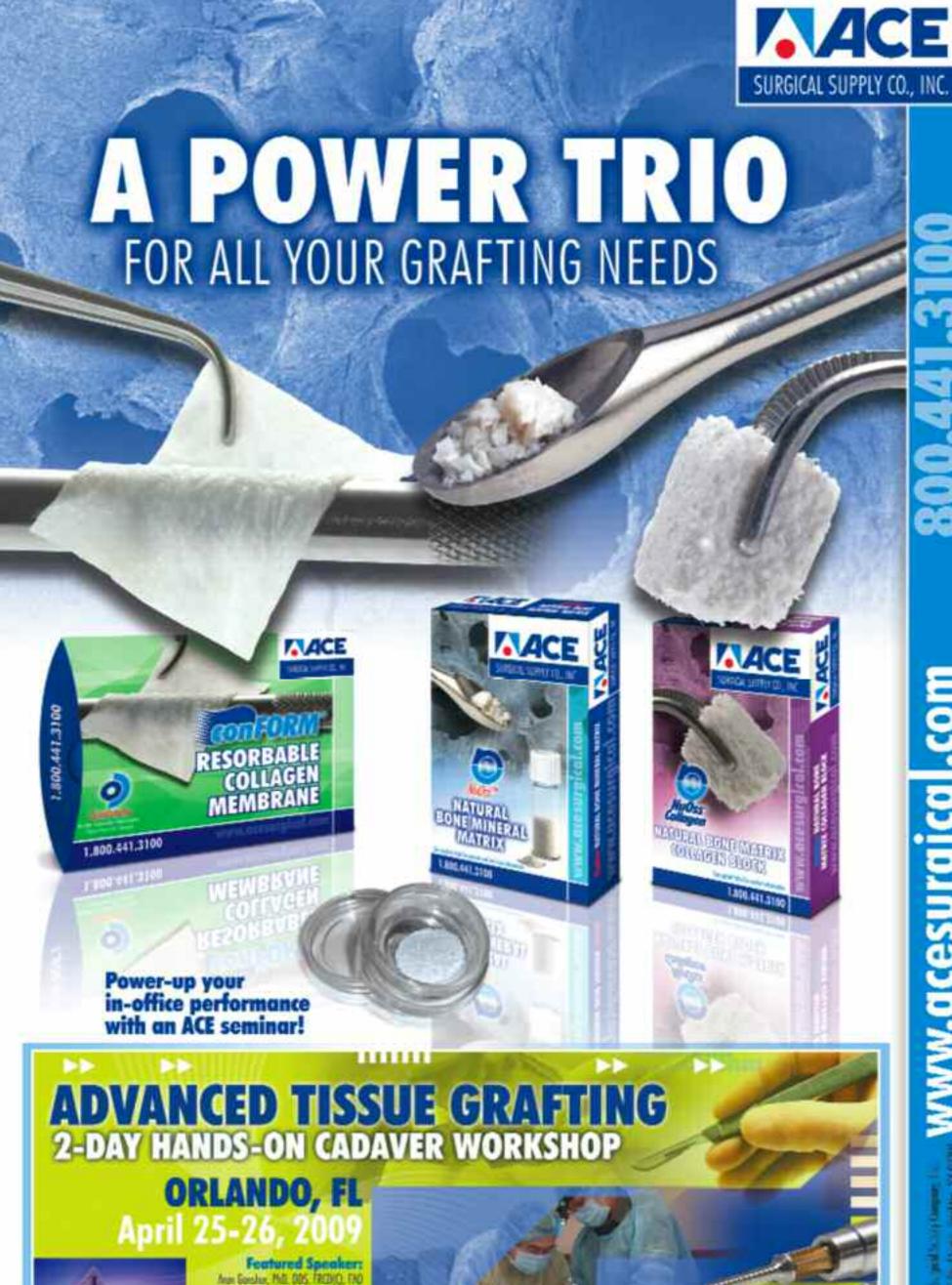
### Corrections

In the January edition, a photo of Long Beach was incorrectly indentified as picturing San Diego.

If you find a factual error or content that requires clarification in Implant Tribune, please report the details to Managing Editor Sierra Rendon at s.rendon@dtamerica.com.



# www.acesurgical.com



Course Locations Wilt Drawy World Swan and Driphin Course Registration: www.acesurgical.com/cadaves.html

## Experts quarrel over mouthwash

### Study in Australian dental journal pushes oral cancer debate

### By Daniel Zimmermann, Managing Editor, Dental Tribune International

LEIPZIG, Germany: New evidence from Australia has revealed that the long-term use of mouthwash containing alcohol can lead to an increased risk of developing oral cancer

The information, which was released after a scientific review was published in the Australian Dental Journal, reports on evidence that ethanol allows carcinogenic substances, such as nicotine, to permeate the lining of the mouth.

Top-selling mouthwashes contain as much as 26 percent alcohol, which is used to kill the bacteria responsible for tooth decay. It is also necessary as a solvent for different flavor oils.

Michael McCullough, associate professor of Oral Medicine at the University of Melbourne in Australia, who led the study said, "We see people with oral cancer who have no other risk factors than the use of mouthwash containing alcohol, so what we've done is review all the evidence. Since the article, further evidence has come out, too."

"We believe there should be warnings. If it was a facial cream that had the effect of reducing acne but had a four- to five-fold increased risk of skin cancer, no-one would be recommending it," he added.

The Australian government said although the study was "very interesting," it lacked definite proof that these products would increase the risk of cancer. Ministry of Health dental officer, Robin Whyman, recommended people speak to their dentists when using mouthwash long term.

Speaking to Dental Tribune, a spokesperson for Johnson & Johnson rejected the claims: "Leading cancer scientists, as well as the U.S. Food and Drug Administration and researchers in dentistry, have found no evidence that alcohol-containing mouthwashes, if used properly, lead

to increased risk of developing oral cancer."

The company, which is behind the Listerine brand, holds 25 percent of

the global mouthwash market and claims to have conducted more than 100 scientific evaluations of its topselling brand.

# Disagreement over mouthwashes — and what it really means

### By Bernhard Stewart

Recent media controversy in Australia over the risk of oral cancer associated with the use of alcohol-containing mouthwashes can be seen as one aspect of a pervasive public health issue.

Once an agent has been unequivocally established as carcinogenic to humans, exposure to that agent in any context is likely to be hazardous and therefore should be prevented. Consideration of this principle in relation to alcohol-containing mouthwashes clearly illustrates one aspect of the dilemma. Specifically, in determining public health policy, how much weight should be accorded to the general findings concerning the agent in question in comparison with those findings that relate specifically to the context under consideration?

Causation of cancer from drinking alcoholic beverages is established to the point of certainty. The anatomical sites principally involved are the oral cavity and oesophagus, and risk is increased multiplicatively in smokers.

However, the evidence in relation to the risk of oral cancer associated with mouthwash use is equivocal to the point that sharply differing conclusions may be drawn. Writing in the Australian Dental Journal, McCullough and Farah, arguing from the perspec-

tive of alcohol as an established carcinogen, state: "There is now sufficient evidence to accept the proposition that developing oral cancer is increased or contributed to by the use of alcohol-containing mouthwashes."

This differs from the conclusion by La Vecchia in Oral Oncology: "A link between mouthwash use, specifically alcohol-containing mouthwash, and oral cancer is not supported by epidemiological evidence." La Vecchia delineates uncertainties regarding mouthwash studies generally, specifically in relation to the lack of clear evidence regarding an anticipated increased risk attributable to alcohol per se.

General agreement that a carcinogenic hazard associated with the use of alcohol-containing mouthwashes is plausible suggests cautionary advice should be given to those making long-term use of these products. However, present uncertainty would not justify warning labels or restricted sales of mouthwashes.

### Contact

Bernhard Steward is currently working as a professor in the Faculty of Medicine at the University of New South Wales in Sydney in Australia. He can be reached at Bernard.Stewart@sesiahs.health .nsw.gov.au.



### Send us your ideas!

Have a topic you'd like to see covered in Implant Tribune? We welcome your ideas for clinical articles, new product coverage, debates on controversial subjects, technology information, practice management topics and much more. To contribute an idea or write an article for publication, e-mail Managing Editor Sierra Rendon at s.rendon@dtamerica.com and provide your name, title and contact information.

# TIRED OF MEMBRANE COLLAPSE INTO DEFICIENT DEFECTS?

Both extraction sites with deficient structural support and ridge augmentation procedures often require tenting membranes to prevent collapse. These same procedures are often the most difficult cases to achieve closure, limiting the applicability of traditional tenting membranes. However, Cytoplast\* dense PIFE titanium-reinforced membranes are actually designed to withstand exposure and prevent bacterial penetration, while also preventing collapse.



Due to a vertical root fracture, the entire buccal plate is missing. The standard-reinforcement of the Cytoplass\* Ti-250 Anterior Narrow allows easy placement and maintenance of space.



The donte PTH membrane has a pore size of ctl. lum; making it certificative to both soft tissue cells ANO bacteria. Primary closure to not necessary.



At two weeks, healing over the membrane is excellent - no inflammatory response and infection-free.



Recause the membrane is left exponent, a non surgical enmousirequires only topical anesthetic after 4 weeks of fleating.



Top weeks after removal of the membrane, soft tissue has re-epithelialized over the socket. Soft tissue contours are preserved.



file-entry at 4 months shows regeneration of the ridge to its uniqued dimensions. Implants may now be placed in an optimal



S450 \$400 SPECIAL!

### DISCOVER WHY SO MANY SPECIALISTS 1931YON CYTOPLAST TI-250 TITANIUM-REINFORCED MEMBRANES

NEW!

"This membrane exhibits the least amount of post operative inflammatory tissue response, if any, and is easy to keep clean, even if a large portion is exposed. They almost maintain themselves, and if they don't self-exhibite, they are easy to slide out. Best of all, the bone forms where you want it to be?"

Robert Gorzelnik, DDS, Oral & Manifestatiol Surgeon

"This is an excellent harrier in cases that don't require additional connective tissue grafting. Does not require primary clusure fand that tissue remains healthy at the margins."

Cales Morrovics, 1975, Persodonnier

The membranes are very easy to use. The ability to bend them to allow space for particulate grafting is superior to collapsible membranes such as Biomend. As we know through research, the tenting effect of this membrane allows for more bone regeneration."

Craig L. Mandows, ODS, Periodipatris.

"I use your membrane for all of my immediate extraction/immediate placement implants. I am getting predictable results. The time saved is another bonus."

Charles C. Chen, DOS, Periodenical.

When space making is needed, such as loss of the bussel place in a maxillary/mandibular mular, the triansum anables the elimeian to mold the membrane rassly."

Robert Levine, DDS, Periodontist



The broader titanium frame increases rigidity and allows for the creation and preservation of space when grafting.

Pilot holes to create more secure membrane stabilization.

SPECIAL OFFER: MENTION OFFER CODE 17209
THROUGH MARCH 31ST AND RECEIVE \$50 OFF
EACH BOX OF TI-250 MEMBRANES. 2 PER BOX.

BONUS: FREE 2ND DAY SHIPPING TO THEST 25 IMPLANT TRIBUNE READERS WHO ORDER

### **← II** page 1

the apex of the implant site, which was crushed and combined with MinerOss (BioHorizons) (Fig. 5). A membrane (Pericardium, Zimmer) was tacked into place to cover the graft (Fig. 6).

After six months of healing (Fig. 7), a screw-retained temporary was placed to aid in forming the soft tissue without any cement lines (Fig. 8). After two months of healing, the temporary was removed and an impression taken to capture the implant position as well as the soft tissue profile (Fig. 9).

The ceramist took the straight abutment that came with the implant and contoured it for clearance with the opposing dentition. The margin of this abutment would be too far apical for adequate cement clearance, so he modified it with porcelain specifically developed for titanium (Vita Titainium Porcelain, Vident).

Emergence profile can be developed as needed for the soft tissue profile, as well as adding a pink color to blend in with the gingival tissue (Figs. 10, 11).

That can help in the esthetics if there is any tissue recession in future years, as well as maintaining the gingival color. A porcelain to metal crown was fabricated with a porcelain butt margin.

In this case, on the day of delivery/try-in, the screw had loosened, resulting in some tissue irritation and bleeding, preventing delivery that day (Fig. 12). Photographs were taken for slight color modifications. The temporary crown was replaced to allow tissue healing for final cementation.





Fig. 2: Split root after extraction.



Fig. 4: Harvesting a core of bone.



Fig. 3: Implant in place.



Fig. 5: Bone graft in place over implant.



Fig. 6: Temporary bonded to adjacent teeth.



# Just because the economy is unstable does not mean that your practice has to be.

LVI will steer you in the right direction!

EXIT 1A



### MOTIVATION SUCCESS SOLUTIONS

This EXIT

Now is the time to take the driver's seat and invest in yourself and your future.

Recession-proof your practice with an education from LVI.

Bring a new enthusiasm to yourself, your practice, your team, and your patients!

You can have the practice of your dreams, and we can show you how.

Reading, PA	February 27-28	Davenport, IA	April 17-18	Charleston, SC	May 15-16
Portsmouth, NH	February 27-28	Fresno, CA	April 17-18	Richland, WA	May 29-30
Providence, RI	March 13-14	Calgary, Canada	April 24-25	Buffalo, NY	May 29-30
Las Vegas, NV	March 13-14	Grand Junction, CO	April 24-25	Athens, GA	June 5-6
Gulfport, MS	March 13-14	Anchorage, AK	April 24-25	Vancouver, Canada	June 5-6
State College, PA	March 20-21	San Jose, CA	May 1-2	Duluth, MN	June 5-6
13 Paso, TX	March 27-28	Palm Springs, CA	May 1-2	Santa Fe, NM	June 12-13
Regina, Canada	April 3-4	Nashville, TN	May 1-2	Chicago, IL	June 26-27
New York, NY	April 10-11	Amarillo, TX	May 8-9	Grand Rapids, MI	July 17-18
Greenville, SC	April 17-18	Dublin, CA	May 15-16	Cleveland, OH	August 28-29

LVI is bringing CE credits TO YOU with a regional event in your area!

For Complete details visit www.LVIRegionalEvents.com, or call 888.584.3237



Sponsored by









Fig. 7: Screw-retained temporary.



Fig. 8: Impression post in place.



Fig. 9: Custom abutment on model.



Fig. 10: Porcelain baked to titanium abutment.

Fig. 11: Custom abutment in place, inflamed tissue due to loose temporary.





Fig. 12: Final crown in place.

AD

### What Other Academy of Osseointegration Member Wants to 'TKO' the Recession in 2009?

Who is this impiant Boulist and why is he felling the Barsh truth about recession economy marketing

and sales (case acceptance) in YBBR practice?

He'll probably make you MAD, especially if you are a specialist or generalist with advanced implicat terminary. Made arough to quarter year entire belief weren about marketing and you in implicat atmining and the value of advanced implicat making if on can't find the partiers who need poor didle the most and other in miling to pay to advanced treatment. HELL DESTROY EVERY SUGAR COATEST VALLACY BEING PREACHED AT THE MAJOR IMPLANT MEET-ENGS year'll be challenged to se think carry agent of year marketing and take operate a year practice. He'll men make you LAERSH OHT LOOKS over you're to made lensing the UNVARNISHED TRUTH that expose the names called 'expents' expents in three ever insteads. (These 'Management & Sales Expents' that blather from prolones even through they arror treek advanced implica-CE, here zero effected incitentials, never treated a full remath case, never had a surrounded practice, where her case presentation was believe HA, or sends con-Acasterd: A surrounded implies clinician whose cases presspecially life per parient Dr. James McAnady has regarded out to come 64 construction and 6 continues has - respectations and restrainting their marketina and some peoptiment finited process for somethic more products then there is promote an interest to the place time, each 3 does to time dentities on the planet are allowed to belong so his top lovel Programs where such instead ISC 425K per year for exercise with the marketing and other for complete dental cases. The framework or the propriet obligators is the operators. ving completely agreed by mastely-trans, lide, equipment wealter, in of implies CE providers on him to find potents needing desired anythors and williage to pure the three law kee haveglet hermad the moderning and other book only forms to said their settin, personling the Anth underholly of MCNT moths describe tog in the profession, and proceeding very specific, radical has process attempted for magnituding the motions or manifesting and takes that match (some list any thereto) that hereb his blook treffic. In the country or region, only implicat dentists with some to their powerful NARKETING and SALES attents will maximize their man gring to smarmore, help more parkens with serious problems, remain itel-pendour of commence communicated experience high lastic of PROSEE. M year enth-moon week an harbbone or an excepty that "perdimensed" to the offi having and take and large patients who entity used advanced care, you'll face failure. But if you'd reduces a lands, lands with constraining and supervising you to pill some mixes on your marketing delices used to get the invide's track on what "wile" major double implies reasonable plans, you'll be riselful to have discussed these, bits only more described in face that the best of the period of supervisions described in the period of supervisions described in the period of supervisions described in the period of supervisions. The mixes occurred decrease. take his concepts and shouts their remote to even higher levels. As a treated management, marketing and who advisor to the most received Elite Dan time. Jeven commands \$14,000 for his neigh day uses and marketing prover estimates ERCLI TRADE WIND in short Advisority and poor constrainty discrete marketing and sales provided AND PREMINET THE TOUGH-MINDRED, PRACHATIC STRAYECHES NECESSARY to make the postal and entiring ideas well. TED the Bacamen with The Charge Off Coule to The Riggest Marketing Secrets in Recommenter Descript" reday.

### Bering the Corrent Recession, The Most Eille Impiant Beatists are Investing in Their Case Acceptance and Marketing Skills. Are for?

fant step for marketing be a given loop for your professional settification and HISTORY

Dr. Jony Nimirk, Income & Proefockerie

(www.lmploorDirect.com)

Finally a bank about how to get a replica crossos. Educations's recorded obits bounds has dampeled used from the base lift"

Dr. Lawy Breede, CEO (www.Smile Vision.ort) Tourn' book could have easily been still (What They Fiegor to Zinch You're Directed School. Finally, a loook resistent from the terrochers.

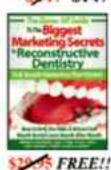
Bill Clean, Glass: Namedy Inddor's Circle (www.DeaKes The fast presentation where funes told his made ting and one surpt ander server, remined in two cases over \$50,000 being closed in any proc-

Dr. Wor Moure, Volley, KTM

Gives A.O. Members with Advanced Implant Training Success in ANY Economy

Order Dr. McAnally's \$85,000 Implant Case Presentation Secrets CD for \$147 (40% off the full price of \$247.00) by March 15th and get \$283.95 in FREE Recession Fighting Tools! This uncensored recording of a \$85K. replant case presentation that went to YES contains a frank discoion of what made the case yo forward. Implant destists worldwide gain acceptance on \$30K-\$50K cases by just listening, Guaranteed to boost acceptance for EVERY type of implinit case.







A.O. Implant Deadline Mar. 15th, 2009

YES! James, I Want to "TKO the Recession" for My Practice! Send Me the Implant Case Presentation CD for anty \$147 (NII) (40% off the \$247 regular price) and My FREE Recession Fighting Tools—The FREE Book & 2 FREE Months of the Gold Elite Does Strategies tw Letter; All Written Just for Implant Dentists Like Me with Advanced Skills. I Understand My Investment is Tax Deductible and Fully Government!

### Reserve at:

BigCaseMarketing.com/it2 Or Call -267-0216



### **← III** page 6

After two weeks, the final crown was delivered (Fig. 13). A small amount of composite (Durafill, 3M) was placed on the adjacent teeth to reduce the black triangle and aid in

The modified abutment was placed into the healthy site and torqued to place. The screw hole in the abutment was filled with Fermit (Ivoclar) and light cured. The crown was cemented with RelyX luting cement (3M) and final photographs taken.

The use of titanium porcelain on the abutment allowed the ceramist to control emergence profile, bring the margin to a cleansable level, color the subgingival material for the best esthetics, all at a cost less than a milled zirconia abutment, because the abutment came with the implant.

Thanks to Mr. Kent Decker, CDT, for his artistry and help in developing this technique.

### About the author



Dr. Highsmith received his dental degree from the University of North Carolina School of Dentistry in 1984, after which he completed a general practice residency at Veterans Administration Medical Center in Baltimore, Md. He has been in private practice in Clyde, N.C., since 1985. He is an accredited member of the AACD, a clinical instructor at LVI, a diplomate of the ICOI, and a fellow of the Misch Implant Institute. He takes more than 200 hours of continuing education annually, and considers his mentors Omer Reed, Bill Strupp, John Kois, Frank Spear, Bill Dickerson, Clayton Chan, Paul Sletten, Mark Hyman, Darryl Nabors, Steve Burch, Bill Domb and Carl

### Osteogenics Biomedical to launch applicationspecific titanium-reinforced membrane sizes

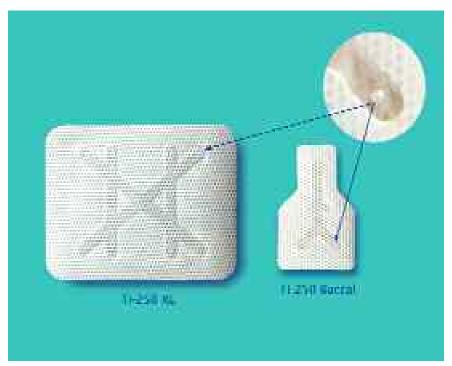
New features will further assist surgeons during advanced bone grafting procedures

Osteogenics Biomedical has announced the addition of two new membrane shapes and sizes, the Ti-250 XL and Ti-250 Buccal, to its line of Cytoplast® titanium-reinforced regeneration membranes. Company officials will introduce the products at the Academy of Osseointegration's Annual Meeting in San Diego from Feb. 26–28.

The new membranes are the first in a planned improvement to the entire line of Cytoplast® titaniumreinforced membranes.

Clinicians designed the new membranes to include a broader titanium frame, as well as pilot holes to create more secure membrane stabilization.

The Ti-250 XL measures 30 mm x 40 mm and is ideal for grafting very large bony defects, especially vertical and horizontal ridge augmenta-



tion. Measuring 17 mm x 25 mm, the Ti-250 Buccal is designed for use in large buccal defects.

"We've identified these two sizes during an ongoing effort to provide

surgeons with products that best fit their needs and through market research, which identified a demand for these specific membrane sizes," said company president Shane Shuttlesworth.

The PTFE membrane's titanium frame increases rigidity and allows for the creation and preservation of space when grafting.

Osteogenics Biomedical's patented Regentex® surface helps stabilize the membrane and the soft tissue flap.

The membranes will be available for purchase at the Academy of Osseointegration's annual meeting. Nationwide sales begin March 2.

For further information, contact Osteogenics Biomedical at (888) 796-1923, or visit the Web site at www.cytoplast.com.

### **About Osteogenics Biomedical**

Osteogenics Biomedical is a leader in the development of innovative guided tissue regeneration products for use by oral and maxillofacial surgeons, periodontists and other clinicians involved in regenerative or implant dentistry. Based in Lubbock, Texas, the company distributes its products under the Cytoplast® brand.

(Source: Osteogenics Biomedical)

