Titanium implants may carry risk of corrosion

By Dental Tribune International

IRMINHAM, U.K.: Titanium medical implants used in dental prostheses and bone-anchored hearing aids may be less robust than commonly believed. Researchers have found evidence to suggest that in environments where there is no significant wear process, microscopic particles of titanium can be found in the surrounding tissue, which may have a negative impact on the devices, as this can potentially be pro-inflammatory.

Globally, more than 1,000 tons of titanium are implanted into patients in the form of biomedical devices every year. Metallic prostheses, fixation and anchoring devices are used extensively for dental, orthopedic and craniofacial rehabilitation and their effects on the body are widely perceived to be predictable following initial implantation.

"The Edentulous Maxilla: Questions and Answers to Current Implant Controversies"
10 to 10:30 a.m. – Break with exhibitors
10:30 to 11:30 a.m. – Dr. Robert Marx: "The Effective Use of (rhBMP-2) in Ridge Augmentation Prior to Implant Placement"
11:30 a.m. to 12:30 p.m. – Dr. Bradley McAllister: "Bone Augmentation with Cellular Allograft"
12:30 to 1:30 p.m. – Lunch with exhibitors

Friday, Sept. 21
Afternoon session host: Dr. Thomas Ford
1:30 to 2:30 p.m. – Dr. Carl Misch: "Emerging Trends in Methods and Materials for Bone Augmentation"
2:30 to 3:30 p.m. – Dr. Craig Misch: "Augmentation of the Alveolar Ridge: Predictable Horizontal and Vertical Bone"
“Prosthetic-Related Complications” 2:30 to 3:30 p.m. — Dr. Rick Ferguson: “Bone Grafting — Misconceptions and Strategies for Predictable Success” 3:30 to 4:15 p.m. — Break with exhibitors 4:15 to 5 p.m. — Dr. Shohri Kasugai: “New Approach to Bone Augmentation: Respecting Endogenous Key Players and Providing Space for Regeneration” 5 to 6 p.m. — Dr. John Russo: “Reduce Complications, Increase Confidence, Achieve Excellence” 7 to 8 p.m. — Awards ceremony

Saturday, Sept. 22 Morning session host: Dr. Rick Ferguson 8 to 9 a.m. — Dr. Bach Le: “Management of the Ailing Implant” 9 to 10 a.m. — Dr. Pablo Galindo Maldonado: “Bone Level Stability Around Implants Placed in Pristine and Grafted Areas” 10 to 10:30 a.m. — Break with exhibitors 10:30 to 11 a.m. — Dr. Mauricio Salama: “Contemporary Reconstructive Hard-and-Soft Tissue Surgery: Myths, Realities and Future Trend in Dentistry” 11:30 a.m. to 12:30 p.m. — Dr. Jeremy Mao: “Regenerative Dental Products: Science Fiction or Reality” 12:30 to 1:30 p.m. — Lunch with exhibitors

Saturday, Sept. 22, 2012 Afternoon session host: Dr. Scott Ganz 1:30 to 2:30 p.m. — Dr. Alan Fetner: “Subcrestal Implant Placement to Optimize Soft-Tissue Esthetics — Controversy and Practicality” 2:30 to 3:30 p.m. — Dr. Fred Bergmann: “Current Protocol of Bone and Soft-Tissue Management in the Atrophic Alveolar Ridge for the Long-Term Esthetic and Functional Outcome” 3:30 to 4:30 p.m. — Break with exhibitors 4:30 to 4:45 p.m. — Dr. Scott Ganz: “A Comparison of Interactive Software Applications in Assessing the Reality of Anatomy: Diagnostics and Implant Planning Accuracy” 4:45 to 5:30 p.m. — Dr. Ady Palti: “Soft-Tissue Management for Esthetic Results With Modified Abutments. A New Concept for the Daily Practice” 5:30 to 6:30 p.m. — Dr. Mariano Herrero Climent: “Surgical Decision Making in Esthetic Implant Dentistry” 6:30 to 6:40 p.m. — Dr. Konstantinos Valavanis: “Perimplant Tissue Design: Parameters and Key Factors for Optimum Esthetics” 6:50 p.m. — Closing comments, Drs. Jon Suzuki and John Russo

A large number of sponsored pre-congress courses will be offered on Thursday morning, Sept. 20. The event’s Gold Sponsors, DENT-SPLY IMPLANTS and MIS, will provide hands-on courses. Dr. Jin Kim, and his sponsor, DENTSPLY, will wow attendees with his course on “Mastering Clinical Digital Photography,” organizers said. Among other things, this course will instruct attendees on mastering the techniques for surgical and cosmetic operative documentation purposes. MIS’s representative, Dr. Amos Yahav, will cover “Bone Augmentation and Ridge Preservation for Implant Placement,” utilizing bone-grafting materials and hard-tissue models for hands-on experience. Silver Sponsors will also conduct pre-congress courses, starting with Osteogenics and Dr. Michael Pokos, whose topic will be “Extraction Site Management for Implant Reconstruction: Hands-on Workshop.” The hands-on segment will include models for socket grafting, connective tissue grafting and free gingival grafting. Dr. Dennis Smiler and NUBONE will provide a hands-on workshop on “Solving the Challenges of Bone Graft Success: Successful Grafts with Stem Cells, StemVie Matrix, Growth Factors.” Attendees at this course will receive an atomic take-home models, DVD movies of bone marrow aspiration technique and a sterile sample of StemVie Graft Matrix. Dr. Carl Misch will discuss “Controversies in Implant Number” for BioHorizons. Attendees at this course will learn the guidelines that determine implant number and the treatment planning for multiple missing teeth. Dr. Louise Al-Faraje will focus on the mini-dental implant phenomenon in his lecture for 3M ESPE on “Small-Diameter Implants for the Modern Implant Practice: Treatment Options and Indication for Fixed and Removable Prostheses.”

Dr. Leonard “Lenny” Linkow will provide a historical examination of and a prognosis for the future of the implant field in his course on “Implant Dentistry: What Was, What Is and What Probably Will Be,” organizers said. Linkow’s course will evaluate where we are today with all materials and techniques, education processes and programs worldwide. Drs. Michael Toffler and Barry Zweig and Hiossen will hold a course on “Sinus Augmentation: Crestal and Lateral Approaches, Challenges and Solutions.” Objectives of this course include an understanding of new and safer approaches to sinus lifting. Rounding out this World Congress will be a 2½-day ADA program for the auxiliary staff members. On Thursday and Friday, the event’s main podium will feature Drs. Jon Suzuki, Rick Ferguson, Kathy Ferguson, Carl Misch, Kostas Valavanis and Scott Ganz and Joy Milits, Emily Durross, Sean Jaramillo, Laura Jamison and Lynn Mortilla.

As is customary, the event’s last day, Saturday, will be devoted to four simultaneous certification programs for dental hygienists, dental assisting, practice management and implant coordinator training. These courses are always lively and always filled, organizers said, so plan to enroll soon.

For more information on this meet, visit ICOI’s web site at www.icoi.org

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 another article about in Implant Tribune? Let us know by e-mailing feedback@dentaltribune.com. We look forward to hearing from you! If you would like to make any change to your subscription (address, phone number, etc.) please send us an e-mail at database@dentaltribune.com and be sure to include which publication you are referring to. Also, please note that subscription changes can take up to 6 weeks to process.
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AAOMS to host 94th annual meeting at San Diego Convention Center

The American Association of Oral and Maxillofacial Surgeons will head to the San Diego Convention Center, left, for its 94th annual meeting from Sept. 10-15.

Photo/Provided by Timothy Hurley

Dr. Peter Moy will speak at the AAOMS annual meeting in September.

Rousing topics, a scenic locale and a visit to the ballfield are on tap for this September event

By Sierra Rendon, Managing Editor

The American Association of Oral and Maxillofacial Surgeons will host its 94th annual meeting, scientific sessions and exhibition from Sept. 10-15 at the San Diego Convention Center.

The AAOMS annual meeting attracts more than 3,200 members and more than 5,500 registrants.

Speakers and sessions include Dr. Lyndon F. Cooper speaking on "Graft Solutions for Fixed Prosthetics;" Dr. Edwin A. McGlumphy speaking on "Graftless Solutions With Angled Implants With Hybrid Prostheses;" Dr. Peter Moy on "Graftless Solutions With Angled Implants With Hybrid Prostheses," and many more.

Educational sessions and the exhibition will take place at the San Diego Convention Center, unless otherwise noted. Business sessions, opening ceremony, welcome reception, some educational sessions and other social functions will take place at the headquarters hotel, the Hilton San Diego Bayfront, unless otherwise specified.

Exhibition hall hours

The AAOMS exhibition hall will be filled with hundreds of exhibitors providing the latest and greatest in implants and related technology.

The schedule for the exhibition hall:
- Thursday, Sept. 13: 9 a.m. – 5 p.m.
- Friday, Sept. 14: 9 a.m. - 5 p.m.
- Saturday, Sept. 15: 9 a.m. - 1 p.m.

President’s event

For one memorable night, Petco Park, home of the San Diego Padres, will be transformed in celebration of the 2012 AAOMS Annual Meeting President’s Event honoring President Arthur C. Lee, DMD, and his wife, Martha. During this event, from 7-10 p.m. Thursday, Sept. 13, at what has been called "the world’s best ballpark in America’s finest city," you and your guests will party where the players play.

You’ll be able to roam the outfield, take batting practice — even sit in the dugout. Try your hand at inflatable speed pitch, inflatable basketball, or fantasy baseball, which includes batting cage, pitchers, ball shaggers, batting helmets, bats and balls. After working up an appetite, attendees can visit the lavish buffet for which AAOMS President’s Events are justifiably renowned.

Information and registration

For more information on the AAOMS annual session and events, visit www.aaoms.org/annual_meeting/2012/
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Report: Selective use of CBCT offers advanced imaging modality

In the August issue of The Journal of the American Dental Association, the American Dental Association’s (ADA) Council on Scientific Affairs (CSA) presents an ADA report with recommendations for the safe use of cone-beam computed tomography (CBCT) in dental practice. This imaging method provides three-dimensional detail of oral and maxillofacial structures, which can help clinicians, provide improved treatment and lead to better patient outcomes.

The published recommendations provide essential principles for consideration in the selection of CBCT imaging for individual patient care. Importantly, clinicians should perform radiographic imaging, including CBCT, only after professional justification that the potential clinical benefits will outweigh the risks associated with exposure to ionizing radiation. However, CBCT may supplement or replace conventional dental X-rays when the conventional images will not adequately capture the needed information.

The statement emphasizes the application of professional judgment in clinical decision-making that is informed by the latest scientific evidence and professional guidance. A guiding principle for use of all X-rays, including CBCT, is to keep radiation exposure as low as reasonably achievable (“ALARA”). The new statement incorporates the ALARA principle while also recognizing the need to expand pre-doctoral and continuing dental education on CBCT use and image interpretation. Actions recommended to help achieve this principle include:

- Consulting with a medical physicist or other qualified expert to perform equipment evaluations at installation, confirming compliance with local, state and federal requirements at least annually, and establishing a facility quality control program.
- CBCT technologies offer an advanced point-of-care imaging modality that has developed into an important adjunct to conventional radiography. As a science-based organization, the ADA supports ongoing research on CBCT and all aspects of dentistry that will help to ensure patient safety, enhance preventive care and facilitate the management and treatment of oral diseases. The ADA encourages patients to talk with their dentists about the use of CBCT imaging and all aspects of their dental care.

About the ADA
The not-for-profit ADA is the nation’s largest dental association, representing more than 166,000 dentist members. For more information about the ADA, visit the association’s website at www.ada.org.

-TITANIUM, Page C1

For this study, Dr Owen Addison in the biomaterials unit of the University of Birmingham’s School of Dentistry and his team obtained tissue from patients undergoing scheduled revision surgery associated with bone-anchored hearing aids (BAHA) at University Hospitals Birmingham NHS Foundation Trust. Soft tissue surrounding commercially pure titanium anchorage devices was examined using micro-focus synchrotron X-ray spectroscopy at the Diamond Light Source, Oxford, U.K.

“The results showed, for the first time, a scattered and heterogeneous distribution of titanium in inflamed tissue taken from around failing skin-penetrating titanium implants,” the authors reported. “Wear processes and implant debris were unlikely to be major contributors to the problem. In the absence of obvious macroscopic wear or loading processes, we propose that the titanium in the tissue results from micro-motion and localized corrosion in surface crevices.”

The development of peri-implant inflammation may result in the premature loss of the implanted device or the requirement for revision/rescue surgery, which are scenarios that can impact on patients’ well-being and economically on the health service provider,” the authors concluded in the study.

“Our results emphasise the need to understand further both the physical and chemical mechanisms leading to the dispersal of titanium species in tissue around implants and their potential to exacerbate inflammation. Similar processes are likely to contribute to the failure of other metal implants in soft tissues, where macroscopic wear is not considered to be a risk.”

Addison commented: “Titanium is still the most appropriate material to put into bone and to be used in these devices. It is the gold standard. However, these interesting findings demonstrate that improvements in these materials can be sought.

“Research at Birmingham is currently being conducted to look at the biological consequences of these findings and to understand the mechanisms by which the debris is produced. This should in no way alarm those with BAHA implants or similar devices.”

The study “Do ‘passive’ medical titanium surfaces deteriorate in service in the absence of wear?” was published online during July in the Journal of the Royal Society Interface.
3Shape TRIOS digital impression solution now with implant scanning

TRIOS captures implant positions and soft-tissue emergence profile in unique dual-step workflow

3Shape, a technology leader in 3-D scanning and CAD/CAM software for dental applications, announces its latest breakthrough innovations for implant work. With 3Shape TRIOS, dentists can now capture single implant positions using autoclavable scan bodies supporting a wide range of implant systems.

Implant cases made easy for dentists

For dentists, digital impression-taking with 3Shape TRIOS represents many advantages. The straightforward workflow replaces conventional implant impression-taking which traditionally can be time-consuming, error-prone and cumbersome. Furthermore, with TRIOS digital impressions, dentists can save time and money by skipping the extra steps involving custom tray production, shipping and handling by the lab.

“Scanning with 3Shape TRIOS makes implant cases easy. It allows me to capture not only the implant positions, but also the soft tissue,” said Dr. Simon Kold of Herning Implant Center. “By adding scans of the soft-tissue emergence profile, I can give my lab detailed information that allows it to optimize the fit and esthetic qualities of the customized abutment and final restoration. This is great for clinical and esthetic results while boosting patient satisfaction.”

New implant service opportunities for labs

With TRIOS, labs can receive the digital impression minutes after scanning and can immediately start designing the digital implant model, the customized abutment and the crown. The TRIOS digital implant impression, 3Shape’s Model Builder™ and its Abutment Designer™ software come together in a fully integrated workflow.

3Shape’s Model Builder CAD/CAM software allows labs to design digital models for implant cases. Based on the software’s implant position detection, users can virtually add interfaces for implant analogs, including glue-in analogs, directly in the model design.

3Shape TRIOS is currently available in Europe and is expected to be launched in North America and other selected markets in Q3 2012. TRIOS implant scanning is available with TRIOS software version 1.1.2.0.

About 3Shape A/S

3Shape A/S is a Danish company specializing in the development and marketing of 3-D scanners and CAD/CAM software solutions designed for the creation, processing, analysis and management of high-quality 3-D data for application in complex manufacturing processes. 3Shape envisions the age of the “full digital dental lab,” and its more than 130 developers provide innovation power toward reaching this goal.

3Shape’s flexible solutions empower dental professionals through automation of real workflows, and its systems are applied in thousands of labs in more than 85 countries worldwide, putting 3Shape technologies at the peak of the market in relation to units produced per day by dental technicians. 3Shape boosts its first-line distributor support network with a second-line support force of more than 30 in-house experts placed in five support and service centers strategically placed around the globe. 3Shape is a privately-held company headquartered in Copenhagen, with the market’s largest team dedicated to scanner and software development for the dental segment based in Denmark and Ukraine, production facilities in Poland, and business development and support offices in New Jersey and Asia.

For further information regarding 3Shape, please refer to www.3shapedental.com.
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From intraoral scan to final custom implant restoration

By Perry E. Jones, DDS, FAGD

Introduction
This case demonstrates the optical scanning of Inclusive® Scanning Abutments (Glidewell Laboratories; Newport Beach, Calif.) utilizing the iTero™ digital scanning system (Align Technology, San Jose, Calif.) with software version 4.0. Digital data was used with laboratory CAD/CAM planning to fabricate custom all-ceramic implant abutments and a four-unit fixed prosthesis. The abutments and fixed prosthesis were fabricated using advanced computer-aided milling technology.

Dental history
The patient was a 52-year-old healthy Hispanic male who sustained a traumatic avulsion and lost his maxillary incisors in an automobile accident. Following healing, a four-tooth transitional removable partial denture was constructed. He was seen by the oral and maxillofacial surgery service of Virginia Commonwealth University for dental implant therapy.

Treatment plan
The patient was informed of the alternatives, benefits and potential complications of various treatment options before deciding to pursue implant restoration of his missing teeth. The treatment plan included placement of two Replace® Select Straight RP 4.3 x 13 mm implants (Nobel Biocare; Yorba Linda, Calif.) with 5 mm healing abutments, followed by a six-month healing period and restoration with all-ceramic custom abutments and a four-unit all-ceramic fixed prosthesis to restore the anterior incisors to form and function.

Surgical procedure
Using local anesthesia, two Replace Select Straight RP implant fixtures were placed in the area of tooth #7 and #10 using standard Nobel implant placement protocol. Placement angulation and depth were verified and deemed satisfactory. Standard RP 5 mm healing abutments were placed, and the fully reflected tissue flap was closed with interrupted sutures.

Restorative procedure
Following six months of healing post-implant placement, intraoral photos were taken to record and confirm the healthy remaining dentition. Osseous integration was confirmed with a panoramic X-ray, followed by resonance frequency analysis (RFA) using an Osstell® ISQ implant stability meter with SmartPeg™ attachment (Ostell Inc., Lindhorum, Md.), which displayed an implant stability quotient (ISQ) of 78 on a minimum-to-maximum scale of 1–100. Counter rotation with a torque wrench confirmed no rotation to 35 Ncm. The implant fixtures were considered acceptable for restoration. The 5 mm healing abutments were removed. Inclusive Scanning Abutments were placed on the implants and the accompanying titanium screws were tightened (Fig. 1). Using the iTero scanner with updated software (version 4.0), a full maxillary arch scan, full mandibular arch scan and centric bite in maximum intercuspation were completed.

A three-dimensional digital record of the patient’s anatomy was created from these scans and electronically submitted to Glidewell Laboratories to be used in the CAD/CAM restoration process. At Glidewell Laboratories, the virtual scan was registered to the scanning abutments, providing the dental technicians with the implant system, size, axis, position relative to the adjacent anatomy and locking feature orientation.

A virtual zirconia abutment was designed using 3Shape’s DentalDesigner™ software (3Shape Inc., New Providence, N.J.) and the Glidewell Digital Abutment Library (Fig. 2). From this, the corresponding physical Inclusive All-Zirconia Custom Abutments (Glidewell Laboratories) were milled. Similarly, a BruxZir® Solid Zirconia four-unit fixed bridge (Glidewell Laboratories) was designed and milled using state-of-the-art CAD/CAM technology. The custom zirconia abutments were trial-fitted in the patient’s mouth with some slight tissue blanching noted (Fig. 3). In the same visit, the final four-unit all-ceramic milled BruxZir Solid Zirconia bridge was tried-in and examined for proper occlusion. There was “tight” anterior coupling for this case as evidenced by the history of provisional denture fracture. The occlusion was checked and presented as so precise that no adjustment was required.

About the author
DR. PERRY JONES received his DDS from Virginia Commonwealth University School of Dentistry, where he has held adjunct faculty positions since 1996. He maintains a private practice in Richmond, Va.
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First used in 2000 and granted FDA approval in 2004 for long-term use as determined by health-care providers, the 1.8, 2.2 and 2.4 mm diameter ANEW implants from Dentatus have met the most precise implantology standards having undergone rigorous testing, research and clinical use by the profession. ANEW Implants are widely recognized by clinicians and universities worldwide. These narrow-body implants provide effective remedy for many because they are ideal for patients who have limited inter-dental spaces, insufficient bone or require provisionalization during augmentation procedures.

Nearly 25 percent of patients who come in for implant treatment will not have enough bone to place a conventional diameter implant, Dentatus said. ANEW Implants should also be considered when financial constraints might delay or prevent treatment. Every practitioner placing implants should consider including ANEW in his or her armamentarium so that all patients might take advantage of the benefits that implants afford.

ANEW Implants are the only one-piece narrow-body implants that have restorative options for screw-retained prostheses, Dentatus said. ANEW boasts a number of features that set it apart from other implants, including a short-threaded external connector that tolerates substantial abutment angulation without stress. ANEW’s prosthetic components provide patients with a cosmetic, fixed chairside restoration at the time of placement so they never have to go without teeth. There are a variety of platforms available for restorative ease, presenting flexibility for optimal esthetic solutions.

For instances of single-tooth replacement in narrow spaces, the availability of ANEW Implants provides patients who might have to proceed with a fixed or resin-bonded bridge the luxury of dental implants without preparation and/or reduction of the adjacent natural dentition. Another advantage to this modality is the maintenance of alveolar bone, which is documented to undergo resorption with other restorative options.

In 2012, Dr. Francois Fissler and Dr. Carlos Munoz from the New York University Department of Implant Dentistry presented the following findings about papilla regeneration at the Academy of Osseointegration’s 27th annual meeting:

“In this case series, nine patients received 10 [ANEW Narrow Diameter Implants (NDIs)], which were loaded for periods of six months to 10 years post-insertion. No implants or prosthesis had to be removed or replaced during the follow-up period. Neither a surgical or prosthetic complication was seen on any of the 10 NDIs.

“The average mesial [Papilla Index Score (PIS)] was 2.4 and the average distal PIS was 2.7, indicating that the NDIs regenerated at least 50 percent of the papilla in all cases (20/20 papilla).”

The non-hygroscopic screwcap allows for retrievability, so that during the healing period the restoration contours can be easily modified to the tissue architecture, thereby eliminating a final “black triangle” result, Dentatus said.

See ANEW, page 16

Anew implants meet the ‘most precise’ standards

First used in 2000 and granted FDA approval in 2004 for long-term use as determined by health-care providers, the 1.8, 2.2 and 2.4 mm diameter ANEW implants from Dentatus have met the most precise implantology standards having undergone rigorous testing, research and clinical use by the profession. ANEW Implants are widely recognized by clinicians and universities worldwide. These narrow-body implants provide effective remedy for many because they are ideal for patients who have limited inter-dental spaces, insufficient bone or require provisionalization during augmentation procedures.

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In 2012, Dr. Francois Fissler and Dr. Carlos Munoz from the New York University Department of Implant Dentistry presented the following findings about papilla regeneration at the Academy of Osseointegration’s 27th annual meeting:

“In this case series, nine patients received 10 [ANEW Narrow Diameter Implants (NDIs)], which were loaded for periods of six months to 10 years post-insertion. No implants or prosthesis had to be removed or replaced during the follow-up period. Neither a surgical or prosthetic complication was seen on any of the 10 NDIs.

“The average mesial [Papilla Index Score (PIS)] was 2.4 and the average distal PIS was 2.7, indicating that the NDIs regenerated at least 50 percent of the papilla in all cases (20/20 papilla).”

The non-hygroscopic screwcap allows for retrievability, so that during the healing period the restoration contours can be easily modified to the tissue architecture, thereby eliminating a final “black triangle” result, Dentatus said.

See ANEW, page 16
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This site is for you. Its slogan is “By Camlog Users: For Camlog Users”, and we mean it. We want you to use it, to talk about it with your colleagues, to let us know what you want more of, to ask questions and to share your own cases, problems and solutions.

TOGETHER WE CAN HELP EACH OTHER.

Dr. Peter Hunt,
Editor & Founder,
Camlog Connect

www.camlogconnect.com
Their effective adaptation and integration in bone has been shown to be on par with conventional implant fixtures and provide excellent support and retention.

In 2007, Dr. Stuart Froum and his colleagues published a study in the International Journal of Perio and Restorative Dentistry stating “40 ANEW Implants in patients for one to five years post-loading. No implant failures were reported, yielding a 100 percent survival rate.”

In 2005, the Journal of Oral and Maxillofacial Implants published Dr. Michael Rohrer’s histology study on Dentatus implants. Rohrer determined that the percentage of bone in contact with the body of Dentatus implants is “in the same range and sometimes higher than what is usually seen with conventional implants.”

The recommended surgical techniques allow for minimally invasive flapless placement and immediate loading. This eliminates most postoperative challenges and dramatically reduces the total time in treatment.

These implants solve the problems of time, money and perceived pain for most patients who otherwise do not proceed with care, Dentatus said. Other indications for use:

**Atrophic and thin ridges**
For patients with atrophic and thin ridges who cannot or do not want to undergo lengthy augmentation procedures based on age, systemic disease or inadequate volume of bone, ANEW Implants are an economical and viable long-term solution.

**Emergency repairs**
One of the most difficult situations for the practitioner is the emergency intraoral repair of a broken bridge. With ANEW Implants on hand, those difficulties are a thing of the past, Dentatus said. Once the bridge is removed, the implant can be placed in the interceptal bone, stabilizing the bridge, returning the patient to a den- tate state while a long-term treatment plan is determined.

**Bone augmentation**
Many implant treatment plans include some type of bone augmentation procedure. It may involve a sinus lift, replacement of the buccal plate and/or widening or heightening a ridge. Selling an implant case involves overcoming a patient’s concerns; one of the major roadblocks is the patient’s perception of a long, drawn out treatment period. ANew implants will give patients teeth during the entire treatment and avoids transmucosal loading of the graft while the patient is able to function with a fixed restoration.

For more information and to see other areas of use, visit www.DentatusUSA.com.

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**For daily use:**

**The new Implantmed by W&H**

Attractive and powerful are two words that describe the new W&H Implantmed, the company says. The new drive unit excels by virtue of its ease of operation, a powerful motor and a motorized thread cutter function. It offers safety and maximum precision for oral surgery in the fields of implantology and also maxillo-facial surgery.

The advantages in detail:

- **Easy to use:** The new Implantmed has an intuitive operating concept. All programs can be easily set up in just one user level, either with the foot control or by pressing the buttons on the unit. The settings are clearly visible on the large display. The clinician can concentrate on the essential factor: the patient.

- **Powerful motor:** Even difficult procedures no longer demand great strength when using Implantmed. Implantmed is powerful enough for all operations with a motor torque of 5.5 Ncm and a motor speed range of 300 to 40,000 rpm. The automatic torque control for rotary instruments, which can be set between 5 and 70 Ncm, ensures that the instrument is safe.

- **Fatigue-free operation:** The lightweight motor and the ergonomically shaped W&H contra-angle handpieces are perfectly balanced in the user’s hand. The advantage for the implantologist: ability to work for long periods without fatigue or hand cramping.

- **Automatic thread-cutting function:** The integrated automatic thread-cutting function supports the implantologist in placing implants in hard bone. Cutting a thread before screwing in the implant prevents excessive compression of the bone and promotes stress-free healing of the implant.

For more information, visit www.wh.com.
Big words for such a small membrane, but Cytoplast™ TXT-200 Singles have lived up to those words from your colleagues for more than 15 years.
Top quality and power — the new Elcomed SA-310 from W&H has some impressive features, the company says. The most crucial advantages, according to the company, at a glance, include:

- Just one operating stage for setting all necessary parameters
- Six program spaces, which can be set individually
- Shortest and lightest 50,000 rpm motor on the market
- Up to 80 Ncm on the rotary instrument
- Complete documentation using USB stick
- Automatic thread-cutter function

Operation made easy
With just one operating stage and a total of four buttons, the user is able to adjust all the important parameters. In addition to torque, motor speed and quantity of liquid, six different programs can also be accessed from the clearly laid out display.

The user is thus able to individually save the most important recurring operational procedures. In addition, the attached instruments are also preset on the display in order to guarantee optimum power transmission.

Full power
The Elcomed motor not only achieves speeds of 50,000 rpm but is also the lightest and shortest motor in its class, the company said. It can be used with all surgical instruments that have an ISO connection.

Together with the surgical handpieces/contra-angles from W&H, it can achieve a torque of 80 Ncm on the rotary instrument. This high torque guarantees an extremely high motor power. The user is able to cut through the bone without exerting large amounts of force.

Complete documentation
The new Elcomed also features the advantage of simple and complete documentation. Data is stored directly on the USB stick that is included in the delivery. Using the USB interface, the user is therefore able to transfer the saved treatment stages to the PC very easily.

The data is displayed as a csv file, ready to be imported into standard analysis programs, and as a bitmap file. The documented information contains the torque curve and the screenshot of the Elcomed display, on which all the set parameters can be viewed. Complete documentation is therefore guaranteed at no additional cost.

Thread-cutter function
To enable the implant to heal as quickly as possible and with the least possible stress, the new Elcomed SA-310 has an automatic thread-cutter function. The thread cuts into the bone when the foot control is activated.

Upon reaching the pre-set torque, the thread cutter immediately switches to reverse operation, in order to remove any bone chips. This process can be stopped by releasing the foot control. If the foot control is activated again, the thread-cutter function will restart in forward operation. In this way, compression on the bones is minimized and potential bone damage avoided.

The motor, cable and handpiece holder are naturally thermo washer disinfectable and sterilizable.

For more information, visit www.wh.com.
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MISSION STATEMENT: The Academy for Implants and Transplants is a not-for-profit dental implant organization composed of dentists and allied health professionals with a special interest in the discipline of implant surgery. Fellow and Mastership Programs are encouraged.

PROGRAM HIGHLIGHTS
Outstanding group of clinicians share exceptional knowledge in a scientific and live surgery environment in the University’s state-of-the-art amphitheater next to the surgical suite.

LIVE SURGERY SESSIONS: The surgical program demonstrates implant selection protocol relevant to clinical situations presented, case diagnosis and treatment planning for placement of selected implants and prosthetic techniques for restoration of the various modalities.

MAIN PODIUM PROGRAM: Lectures will focus on the availability of various implant modalities and their related clinical applications; indications and contra-indications; selection protocols; surgical procedures for the placement of selected implants; and, prosthetic restoration.

AUXILIARY PROGRAM: An informative 12 hour course offers “all you need to know about implant dentistry and maintenance procedures”. The course will also include special handling techniques for implants, instruments, sterilization packaging procedures that will withstand the rigorous requirements of OSHA standards, as well as Infection Control and CPR Certification.

Alabama attendees are encouraged to bring their own patients for surgery with individual instructors
SimPlant GO: new solution in guided implant surgery

Materilize Dental just launched a new user-friendly implant planning solution. With SimPlant GO, there are no surprises during surgery because you have optimally planned the implants in the bone—and with SurgiGuide, this planning is then transferred into a fully predictable surgery.

SimPlant GO’s intuitive navigation, 3D images and simple four-step process is so straightforward that you can learn it over lunchtime, during a break or in-between appointments, the company said.

This software is made for dentists who have only a few minutes to become familiar with this easy 3D implant-planning software.

SimPlant has been hugely successful during the past 20 years in addressing the needs of the implant specialists, the company said. However, some dentists who were placing implants less frequently felt overwhelmed by the amount of flexibility that SimPlant has offered. SimPlant GO has been designed to specifically address their needs.

The solution has been specifically designed for dentists without a cone-beam scanner in their office.

“Although cone beam is the way of the future, not everybody is willing to invest in it yet. And now dentists have a great, low-threshold solution to start with computer-guided implantology,” said Bert Van Roie, SimPlant product manager for Materilize Dental.

“We strongly believe there is a place for our earlier products, so we will continue to invest in their future, and new versions of SimPlant Planner, Pro and Master will be released this fall,” said Bart Swaelens, CEO at Materilize Dental.

“Expanding our portfolio is our way of ensuring that the best implant planning software and surgical guides on the market reach the widest audience possible.

Part of the scan-plan-guide process, SimPlant GO is more than just a fancy new computer software program; it’s part of a full solution for your cases. “On top of this, the process is a cool and smooth user experience,” he added.

Find out more by visiting www.simplantgo.com.

The latest from OSADA: Enac Model OE-F15

Company launches its enhanced bone-cutting specialist with extended boosting power

OSADA developed and introduced Enac in the United States in 1984, a piezoelectric ultrasonic system, multi-purpose instrument that can be used in various applications in the dental field.

Utilizing the dynamic nature of piezoelectric ultrasonic system, Enac has been used extensively in endodontic and periodontic treatments, OSADA says. Because it is automatically tuned, the Enac system is user-friendly. It provides continually stable oscillation at any level of power with any of the chosen tips. Its ease of operation enhances the users’ technique in achieving excellent results, the company says.

The clinical application of the ultrasonic device in the oral surgery field has been seen in a variety of different contexts, including ultrasonic scalpels, apicoectomy and bone surgery in the maxillofacial area, to name a few.

In particular, bone surgery, which uses the piezoelectric element (the dynamic energy in the ultrasonic wave) ensures minimal invasion to biological tissues including blood vessels and nerves, which in turn leads to faster healing after surgery.

Upon introducing the OSADA Enac OE-Wio, featuring extended power setting No. 10 through No. 12 and sterile irrigation systems.

The Enac Model OE-F15 by OSADA.

The Enac Model OE-F15 by OSADA. (Photos Provided by OSADA)

The Enac Model OE-F15 by OSADA.

The Enac Model OE-F15 by OSADA. (Photos Provided by OSADA)
Hands-On Advanced Surgical Cadaver Course

KEY AREAS OF EMPHASIS:
- Comprehensive soft tissue grafting procedures and suturing techniques
- Localized ridge augmentation
- Immediate implant loading
- Sinus lift procedures
- Block grafting procedures

UPCOMING COURSES:

SEPTEMBER 24-25, 2012
Florida Hospital Nicholson Center, Orlando, Florida

OCTOBER 29-30, 2012
ZI East, Parsippany, New Jersey

Presenters:
Dr. Monish Bhola
Dr. Kanyon Keeney

FOR ADDITIONAL INFORMATION AND TO REGISTER CONTACT:
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DENTSPLY Implants is the union of two successful and innovative dental implant businesses: DENTSPLY Friadent and Astra Tech Dental.*

DENTSPLY Implants offers a comprehensive line of implants, including Astra Tech Implant System™, ANKYLOS® and XIVE®, digital technologies such as ATLANTIS™ patient-specific abutments, regenerative bone products and professional development programs.

We are dedicated to continuing the tradition of DENTSPLY International, the world leader in dentistry with 110 years of industry experience, by providing high quality and groundbreaking oral healthcare solutions that create value for dental professionals, and allows for predictable and lasting implant treatment outcomes, resulting in enhanced quality of life for patients.

We invite you to join us on our journey to redefine implant dentistry. For more information, visit www.dentsplyimplants.com.

*The newly created business will actively market and sell products as DENTSPLY Implants beginning with North America, effective April 2012. Transition to the new business in all other geographic locations around the globe will follow.