The forgotten implant: subperiosteal

By Pankaj Singh, DDS, DICOI, DABOI, FAAD

With very advanced jawbone resorption, there may not be enough bone width or height for the more common and routinely placed type of implant: the root form implant.

This advanced, severe bone resorption is due to long-standing edentulism and the detrimental forces from loading these jaws with soft-tissue supported dentures.

One complication that arises from this severe bone resorptive pattern is ill-fitting dentures that even after repeated relines aren’t stable during normal or even soft mastication and the patients have to use massive amounts of denture adhesive to just keep them in place to speak.

Besides being a quality of life issue, it becomes a health issue as the lack of proper masticatory process results in inadequate nutrition, which leads to a host of digestive disorders including acid reflux and esophageal blockage, and can even contribute to metabolic disorders. Chronic excessive use of denture cream containing zinc may result in hypocupremia and serious neurologic disease.

Another major complication is pain from direct pressure on the exposed inferior alveolar nerve.

AAID covers it all in New Orleans

By Sierra Rendon, Managing Editor

From implant design to emergen-cy medicine to particulate grafting, there was in-depth information for everyone to take home with them from the American Academy of Implant Dentistry meeting, which was held Nov. 11 to 14 in New Orleans.

The meeting offered three days of education on new techniques on a wide variety of subjects.

Here is a sampling of the meeting’s topics:

* New implant design: Drs. Henry Salama, Maurice Salama and David Garber presented from the perspective that implant-supported restoration must cosmetically equal or surpass that of conventional restorative dentistry.

They outlined the biological, clinical and biomechanical factors that allow clinicians to reduce or eliminate the waiting period to implant loading without sacrificing predictably successful osseointegration.

* Emergency medicine: Dr. Stanley Malamed presented a dynamic pro-
AAA • Platelet-rich plasma enhances bone, tissue growth

An exciting treatment gaining acceptance in orthopedics and sports medicine, called platelet-rich plasma therapy (PRP), shows strong potential for accelerated healing of dental implant procedures, according to a prominent dental researcher speaking at the American Academy of Implant Dentistry (AAID) annual meeting.

James Rutkowski, DMD, PhD, editor of the Journal of Oral Implantology and a practicing implant dentist in Pennsylvania, spoke at the AAID convention and said that for dental-implant patients, platelet-rich plasma therapy can accelerate bone and tissue growth and wound healing and help assure long-term success of implant placements.

“What could be better than using the body's own regenerative powers to grow bone and soft tissue safely and quickly? For dental implant procedures, PRP treatments can jump start bone growth and implant adherence in just two weeks, which cuts down the time between implant placement and affixing the permanent crown,” Rutkowski said.

Platelet-rich plasma is obtained from a small sample of the patient’s own blood. It is centrifuged to separate platelet growth factors from red blood cells. The concentration of platelets triggers rapid growth of new bone and soft tissue.

“There is very little risk, because we are accelerating the natural process in which the body heals itself,” Rutkowski said. “PRP speeds up the healing process at the cellular level, and there is virtually no risk for allergic reaction or rejection because we use the patient's own blood.”

Rutkowski noted that some orthopedic physicians have been using PRP with success for painful and hard to treat injuries like tennis elbow, tendinitis and ligament damage. An avid Pittsburgh Steelers fan, Rutkowski couldn’t resist mentioning that PRP was used in 2009 pre-game Super Bowl treatment for two Steelers players (Heinz Ward and Troy Polamalu), and both were instrumental in the team winning its sixth Super Bowl.

For dental surgery applications, Rutkowski explained that PRP is mixed in a gel that can be applied directly to tooth sockets and other sites. It also is effective in cases when bone grafts are required to foster proper bone integration for implants.

Growth factors in PRP preparations help the grafts bond faster with the patient’s own bone. Rutkowski reported that in one of his studies there was increased radiographic bone density during the initial two weeks following PRP treatment when compared to sites that did not receive PRP treatment.

“Accelerated healing is a goal we’ve been seeking in implant dentistry and we now have treatment that activates the natural healing process. It is a very promising development for implant dentistry,” explained Rutkowski.

He estimates that about 10 percent of practicing implant dentists have used PRP treatment and predicts it will become more common as more studies are performed.

About AAID

AAID is based in Chicago and has more than 3,500 members. It is the first organization dedicated to maintaining the highest standards of implant dentistry by supporting research and education to advance comprehensive implant knowledge for more information, see www.aaid.com.

AAP supports foundation’s guidelines on oral health for people with diabetes

New clinical guidelines released by the International Diabetes Foundation (IDF) emphasize the importance of periodontal health for people with diabetes. Diabetes affects approximately 246 million people worldwide, and this number is only expected to increase. The IDF is an organization of 200 national diabetes associations from 160 countries.

The new IDF oral health clinical guideline supports what research has already suggested; that management of periodontal disease — which affects the gums and other supporting tissues around the teeth — can help reduce the risk of developing diabetes; and can also help people with diabetes control their blood sugar levels. Studies have suggested there is a two-way relationship between diabetes and periodontal disease, and the IDF guideline outlines helpful guidance for health professionals who treat people living with and at risk for diabetes.

The IDF guideline contains clinical recommendations on periodontal care, written in collaboration with the World Dental Federation (FDI), that encourage health professionals to conduct annual inquiries for symptoms of periodontal disease such as swollen or red gums or bleeding during tooth brushing, and to educate their patients with diabetes about the implications of the condition on oral health and especially periodontal health.

“Everyone should maintain healthy teeth and gums to avoid periodontal disease, but people with diabetes should pay extra attention,” said Samuel Low, DDS, MS, associate dean and professor of periodontology at the University of Florida College of Dentistry and president of the American Academy of Periodontology (AAP). “Periodontal disease triggers the body's inflammatory response which can affect insulin sensitivity and ultimately lead to unhealthy blood sugar levels. Establishing routine periodontal care is one way to help keep diabetes under control.”

In recognition of American Diabetes Month, the American Academy of Periodontology commends the International Diabetes Foundation on the release of the Guideline on Oral Health for People with Diabetes.

About AAP

The American Academy of Periodontology (AAP) is the professional organization for periodontists — specialists in the prevention, diagnosis and treatment of diseases affecting the gums and supporting structures of the teeth and in the placement of dental implants. The AAP has 8,000 members worldwide.
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¹ Histologic Evaluation of a Stem Cell Based Sinus Augmentation Procedure: A Case Series.
— McAllister, Harghigam, Günstig. — Journal of Perio., April 2009

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result of dehisced inferior alveolar canal and mental foramen by the mandibular denture and resulting Trigeminal neuralgia. In these cases the subperiosteal implant can be of tremendous help.

By definition, a subperiosteal implant is a framework specifically fabricated to fit the supporting areas of the mandible or maxilla with permucosal extensions for support and attachment of a prosthesis. The framework consists of permucosal extensions with or without connecting bars and struts. Struts are classified as peripheral, primary and secondary. The subperiosteal implant can be constructed as a complete arch, unilateral or universal, and is loaded immediately.

Prior to the tremendous success of the root form implants since Dr. Brånemark introduced the concept of osseointegration in 1981, the subperiosteal implant along with blade and plate implants were routinely used to support either a fixed, or removable, complete or partial prosthesis. The subperiosteal implant is custom made and designed to fit and sit on top and around the bone, but under the gums. There are two methods for its fabrication and installation.

The first and original technique is the “dual surgery” method. Usually under sedation, the jawbone is exposed and an impression of the bone is made using a custom impression tray and the impression material of choice (not alginate). Whenever possible, vertical dimension in centric relation to the alveolar ridge with the opposing arch to provide inter-maxillary distance for determination of abutment height of the subperiosteal framework and the height of the prosthesis is recorded while the bone was still exposed. The gums are sutured closed and the patient is dismissed with a facemask-type compression bandage.

This impression is poured with plaster to fabricate a replica (model) of the jawbone and the model is used by the dental laboratory to custom cast the implant with the suprastructure to fit the jaw along with the prosthesis that was prescribed. Six to eight weeks after the first-stage “impression acquisition” surgery, a second procedure is then carried out where the jawbone is re-exposed and the implant placed and secured into place. The gums are closed with stitches over the subperiosteal and around the suprastructures and the prosthesis is placed into place.

This type of protocol was very common and predictable as it used very familiar and commonly practiced prosthodontic techniques for workup and fabrication of the implant and the final prosthesis, but was very unsatisfactory to the patient and a big deterrent for undergoing the therapy.

In the late 1980s and early 1990s with CT and within the past decade cone beam volumetric tomographic (CBVT) scans becoming more common in dental/oral surgical diag-
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nosis and treatment planning, and medical modeling companies getting better and more accurate in computer modeling of anatomic structures, the first stage surgery for the fabrication of an accurate impression of the jaw was bypassed.

For the “single surgery” method, a special CT/CBVT scan of the arch being considered for rehabilitation is ordered. A replica (radiographic template) of the final prosthesis is fabricated with the denture base made with acrylic with 25 percent barium sulfate, a radiopaque marker that shows in the 3-D radiograph outlining the soft tissue (gum) architecture (Fig. 3).

The radiographic template is worn during the scan, and using the scan data and advanced computer modeling techniques, a model of the jawbone and overlaying soft tissue is constructed.

This stereolithographic model (Fig. 4) of the alveolus and the overlying gum (Fig. 5) is used by the dental laboratory to fabricate the custom subperiosteal implant and process and finish the prosthesis for immediate function.

A surgical procedure is then carried out where the alveolus is exposed and the implant placed and secured to the jaw (with bone screws) and any gaps between the implant and the underlying bone is filled with hard tissue graft of the dentist’s liking and guided bone regeneration technique is applied. The gums are closed with stitches and the prosthesis is put into place for immediate function.

The patient is instructed in the usual manner for postoperative wound and prosthesis care and a stretchable compression bandage is applied.

This modern one-stage protocol is more palatable for the patient who is more likely to consider this form of implant therapy versus undergoing multiple augmentation procedures to build the ridge to the appropriate dimensions (height and width) in the certain areas for implantation of appropriately sized rootform implants. Depending on the location and type of materials used for augmentation, it could be six months to up to two years or more before the patient is rehabilitated with a final prosthesis.

At times, the patient is not a good candidate to undergo such significant augmentative procedures either due to health or financial considerations.
Case report No. 1

A 61-year-old caucasian female presents with the chief complaint that her lower denture doesn’t fit well and every time she wore it, it caused great pain and a burning sensation in the lower jaw. She only wore it for cosmetic reasons and never chewed with them in and made excuses for not eating in company of others.

She has been to several dentists, including prosthodontists, who fail to fabricate complete removable mandibular dentures she can wear comfortably.

She also has sought consultations with several oral surgeons who would only recommend multiple autogenous onlay grafts in the intermental region for an implant-supported soft-tissue borne overdenture with the possibility of still experiencing pain due to the free end saddles pressing into the exposed mental foramen and inferior alveolar nerve when chewing.

Her past medical history was significant for post-menopausal osteoporosis for which she takes Boniva (ibandronate sodium) once a month.

She also suffers from hypertension, which is under control, and for which she takes a combination of thiazide diuretic and beta blocker.

She also suffers from panic disorder for which she takes Zanax (alprazolam) on a regular basis.

Social history is significant for her becoming a widow eight years ago and is socially active, and her only son was to be married within three months of consultation.

Her past dental history is significant for periodontal disease, which was the reason for her losing all of her teeth by the time she was in her 30s and now having severe atrophy of both jaws.

Twenty years ago, she began implant therapy for supporting her complete mandibular dentures. During the years, the implants failed for one reason or another and the last one remaining is fractured with a piece still integrated but not usable. Both mental foramen and parts of the mandibular canal are exposed on the crest of the alveolus with the nerves enveloped in the soft tissue over the crest.

Treatment plans were developed after an initial panoramic view was extracted from a CBVT.

Treatment plan No. 1

- Total treatment time: eight to 12 months.
- Anterior iliac crest to be used as a donor site for block grafts to augment the intermental region and posterior mandible with bilateral relocation of the mental foramen and mandibular canal more apically and laterally.
- Surgery under general anesthesia.
- Insertion of a full maxillary removable denture and immediate insertion complete mandibular denture using four locator abutments.
- Permanent reline of the lower prosthesis in two months.

Case report No. 2

A 48-year-old caucasian female presents with the chief complaint that her lower implant bar-retained overdenture is extremely uncomfortable, doesn’t fit well and is cosmetically unacceptable. She is also unhappy with the way her maxillary denture fits and feels.

She has sought consultation from several dentists including prosthodontists, periododontists and oral surgeons who recommended various options, including removal of the existing implants and placing new ones in a more favorable angulation and even changing the retention mechanism from bar to individual implant retention (o-rings, locators and type).

For the maxillary denture, all recommended a new denture.

Her past medical history was insignificant for post-menopausal osteoporosis for which she takes Boniva (ibandronate sodium) once a month.

She also suffers from hypertension, which is under control, and for which she takes a combination of thiazide diuretic and beta blocker.

She also suffers from panic disorder for which she takes Zanax (alprazolam) on a regular basis.

Social history is significant for her becoming a widow eight years ago and is socially active, and her only son was to be married within three months of consultation.

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Treatment plans were developed after an initial panoramic view was extracted from a CBVT.

Treatment plan No. 1

- Total treatment time: six to eight weeks. (Patient elected to undergo this option.)
- One-stage protocol mandibular subperiosteal (bone contact side coated with hydroxyl apatite) placement and rigid fixation with bone screws and simultaneous bilateral relocation of the mental foramen and mandibular canal more apically and laterally.
- Surgery under I.V. conscious sedation and local anesthesia.
- Insertion of a full maxillary removable denture and immediate insertion complete mandibular denture using four locator abutments.
- Permanent reline of the lower prosthesis in two months.
significant and was categorized as an ASA1 patient. Social history is significant for divorce five years ago, and she is planning on remarrying in the near future.

Her past dental history is significant for becoming completely edentulous at age 18 upon recommendation of her dentist. Ten years ago, she had four implants placed in the anterior mandibular symphysis out of which one failed. Her bar was preserved and made usable with three implants.

Two years ago, she had new mandibular and maxillary dentures fabricated by a prosthodontist that was recommended by the periodontist who removed the failed implant.

Treatment plans were developed upon visits with the hygienist.

Both patients and others like them have undergone this type of rehabilitation using subperiosseal implants without any untoward complications and have reported satisfactory results upon visits with the hygienist.

The author would like to acknowledge Dr. Jerome Kaufman, DDS, (prosthodontist) of Arch Dental at Le Visage Center for Cosmetic and Implant Dentistry for performing the prosthetic workup and completion of such challenging reconstructions, and Ryan Dutton, CDT of Dutton Dental Labratory, Ohio, for his exemplary fabrication of such difficult and precise frameworks.


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About the author

Dr. Pankaj Singh has authored the third edition of the best-selling textbook on dental implants, “The Atlas of Oral Implantology,” which will be released in December. Singh is an attending faculty at the Department of Dental Medicine and Oral Surgery at LIJ-North Shore University Hospital Medical Center in New York and is a clinical instructor of advanced dentistry at New York University College of Dentistry (subialtal). He is the founder and CEO of Arch Dental Associates and Le Visage Cosmetic & Implant Dentistry with offices in Manhattan, Huntington and Garden City, NY. Singh has been in private practice for more than 15 years, specializing in implant, sedation, reconstructive dentistry and dental sleep medicine. He is a graduate of New York University College of Dentistry. He completed his advanced training in dental implants at Brookdale Hospital and NYU.
Materialise Dental, Medical Modeling establish partnership for surgery planning

Materialise Dental, which develops 3-D technology solutions for implant practices, oral maxillofacial surgeons and orthodontists, announced recently that it has established a partnership with Medical Modeling.

The new partnership allows Medical Modeling to exclusively manufacture orthognathic CAD/CAM splints for the United States market and equally provide support for the SimPlant® OMS software.

Materialise Dental focuses on 3-D digital dentistry, offering a range of integrated solutions in computer guided dentistry.

With SimPlant OMS, the company provides an interactive 3-D system for predictable diagnosis and treatment planning of orthognathic cases. SimPlant OMS allows for accurate 3-D cephalometric analysis, surgical simulation and prediction of soft tissue movements.

Based on the surgeon’s pre-operative treatment planning, Medical Modeling then produces custom-made intermediate and final splints using the stereolithography (SLA) process, an additive manufacturing technique.

The splints provide a seamless link between planning and actual surgery, ensuring optimal jaw positioning during surgery without any time consuming model surgery.

Bart Swaelens, CEO of Materialise Dental said: “Medical Modeling has many years of experience in supporting development of an accurate and predictable orthognathic surgical protocol. We value the company’s high esteem for quality service toward its customers and thus we trust they will do an excellent job in managing the SimPlant OMS software support. Their know-how in orthognathic surgery and our industry expertise in 3-D treatment planning software complement each other perfectly.”

Andy Christensen, president of Medical Modeling, said: “We are proud to partner with Materialise Dental for the U.S. market, as they are a fast-growing international company with a strong background in the research and development of computer-guided treatment planning software and patient-specific medical devices. Thanks to our unique strengths, we can offer surgeons performing orthognathic cases a combination of the best 3-D treatment planning software available on the market today.”

The partnership gives surgeons the possibility to opt for all-round assistance during the treatment planning process. Engineers at Medical Modeling are equipped to help provide hands-on assistance for surgical planning using the software. Additionally, SimPlant OMS users will gain access to patented technology surrounding Medical Modeling’s protocol including fiducial registration of occlusal anatomy.

About Medical Modeling

Medical Modeling Inc., based in Golden, Colo., is a world leader in production of custom anatomical models made using medical imaging data combined with additive manufacturing technology. Every day around the world surgeons count on the company’s ClearView® and OsteoView® anatomical models to prepare for and guide complex surgery spanning the fields of orthopedic surgery, spine surgery, cranio-maxillofacial surgery and neurosurgery. More information on Medical Modeling can be found at www.medicalmodeling.com.

About Materialise Dental

Materialise Dental focuses on 3-D digital dentistry by offering a range of products and services to support specialists in the treatment of their patients. Materialise Dental continues to lead the dental industry in medical image processing, surgery simulation and rapid prototyping technology. The company is represented worldwide by subsidiary offices and authorized distributors and is a trusted partner for many of the largest clinics and research institutions. For more information, see www.materialisedental.com.
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Enhance the experience for implant patients

By Roger P. Levin, DDS

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Enhancing the patient experience can help ensure greater implant success.

**Motivate patients with benefits**

Implants should be treated as a practice within a practice. You cannot expect success if you run your implant systems the same way you run the systems for other types of services. Because acceptance of implant treatment is based on emotional decision-making, you must excite patients and motivate them about the benefits of implants.

Use the following suggestions to boost the implant experience:

- Encourage referring practitioners to send all potential patients. Every patient missing teeth is a candidate for implant treatment. Work closely with referring practitioners to showcase the benefits of implants to all referred patients.
- Schedule implant patients within seven days or less. The longer it takes to schedule an elective appointment, the more likely that the patient will not present.
- Appoint an Implant Treatment Coordinator (ITC). An ITC is a specially trained individual who has the ability to close a high percentage of cases as well as manage financial arrangements.

**Exceeding patient expectations**

Patients who receive dental implants are generally pleased with the result, especially when they are given excellent and timely communication during the treatment process from both the surgical and restorative practices. With a clear understanding of the procedure and the timeline involved, patients feel more connected and assured.

In addition, because the majority of implants are still provided by multiple practices, it is important to put the least amount of responsibility on the patient. Levin Group suggests that you map out every step of the interdisciplinary process and determine how to communicate next steps, time frames and all fees along the way.

**Conclusion**

The success of your implant practice rests on your interaction with the patient. When a unique experience is created, patients are pleased with the outcome from an aesthetic and functional perspective. Communicating the value of treatment helps patients realize the benefit of implants beyond the money they are spending.

Trying to decide where to take the implant side of your practice? Implant Tribune readers are entitled to receive a 50 percent courtesy on a Levin Group Practice Potential Analysis™ — a six-step, in-office evaluation designed to identify the true potential of your practice. Call (888) 973-0000 and mention “Implant Tribune” or e-mail customerservice@levingroup.com with “Implant Tribune” in the subject line.

**About the author**

Dr. Roger P. Levin is founder and chief executive officer of Levin Group, a leading implant practice management firm. Levin Group provides Total Implant Success™, the premier comprehensive consulting solution for lifetime success to implant clinicians in the United States and around the world.

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gram with high-quality videos and helpful acronyms such as PARBCD and MONA. Malamed’s presentation began with a startling video example of what might happen if a patient or family member had a heart attack in the waiting room of an unprepared dentist’s office. The dentist and staff did not have a plan for this type of event, and the victim in this video died.

“It didn’t have to be like this,” Malamed said. “Are you prepared? Is your entire office staff trained for an emergency situation?”

To the musical strains of “Stay in’ Alive,” the University of Southern California professor offered tips and advice. His main point was “your legal obligation is to keep the patient alive,” which means following steps to ensure the patient either gets better or simply remains alive until emergency professionals arrive on the scene.

Acronyms such as PARBCD (positioning; airway; breathing; circulation; morphine; oxygen; nitroglycerin; aspirin) will help practitioners remember what to focus on during an emergency.

“Remember: Doing nothing means the person is going to die,” he said. He also recommended that everyone purchase automated external defibrillators (AEDs) to use in the case of an emergency.

“They’re simple to use, they’re available over-the-counter, you cannot do it wrong, and you might save a life.”

- Laser treatments: Dr. Edward Kusek of Sioux Falls told his AAID colleagues he has employed lasers in most of the surgeries he has performed in the last five years, which include implants and endodontic procedures. He said the lasers use low levels of non-ionizing radiation and actually generate less heat and discomfort than other devices commonly used in dental surgery.

“Erbium and/or diode lasers can accelerate healing in dental surgery and are very effective for detoxifying an area to clear up infection,” Kusek said. “In our practice and in several studies we have conducted, lasers have proven to stimulate better tissue growth and height and also foster stronger bone growth and better contact with the implant. As a result, we have cut the cycle time for most implant procedures from six to three months.”

Kusek added that for most patients, laser detoxification allows immediate placement of the implant and securing a temporary crown in one visit. “Being able to send the patient home in one day with an immediate load implant in the smile zone helps socially because the missing teeth aren’t noticeable,” he said. “Three months later, the permanent crown can be affixed.”

In his presentation, Kusek covered the case of a young woman whose root canal failed because the root cracked and the area was badly infected. The tooth was extracted and the laser was used to clear up the infection. “Once the socket and surrounding area were detoxified by the laser treatment, the implant was inserted and a temporary crown attached. The patient went home with her smile looking great and the final outcome in three months was excellent,” said Kusek. “Given the degree of infection, she would not have received an immediate-load implant in the same visit without the laser treatment.”

Kusek said about 7 percent of dentists have some type of lasers in their offices and many are evaluating the cost benefits. “In my experience, nothing matches laser applications for overall implant procedure outcomes in infection management, bone regeneration, osseointegration, tissue growth enhancement and overall esthetic success,” he said. • Esthetic zone: Dr. Eric Van Dooren, who maintains a private practice in Belgium, provided a lecture focusing on less invasive procedures that allow for preserving soft-tissue quality.

“It’s all about soft-tissue stability,” Van Dooren said. He offered surgical and prosthetic concepts for five different cases and explained what sort of intuition he used to determine which techniques to use in each case. Some techniques Van Dooren discussed included modified socket seal surgery, flapless surgery, both delayed and immediate implant placement, connective tissue grafting with Bio-Oss, and hybrid techniques.

- Accessible treatment: In a candid address, noted dental researcher, author and lecturer Gordon Christensen, DDS, PhD, urged more dentists to add implants to their practices, but said the procedure must become simpler and less costly to achieve optimal public and professional acceptance.

“I strongly encourage more dentists to add implants to their practices and make this treatment accessible and affordable for their patients,” Christensen said. “The statistics on missing teeth in the U.S are staggering and, frankly, embarrassing for the dental profession. We can make a major contribution to improving the nation’s oral health by further utilization of dental implants, but we must get serious about reducing the cost of the procedure. Ultimately, costly implant placements don’t serve the public or the profession, even though dental implants are the best treatment available for replacing missing teeth.”

Impressive advances in technology have made implant procedures safer and more predictable with 95 percent-plus success rates, Christensen noted.

“However, we need more innovative and simpler implant designs — short, wide, narrow, hollow, non-round — and simpler and more reliable methods for evaluating bone quality, quantity and osseointegration.”
Scenes from AAID

Implant Direct President Gerald Niznick talks to AAID attendees about his company’s varied implant offerings.

Piezosurgery’s Caleb Hill shows an AAID attendee how easy it is to use the technology with the use of a fresh egg.

Sabine Nahme, director of dental CT sales and business development for PreXion, shows off the company’s scanner.

Clark Barousse of BioHorizons offers information about the company’s implant technology.

Matt Tedrow of Materialise Dental walks a customer through the basics.

A Southern Implants official shows off the wide variety of implants available through the company.

Joseph Jung, DDS, asks questions about ACE Surgical technology to Tim Ritchey.

Impladent has exhibited at the AAID for more than 20 years.

Pezosurgery’s Caleb Hill shows an AAID attendee how easy it is to use the technology with the use of a fresh egg.
AAOMS offers implant conference

The American Association of Oral and Maxillofacial Surgeons will host Dental Implant Conference 2009 from Dec. 3-6 at the Sheraton Chicago Hotel and Towers in Chicago.

The meeting will focus on topics such as immediate loading partial- and full-arch restorations; custom vs. CAD/CAM vs. stock ceramics abutments; advances in treatment planning; advances in delivery of care for the implant patient; and short- and long-term effects of implant restorations compared to traditional dental restorations.

Speakers include Drs. Maurice A. Salama; Joseph Y. Kan; Sonia Lezly; Jaime L. Lozada; Lars Sennesby; Steven J. LoCascio; Jonathan Ferencz; Ira D. Cheifetz; and many more.

For more information, see www.aaoms.org/implant_conference/2009/.
New York University College of Dentistry, Assistant Department of Implant Dentistry, and the ICOI will co-host their 20th Annual Implant Symposium at NYU this winter.

The theme for this symposium is “Advances, Challenges and Innovations in Successful Implant Therapy” and will feature an impressive list of international speakers. Main podium lecturers will be Drs. Alan Herford (USA), Lars Sennerby (Sweden), Stefan Pickl (Germany), George Zarb (Canada), Giulio Preti (Italy), Edwin McGlumphy (USA), Kevin Murphy (USA), Jay Malmut (USA), Scott Ganz (USA), John Cavallaro, Jr. (USA), William Giannobile (USA), Istvan Urban (USA) and Hom-Lay Wang (USA).

For more information or to register for this meeting contact the ICOI at the following: E-mail: icoi@dentalimplants.com Phone: (973) 783-6300

In addition to the two-day doctors’ program, the Association of Dental Implant Auxiliaries (ADIA), will conduct a full-day Implant Certification Program for dental auxiliary staff members on Saturday, Dec. 12.

This event will be presented by Lynn Mortilla, RDH. The program, open to all staff members, will address all aspects of dental implantology including treatment planning, surgical, prosthetic and maintenance procedures, case presentation, financial arrangements, insurance issues and more.

Interested auxiliary staff should contact NYU at: E-mail: dentalcde@nyu.edu Phone: (212) 998-9757

AO to offer new approaches, unexpected complications

Different approaches to implant therapy and solutions to unexpected complications are among the highlights of this year’s celebration of Osseointegration’s 25th anniversary annual meeting from March 4-6 at the Walt Disney World Dolphin Resort.

Treatment Approaches: Controversies in Implant Dentistry, held Friday, March 5, and Saturday’s “Unexpected Complications: Complications and Solutions,” are key pillars of the meeting’s overall theme, “The Formula for Predictable Implant Success.”

The 2010 meeting will serve as a celebration of everything we have learned in the past 25 years, and how that knowledge is applied for the benefit of our patients today,” Annual Meeting Committee Chair Dr. Stuart Froum, New York, NY, explains. “Our focus is on exploring how the exciting treatment innovations we’ve witnessed over the last quarter century enable us to increase predictability and optimize outcomes in an age where esthetics have never been more valued.”

Treatment approaches, controversies

Friday’s implant therapy program gathered an international roster of experts to review the latest treatments and materials through an evidence-based approach.

Topical for a clinical classification of alveolar hard- and soft-tissue deficits. Based on this classification, Kirsch will discuss selected solutions with a focus on the “backward planning concept,” or restorative-driven planning.

Dr. Stuart Froum

Is Zirconium the Ideal Material for Implant Technology? Drs. Stephen J. Chu, New York, N.Y., and Joerg R. Strub, Freiburg, Germany, will present differing perspectives on the effectiveness of zirconium in implant abutments and implants. Attendees will learn the various applications of zirconium for implant frameworks.

Timing of Implant Placement — Advantages of Early Placement. Dr. Daniel Buser, Bern, Switzerland, will discuss the effectiveness of implant placement after four to eight weeks of soft-tissue healing.

Timing of Implant Placement — The Immediate Approach: Indications, Contraindications and Coordinated Therapy. Dr. Barry D. Wagenberg, Livingston, N.J., will discuss a study of 1,925 immediate implant cases that includes the effects of modifiers such as gender, smoking, medications and diseases.

The Advantages of the Root Submergence Technique (RST) for Posterior Site Enhancement. Dr. Maurice A. Salama, Atlanta, Ga., will detail the RST strategy and why it can more predictably provide esthetic implant results for multiple tooth replacement cases.

Managing Esthetics with Two Adjacent Implants. The challenges of placing side-by-side implants are well documented. Dr. Nigel A. Saynor, Stockport, U.K., will examine the limits and set parameters that influence where implants can be placed side-by-side with successful esthetic outcome.

Implant complications, solutions

The meeting’s closing symposium, “Unexpected Complications: Complications and Solutions,” held Saturday, March 6, will address common problems that clinicians are encountering with greater frequency.

“The increasing number of implant complications is something we did not envision 25 years ago. Back then, we measured success by whether an implant worked or didn’t work,” Dr. Froum recalls. “Complications are a crucial part of our everyday practices, due in part to the sheer number of implants being placed.

Saturday’s session on complications will explore why problems occur and what to do to prevent them.”

Topics include:

- Risk Factors: Dr. Myron Nevin, Swampsassett, Mass.
- Treatment Planning Failures: Dr. Nicholas Elian, Englewood Cliffs, N.J.
- Soft-Tissue Esthetics: Dr. Bobby L. Butler, Seattle, Wash.
- Hard-Tissue Failure: Dr. Donald S. Clemen, Fullerton, Calif.
- Esthetic Failures Caused by Implant Malpositions: Dr. Daniel Buser, Bern, Switzerland.

The 25th anniversary annual meeting will kick off Thursday, March 4, with the opening symposium, “A Quarter Century of Experience: The Formula for Predictable Implant Success in the Esthetic Zone.” Moderated by Dr. William R. Laney, the program will examine why problems occurred, the clinical application of computer-guided surgery for implant placement, techniques to optimize provisionalization in the esthetic zone and final prosthesis.

Program speakers include Drs. Ueli Grunder, Zurich, Switzerland; William C. Martin, Gainesville, Fla.; Konrad H. Meyenberg, Zurich, Switzerland; Louis F. Rose, Philadelphia, Pa.; Alan L. Rosenfeld, Park Ridge, Ill.; Clark M. Stanford, Iowa City, Iowa; and Dennis P. Tarnow, New York, N.Y.

Other annual meeting highlights will include:

Hands-On Workshop — This pre-meeting, daylong series of sessions will explore how 3-D imaging and navigation technology helps providers fabricate surgical templates, generate final prostheses and place implants more effectively as part of the “team approach” concept. The Hands-On Workshop Committee has secured the support of Astra, BioHorizons, BIMET 3, Knee Dental and Nobel Biocare to provide equipment, supplies and speakers for each session.

(April, Wednesday, March 3)

AO Corporate Forum — AO’s 2010 Corporate Forum features 56 manufacturer-hosted educational sessions that showcase the latest research, products, techniques and developments.

“Two-Track” Scientific Program — The Surgical Track will explore “Surgical Procedures to Enhance Implant Success in the Esthetic Zone.” The Restorative Track, “Where, When, Why and How,” will cover prosthodontic considerations for restoring angled or tilted implants, endentulous vs. implants; and early predictors for biological and technical complications.

(Saturday, March 6)

Round Table Clinics — Twelve separate sessions offer attendees the opportunity to discuss diverse implant dentistry Top topics, everything from immediate placement of wide-diameter implants and image-guided surgery to implant complications in small, informal settings with presenters.

(Friday, March 5)

Limited Attendance Lectures — These lectures increase interaction between annual meeting attendees and world-class clinicians on a range of topics, including strategies and techniques for maxillary sinus elevation, the sandwich osteotomy and immediate loading for the edentulous patient.

(Friday, March 5)

Allied Staff Program — The annual meeting’s Allied Staff Program, scheduled for Saturday, March 6, offers concurrent sessions designed for dental lab technicians and hygienists. The daylong series of programs includes the AO’s scientific-based lectures that tie in with the meeting’s overall theme.

The AO will distribute complete program and registration information in December. Additional details on the 2010 annual meeting are available online at the Academy’s Web site at www.osseo.org.
Zimmer launches Hex-Lock short abutment

Zimmer Dental Inc., a leading provider of dental oral rehabilitation products and a subsidiary of Zimmer Holdings, Inc., is pleased to announce the availability of the Hex-Lock® Short Abutment and Restorative System in the United States.

Created to minimize the challenges faced by clinicians and labs, this new, all-inclusive system promotes simple, immediate and convenient posterior restorations.

The Hex-Lock Short Abutment and Restorative System includes the new titanium Hex-Lock Short Abutment and corresponding Short Restorative Components, innovatively designed to address a myriad of challenges presented to clinicians and labs during the posterior restoration process, including limited interocclusal space, reduced visibility and time-consuming prep work.

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The Hex-Lock Short Abutment and Restorative System is ideal for single- and two-stage protocols, and is designed to work seamlessly with the popular Tapered Screw-Vent® and Screw-Vent® Implant Systems.

Contact a Zimmer Dental Sales Consultant or Customer Service at (800) 854-7019, (760) 929-4500 (for outside the United States), or visit www.zimmerdental.com for more information.
RIEMSER launches CollaGuide membrane

RIEMSER, Inc., a leading supplier of bone regeneration products, announces the launch of CollaGuide™, a new collagen membrane designed for ease of handling, based on its resiliency, and ease of placement, based on its translucency and adherence to surrounding tissue. CollaGuide is approved for guided tissue regeneration (GTR) and guided bone regeneration (GBR) indications.

Derived to ensure the highest purity, CollaGuide membrane, developed and manufactured by Kensey Nash Corporation (NASDAQ: KNSY), contains no chemical cross-linking. Unlike many other collagen membranes, CollaGuide is translucent and non-friable with a morphology of dense fibers that gives it mechanical strength. In addition, its fibrous structure creates porosity that retards epithelial down growth and prevents gingival connective cell migration into the wound site. CollaGuide is available in three sizes: 15 mm x 20 mm, 20 mm x 30 mm, and 30 mm x 40 mm.

“Because of interest from dental practitioners, we wanted to add an easy-to-use collagen membrane to our product line for the busy implant office,” said Rick Patton, RIEMSER vice president. “Based on its combination of transparency, pliability and dual-sided application — i.e., the doctor can place it either side up — CollaGuide will simplify procedures, particularly because it can be sutured into place using absorbable sutures or affixed with resorbable tacks.”

RIEMSER Inc., based in Research Triangle Park, N.C., has a product portfolio that also includes Cerasorb® M grafting material, EpiGuide® membrane, REVOIS® implant products, and the Bacterin family of products, including Osteo-Sponge® Block, Osteo-Sponge® Filler, OsteoWrap® and D-Block.

PaX-REVE3D by eWoo available

PaX-REVE3D is the new flagship three-in-one dental CBCT from VATECH and E-WOO. The combined X-ray modalities of digital pano, ceph and dental CBCT provide the ultimate versatility of a single X-ray system and increase the system utilization rate to one that was never available before.

PaX-REVE3D offers the field-of-view (FOV) size of 15-by-15 cm, which provides the anatomical information of the maxillofacial region, including a condyle on both sides, with a single scan. The size of the FOV is customizable, based on an individual treatment need to avoid radiographic information and X-ray exposure in places other than at the region of interest. It is equipped with a flat-panel, cephalometric X-ray detector (FPXD) that produces a radiographic image quality comparable to a digital picture.

The new FPXD from VATECH and E-WOO captures a radiographic image in less than a half second, which means no image distortion from patient movement.

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