Under a warm, clear Dublin sky, dental professionals from around the globe gathered on Wednesday at the Convention Centre Dublin for the 22nd Annual Scientific Meeting of the European Association for Osseointegration. Held for the second time in the Irish capital since 1995, the congress aims to evaluate the latest concepts and innovation in dental implant rehabilitation and other issues related to the field. On Friday, for example, the use of implants in an ageing population will be discussed.

Thousands of dental professionals from Ireland and abroad are expected for the event, which is also presenting the latest materials and products in the field at an industry exhibition on the ground floor. Leading providers have announced the launch of new implant lines and digital treatment solutions that will help dentists achieve better treatment outcomes for their patients.

More information about the meeting, scientific sessions and industry exhibition is available on the EAO congress website. The association has also recently launched the latest version of its application for mobile devices and tablet computers that is aimed at giving visitors quick access to congress-related information. Daily news updates, interviews and product reviews from the show floor are available on the Dental Tribune website at www.dental-tribune.com. The newsfeed can also be accessed by scanning the QR code below.

Clear, sunny start for Dublin meeting of the EAO
Latest concepts and technologies in dental implant rehabilitation discussed until Saturday

Bone & Tissue Days 2013/2014
botiss biomaterials bone & tissue days focus on new scientific and clinical concepts in dental bone and tissue regeneration. Latest trends and results, innovative technologies and surgical techniques combined with clinical training and hands-on courses are introduced.

Istanbul
22nd-23rd Nov. 2013

Berlin
18th-20th Sept. 2014

Innovation, Regeneration, Aesthetics.

botiss biomaterials offers you a unique systematic BTR approach, the complete regenerative biomaterial portfolio for Implantology, Oral Surgery, CMF and Periodontology out of one hand,

www.botiss.com
“The term ‘implantologist’ is ill-defined and often misleading”

An interview with Dr Nikos Mattheos, Hong Kong

Dr. Nikos Mattheos: It is true that a wave of negative publicity recently affected the whole of implant dentistry in Japan. A few high-profile cases of complications after the placement of dental implants were picked up by the daily press and blown out of proportion, with the help of some negative statistics. This had a direct and drastic impact, as the number of treatments with dental implants dropped dramatically within a short period.

It is unfortunate that as a result of this negative publicity many patients who could benefit from implant treatment significantly are becoming increasingly hesitant to seek or accept implant treatment. But it also offers an opportunity for a more thorough and realistic portrayal by the media, or to some extent the lack of education and skills in placing dental implants.

Today International: Dental implants have gained a negative image recently in countries like Japan. Is this perception due to portrayal by the media, or to some extent the lack of education and skills in placing dental implants?

Dr. Nikos Mattheos: In Japan, the number of complications with dental implants has increased the amount of teaching. Nowadays, a general practitioner has the skills and competencies in implant dentistry that are necessary to maintain this knowledge in the dental curriculum for most dental schools. The lack of time in the curriculum, lack of resources or staff, as well as departmental fragmentation, make the implementation of implant dentistry a challenging task for dental schools. Progress has been achieved nevertheless. Several initiatives to standardise norms and guidelines in implant education already exist. What are the main obstacles to implementing them?

Dr. Nikos Mattheos: In 2008 in Prague, we managed to come up with a consensus on the knowledge and competencies a general dentist today must possess in implant dentistry. It is without a doubt that general practitioners must have a thorough understanding and certain skills, regardless of whether he or she will choose to place or restore dental implants.

What we realised in 2013 however is that although it is relatively easy to identify what a general practitioner needs to know it has proven to be a very difficult exercise to implement this knowledge in the dental curriculum for most dental schools. The lack of time in the curriculum, lack of resources or staff, as well as departmental fragmentation, make the implementation of implant dentistry a challenging task for dental schools. Progress has been achieved nevertheless.

Virtual implant planning and guided implantology have the potential to enhance implant treatment outcomes significantly. Are these technologies of benefit to dental implant education or do they make it more challenging?

Dr. Nikos Mattheos: Technology has offered many solutions to clinical problems, and computer-aided planning in combination with CAD/CAM technology has opened up possibilities for effective and quick treatment of rather complex cases. Although such technologies are certainly promising, there are still challenges related to their application. Many clinicians mistakenly think such technologies as compensating for a lack of clinical experience, as they are often led to believe that with the help of guided surgery even a relatively inexperienced clinician can undertake complex treat-ments with safety and this is a dangerous illusion.

Another limitation is the high cost of such technology, which makes the investment worthwhile only when undertaking relatively large reconstructions. However, there is no doubt that it is in the hands of an adequately trained clinician computer-guided surgery combined with CAD/CAM technology can improve the quality of service offered to the patient and introduce many new possibilities.
Digital Impression and Workflow Solutions:

Henry Schein offers full digital seamless and easy to use workflow solutions for dental practices and dental laboratories under the ConnectDental Brand through its specialist teams. These teams of digital systems ConnectDental specialists provide professional and individually tailored product and service solutions built on an open platform.

Working with Henry Schein gives you following assurances:

- Professional advice through a personalized and workflow oriented approach supported by a team of Henry Schein ConnectDental specialists.
- Complete workflow management between practice and laboratory providing data transfer, interfaces and digital case management solutions.
- Implementation of your bespoke solution: Installation of network solutions, conebeam CBCT scanning, implant and prosthetic offerings, open digital impression scanning, chairside and laboratory side CAD/CAM systems, appropriate consumables and technical services and support.

www.henryschein.com
Resonance frequency analysis of dental implants placed with simultaneous sinus floor elevation

Preliminary results of an ongoing prospective study at the University of Bern announced

- Timing is a critical factor for the loading of dental implants. In the past 10 years, resonance frequency analysis (RFA) has become the method of choice for this examination. Using the 3rd generation of this RFA device (Ostell®), a small metal pin (SmartPeg®) is firmly inserted into the implant to allow the measurement of the Implant Stabili- ty Quotient, called ISQ value. The higher the ISQ value, the better the implant stability.

- RFA was used at the Department of Oral Surgery and Stomatology in Bern since 2004 to determine ISQ values of implants. They were placed in healed sites in the posterior mandible and measured after 8 weeks (min 58; max 84), and 74 at 8 weeks (min 58; max 83). In 69.6% of all implants, the ISQ increased over the 8 week period (median 9; min 1; max 28). In 14.3% of all implants, the ISQ decreased within 8 weeks (median -1; min -1; max -6). Two implants dropped below ISQ 70 and regained stability after additional four weeks of healing. One implant required 16 weeks to reach an ISQ value ≥ 70. Within the current observation period (since 01/2012) no implant was lost.

- The results suggest that the RFA technique is an effective method to measure implant stability objectively, and to help reduce the time to load for implants placed with simultaneous sinus floor elevation.

“…Nowadays, short implants can deliver a good anchorage in situations with limited bone height...”

- Short implants have gained increasing popularity in the field. Prof. Christoph Hämmerle about benefits, indications and challenges.

- The consensus defined them as 8 mm and less. The high interest comes from the possibility to provide less invasive treatments. Furthermore, short implants can lead to fewer complications and less morbidity. They decrease the costs, can deliver more predictable outcomes and are also easier to perform in many cases.

- With short implants you also need less complex diagnostics and you run fewer risks sometimes. All these factors make short implants an attractive option, often providing a completely different strategy for implant placement.

- Most publications describe the use of the short implants primarily in the posterior region. Short implants help in the maxilla to avoid sinus lift augmentation, while in the mandible they help to avoid vertical ridge augmentation.

- A challenge could be a patient requiring a short implant owing to reduced bone height, but who still needs an additional augmentation procedure because of insufficient bone width.

- Alternatively, in the sinus area, in cases of soft bone, it would be difficult to get a good anchorage with a short implant. The healing time needs to be increased and implant loading delayed to ensure an undisturbed osseointegration process.

- The consensus workshop has also defined three-year full-time programme, has achieved specific knowledge and competencies as defined by the respective scientific and government bodies, and can perform an array of treatments, for which he or she has undergone adequate training. However, the term “implantologist” is ill-defined and often misleading, as there is no widely accepted description as to what an implantologist is (competencies, scope of practice, etc.) nor any structured educational pathway defined for someone to reach such a status. So I think the consensus among university lecturers of implant dentistry will agree with the Irish dental council and will discourage the use of the terms “implant specialist” and “implantologist” in any context.

- The consensus workshop has also adopted this position and does not see any need for implantology as a new specialty. I cannot reveal any details, as the detailed position paper will be published in early 2014, but the consensus is that implant dentistry is a multidisciplinary treatment modality that at present does not fulfill many critical requirements for recognition as an independent specialty.

- Unfortunately, the truth is that many clinicians and societies are self-proclaimed implantologists or implant specialists, thus implying a special- ist status. An established specialist, for example a periodontist, is someone who has completed an accredited three-year full-time programme, has achieved specific knowledge and competencies as defined by the respective scientific and government bodies, and can perform an array of treatments, for which he or she has undergone adequate training.

- The preliminary results reported herein based on 82 dental implants placed in 37 female and 34 male pa- tients. 61.2% of the implants reached ISQ values ≥ 70 at the 8 weeks time point. The median ISQ value of all implants was 69 at baseline (min 37; max 84), and 74 at 8 weeks (min 58; max 83). In 69.6% of all implants, the ISQ increased over the 8 week period (median 9; min 1; max 28). In 14.3% of all implants, the ISQ decreased within 8 weeks (median -1; min -1; max -6). Two implants dropped below ISQ 70 and regained stability after additional four weeks of healing. One implant required 16 weeks to reach an ISQ value ≥ 70. Within the current observation period (since 01/2012) no implant was lost.

- The results suggest that the RFA technique is an effective method to measure implant stability objectively, and to help reduce the time to load for implants placed with simultaneous sinus floor elevation.