Greece inspired us once again

_Dr Antonis Chaniotis, Greece_

Athens, the home of democracy, philosophy and culture, welcomed evidence-based endodontics from 6 to 9 October for the 8th World Endodontic Congress. What an interesting combination for those lucky enough to have attended the meeting! The organising committee and the Greek team tried their utmost to satisfy the expectations of the demanding audience. Honestly, with the impressive list of international keynote speakers the organisers were able to attract—Profs Syngcuk Kim (USA), Paul Abbott (Australia), Craig Baumgartner (USA), Edgar Schäfer (Germany), Ken Hargreaves (USA) and Shimon Friedman (Canada)—this was relatively easy. To me, it felt as if chapters of classic endodontic textbooks popped up right in front of me.

The congress was sponsored by major dental industry players. DENTSPLY-Maillefer played a key role as gold sponsor of the event. In a pre-congress course with Prof Sergio Kuttler, DENTSPLY launched the new WaveOne reciprocating file. DENTSPLY also organised hands-on courses at their booth and a wonderful cocktail party, which was held on the top floor of the Athens Hilton Hotel. The view of Athens from up there was absolutely breathtaking!

There was a tangible feeling of competition in the entire exhibition hall. The Self Adjusting File team did a great job promoting their new irrigation file structure and VDW and MICRO-MEGA also launched new products. Frankly speaking, promoting anything at this meeting was a difficult task because of the very demanding audience. Each participant sought documentation for just about everything being presented. When appropriate evidence was not yet available, the audience acted with reserve and caution.

The scientific programme was opened with a bit of dental history by Prof John Ingle (USA). Did you know that the first short Walt Disney ever made was on dentistry? In 1922, Walt Disney created _Tommy Tucker’s Tooth_, a silent film about children’s oral health.
he was still a struggling cartoonist in Kansas City. Payment for the film allowed Disney to settle debts and head for Los Angeles, where he launched his historic career in animation and moviemaking. I, as well as many others in the audience, enjoyed watching the film for the very first time. Prof Ingle, we are grateful for your contribution to the congress!

Lectures of the highest quality marked the congress in Athens. Prof Hargreaves, Dr Gabriela Martin (Argentina) and many others presented evidence for revascularisation and regeneration efforts. Antibiotic pastes, scaffolds, cells and growth factors performed on the stage under the guidance of the speakers. Researchers and industry leaders are working on these issues and some major advances in this field may be very near.

Dr Enrique Merino (Spain) explored the endo-implant controversy and Dr Giuseppe Cantatore (Italy) lectured on A critical approach to new NiTi instruments for mechanical glide path. It was impossible to attend every session, as there were simultaneous lectures in different halls, as well as high-quality poster sessions. One presentation that impressed me in particular was Three-dimensional photography in endodontics by Dr Moscoso and colleagues from the University of Catalonia in Barcelona, Spain. Imagine your PowerPoint presentations and your microscope videos being transformed into a 3-D visual experience!

Dr Luc van der Sluis (The Netherlands) and the fluid dynamics team were also present and gave an overview of their interesting research on irrigation dynamics and delivery techniques. “Maybe in the future we will produce some kind of bioactive yogurt to fill the canals effectively,” commented Dr van der Sluis in a private conversation. In my opinion, until we do, we will have to present and seek evidence for everything we do.

Effective root-canal debridement and disinfection techniques were reconsidered by Prof Baumgartner in his inspiring lecture. Are we close to sterilisation of the infected root-canal system? According to Prof Baumgartner we are “pretty close”.

On the last day of the congress, Prof Kim held a passionate lecture on evidence-based endodontic microsurgery and Prof Friedman’s closing lecture offered the best of current evidence for treatment outcomes, supporting what we do and that about which are passionate—Evidence-based Endodontics, which was the theme of the congress.

A lucky few had the privilege of watching Prof Kim perform live surgery on a mandibular molar under the microscope. The event was sponsored by Satelec and Carl Zeiss and took place at the facilities of the University of Athens Dental School.

In closing, I would also like to say a few words about the social programme. The welcome reception took place on a cruise boat, at which the Ouzo and Greek wine served offered attendees the opportunity to relax after the high level but exhausting sessions. The Gala Dinner, which was held at the well-known Aegli Zappiou Restaurant, was so entertaining that many of the participants found it difficult to wake up in time for the morning sessions. Prof Baumgartner, we thank you for waking all of us up in the first ten minutes of your inspiring lecture.

I could write many more pages about what happened in Athens during the 8th World Endodontic Congress, but I think I have made my point. Thank you Athens! We will remember you as a wonderful host!
A meeting of minds—
Seeing is believing

From 16 to 18 September 2010, over 300 delegates from 30 different countries assembled in Vilnius, Lithuania, for the second congress of the European Society of Microscope Dentistry (ESMD). I have attended several meetings dedicated to microscope dentistry during my career and have to admit that this one was as good as they get.

Simply put, the better you can see something, the better you can understand and treat it, and, thanks to the great imaging ability of microscopes, the better you can document and share the information with your patients and colleagues. For those of us who have already adopted this technology in our daily work, there is no going back. Today, the operating microscope (OM) is no longer only used by endodontists. Prosthodontists and periodontists equally are enhancing their treatments with magnification, illumination and documentation.

On the first day of the programme, delegates were able to select from a variety of hands-on workshops, including microsurgery suturing, non-surgical endodontics, precision preparation techniques for crowns and veneers, 3-D obturation techniques, soft-tissue management around implants and microsurgical reconstructive procedures. Alternatively, master classes in practice management, digital imaging, matrix-free composite build-ups, laser use, tooth discolouration treatment and 3-D diagnosis were offered. The main programme, which offered introductory workshops on microscope use, allowed international speakers to demonstrate their expertise and the accuracy of their periodontal, prosthetic and endodontic skills. The wonderful aspect of presentations at today’s meetings is the tangible manner in which information can be presented through video and still photography taken through the OM—and not only one or two images but a whole stream of pictures that really convey the techniques, benefits and outcomes of the treatment. This is a level of discussion, education and knowledge transfer that was previously not possible.

An innovative and successful live demonstration of a periodontal surgery, performed by Dr Jan Behring, and a molar preparation, performed by Dr Horst...
Behring, was offered via satellite link from a dental clinic in Hamburg, Germany. The presentations, which were moderated by Prof Stefan Ioan Stratuli (Romania), alternated between the two treatment rooms in the clinic as the procedures progressed. Most of the images shown in the main lecture hall came from full-HD video cameras mounted on the clinicians’ OMs. I have to congratulate my colleagues on presenting these procedures in real time (!) to over 200 eager attendees, who were also able to ask questions throughout the treatment process. In fact, the entire session was a logistical, educational and treatment triumph!

A selection of workshops and lectures on staff and practice management interspersed the programme and was received with much interest. Dentists who use OMs are very focused on their clinical skills. However, microscope use requires a good support team and a securely based business. Additionally, it is true that patients do not judge us based on our clinical skills only, but also on the image of our practice. We need to be aware of the image our practice conveys and not only focus on what we see though our microscopes!

Another real strength of this congress was the opportunity to meet the suppliers and manufacturers in the exhibition hall. Attendees were able to check out the latest in microscope technology, as well as instrumentation and imaging. The industry sponsors, such as Sigma Dental Systems, Global Surgical, DENTSPLY Maillefer, EMS and Nobel Biocare, who help make these meetings possible, must also be recognised.

The social programme was very well organised, with a welcome reception at the National Gallery of Art and a gala dinner at the Vilnius Town Hall the following evening. Vilnius is a most interesting place to visit—a mix of the very old and the very new and an awareness of the really quite recent changes in Lithuania’s political climate.

The venue, the Radisson Blu Hotel Lietuva overlooking the Neris river, was just a short walk from the ancient town centre of Vilnius, making it well located and attractive at the same time, with great views over Vilnius and good ambience and customer service overall.

Microscope-using dentists might be seen as a special ‘breed’, a rather elitist self-selecting group. In my opinion, microscope-using dentist are concerned dental clinicians, following a logical progression of endeavour that modern technology allows. Additionally, they are knowledgeable, open to sharing their experiences and a wonderful group of people to be around. This congress was a great opportunity to gain exposure in this regard and my heart-felt congratulations go to the organisers. I look forward to the 2012 Berlin meeting.
Endodontics provides an important foundation for long-term and lasting tooth preservation. In light of an ageing society, this dental discipline is increasingly gaining importance. With evidence-based success rates of up to 85 per cent for treatments performed lege artis, endodontics has long been established in the range of therapies offered by general dentists, while at the same time offering a variety of tasks for specialists. According to Dr Martin Rickert, Chairperson of the Board of the Association of German Dental Manufacturers (VDDI), “The impressive scientific and technological progress in the field of endodontics has improved the odds of long-term tooth retention tremendously and puts this speciality at the centre of a prophylactic-conservationist approach to dentistry.” The latest methods employed in conservation therapy include manual and automatic root-canal preparation, efficient rinsing methods during disinfection, and modern instruments and materials for obturation. Today, even the treatment of anterior teeth with fractured crowns and roots is possible through the use of advanced fiber post systems, amongst other techniques. Additionally, if root-canal revision should become necessary, endodontic specialists have a range of minimally invasive microsurgical treatment options available to them, including the treatment of complex endo-periodontal lesions.

The many years of intense collaboration between a large number of specialists and companies in the dental industry have resulted in the well-engineered instruments and material systems available today that increase accuracy of diagnosis and, above all, improve treatment of root-canal lesions. Modern imaging techniques, for example, allow the precise visualisation of the root canal and thus enable both endometry up to the apex and the exact determination of the file position during preparation. Digital X-rays and digital volumetric tomography are also becoming increasingly important. Moreover, high-
resolution intra-oral cameras are used for the time-saving online documentation of the treatment, as well as for diagnostic purposes.

Another important trend is the increased use of mechanised root-canal preparation. In particular, computer-designed file geometries with optimised conicities and cutting edges result in greater safety and efficiency. Modern materials, such as nickel-titanium or titanium-niobium alloys, have vastly improved the durability of rotating preparation and revision files, thus virtually revolutionising endodontic treatment options. A conical preparation is now also possible in severely curved root canals. High-performance, electronically controlled drive units with torque control largely help to eliminate fracturing when using the mechanised files.

Technological progress has also been made in other areas of endodontics. The working length is determined by means of either X-rays or modern electrometric measuring units that cause no additional exposure to radiation. Effective chemicals that can be enhanced via ultrasound-supported or hydrodynamic methods are used to irrigate root canals, which frequently determines the failure or success of the procedure. Modern sealer adhesives and cements based on composites are available for bacteria-tight obturation. Classic methods, primarily gutta-percha techniques, can also be used. There has been significant progress in this regard as well. For example, new equipment systems for warm vertical condensation ensure better adaptation of the thermally plasticised gutta-percha to the canal walls. The 34th International Dental Show (IDS) will be a particularly valuable source of comprehensive information for anyone wishing to learn about the entire spectrum of new developments in endodontics.

Aside from routine tasks that can be performed by general dentists, endodontics also offers a challenging field of work for specialists, which includes complex revisions, root-end resections, and the restoration of teeth with fractured crowns and roots. In order to complete these treatments successfully, experts have a wide variety of tools available to them, such as loupe systems or surgical microscopes that permit minimally invasive microsurgical endodontic surgery.

At the next IDS, which will be held from 22 to 26 March 2011, the solutions offered by endodontic specialists and renowned companies in the dental industry will demonstrate the integration of standard endodontic services and specialisation opportunities into the day-to-day routine of a dental surgery. Interested trade visitors can take advantage of this expertise and experience during the fair. Visitors will also have the opportunity to ask questions and discuss problems with the experts at a unique international forum. IDS is the ideal opportunity for dentists and dental technicians to gain the latest information on endodontics, as well as learn to implement it in their dental surgery and to integrate complex treatment systems at an expert level. Successful endodontic treatment increases the likelihood of tooth preservation, makes for satisfied patients and ultimately enhances the image of the dentist’s surgery.

“From 22 to 26 March 2011, the International Dental Show in Cologne—the world’s largest trade fair for dental medicine and dental technology—will be the best place for dentists interested in endodontics and their assistants to talk to specialists from the exhibiting companies and experienced users about the whole spectrum of modern endodontic concepts and current trends in treatments and diagnostics,” concludes Dr Markus Heibach, President of the VDDI.