Quest for the Perfect Restoration

By Dr. Munir Silwadi, UAE

The much anticipated event will have 27 International Speakers, 24 Presentations, 12 Sponsors and 19 Industrial Players, bringing the latest in the field of Dentistry. This year’s annual CAD/CAM & Digital Dentistry International Conference is co-organized by Emirates Dental Society, Saudi Dental Society, Lebanese Dental Association and Centre For Advanced Professional Practices — spearheaded by Dr. Dobrina Mollova, DDS, experienced provider of Continual Medical Education for the last 10 years in the Middle East and Asia.

The event enjoys accreditation and SHS, including cutting edge presentations and an impressive lineup of lectures to be provided by opinion leading Dental Professionals such as: Prof. Dr. Dr. h.c. Georg Meyer, Germany; Dr. Andreas Kurhad, Germany; Dr. Lida Swann, USA; Lee Culp, CDT, USA; Dr. Andrea Mastrorosa Agnimi, Italy; Dr. Alessandro Agnimi, Italy; Prof. Alfred Hans Resch, Germany; Dr. Ulrich Wegmann, Germany; Dr. Maria Hardman, UK and Dr. Ziad Salameh DDS, MSc, PhD, Lebanon.

The two-day Scientific Session is complimented by eight hands-on courses, pre- and post-conference, including: Indirect Veneers; Laser; Unconventional Management for Soft & Hard Tissue; Mastering Dental Technology; Aesthetics and function; Orthodontic – surgical... 

First Dental Technician Forum highlights current developments in dental labs

By Dr. Dobrina Mollova, DDS

Singapore: Dental technicians are a very important part of the dental team. As an extension of IDEM’s educational offering, the first Dental Technician Forum organised by the Centre for Advanced Professional Practices in Dubai and Koelnmesse saw over 220 dental technicians from 18 countries come to Singapore to develop the knowledge and skills they need to keep pace with the rapid advances and innovations in dental technology. An exhibition sponsored by VITA, Sirona and SHERA, among other companies, created excellent networking opportunities and had the latest developments, systems and technologies on display.

Moderated by key opinion leaders from around the globe, the two-day event saw participants sharing and discussing cutting-edge knowledge and the newest clinical approaches in prosthetics, orthodontics, implants and prosthodontics.

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“New educational format presented at IDEM Singapore a success”

The four table clinic presentations, which ran concurrently, were among the most appealing and enjoyable sessions for all participants. Among other things, new hybrid materials and techniques were presented. Participants were also given the opportunity to ask questions on real cases that were printed live with help of 3-D scanners and milling machines. By analysing different cases, brothers Drs Andrea Mastrorosa Agnini and Alessandro Agnini from Italy gave the audience a surprising insight into the operational techniques that they have developed over time with their increasing knowledge of new materials. With new technologies replacing traditional materials and techniques, they said that achieving good clinical results has become more systematic and time effective.

A ceramist and professional photographer, Naoki Aiba demonstrated the capture of shade photographs in order to communicate shade accurately. Tips for calibrating and coding a shade guide were also given. Hue and value analysis of models milled by the inLab system, accuracy of shade view photographs were also demonstrated with shade view photographs.

Rik Jacobs’ presentation on the latest developments concerning 3-D printers, software, bio-compatible materials and workflow management drew a large crowd of not only participants but also industry representatives.

The discussion lasted over an hour with debates sparked about the suitability of alginate impression materials for scanning, the accuracy of models milled by the inLab MC XI (Sirona Dental Systems), the shade availability of crown and bridge materials, as well as which zirconia blocks are recommended for good aesthetics.

Don’ts, aesthetics in implantology, and CAD/CAM technologies, among others. “Things in the dental lab are changing in a rapid manner. Digital technology and workflows allow us to be more economical and creative with new materials and produce excellent aesthetics,” said Swiss master dental technician Vanik Kaufmann-Janssion, who presented a lecture on minimally invasive restorations with CAD/CAM.
CEREC
Desert Fest

The Palace Hotel Downtown
12-13 September 2014
Dubai, UAE
www.cappmea.com/cerecfest

Panel Show
Desert Night
Clinic Presentations
14-15 November 2014
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6th Dental - Facial Cosmetic International Conference

Joint Meeting with

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Hands-On Courses

Indirect Veneers
Dr. Munir Silwadi, UAE

Face & Smile Analysis
Dr. Eduardo Mahn, Chile

Direct Veneers: The Shade Dilema
Dr. Eduardo Mahn, Chile

Veneers/ Crowns
The Challenge in Smile Design
Dr. Eduardo Mahn, Chile

www.cappmea.com/aesthetic2014
World oral health report: Almost 100 per cent of adults suffer from dental caries

The One

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By Dental Tribune International

LONDON, U.K.: In celebration of World Oral Health Day, representatives of the FDI World Dental Federation presented the latest findings on oral health on 20 March at a press conference held in collaboration with the British Dental Association in London. The report identifies the main obstacles to achieving universal oral health and includes recommendations to improve oral health worldwide.

Among other aspects, the report, titled “Oral health worldwide: A report by FDI World Dental Federation,” highlights that nearly 100 per cent of adults and between 60 and 90 per cent of children worldwide have dental caries, which results in millions of lost school and work hours. For instance, in the US, an estimated 2.4 million days of work and 1.6 million days of school are missed owing to oral disease. In the Philippines, toothache is the primary reason for school absenteeism. The FDI stated that about 97 per cent of Philippine 6-year-olds have dental caries.

In addition, the report states that only 60 per cent of the world’s population have access to oral care, creating enormous disparities between different populations. According to the FDI, people of a lower socio-economic status visit the dentist less often and have fewer fillings, more missing teeth, higher tobacco consumption, higher rates of caries and untreated decay, and higher rates of periodontitis compared with those of a high socio-economic status.

In order to increase access to oral care, the training of the oral health workforce needs to be strengthened and expanded to improve the quality of and increase the number of oral health professionals. Moreover, emphasis needs to be put on the equal geographical distribution of oral health personnel, especially within developing countries, where the dentist-to-population ratio is approximately 1:150,000 compared with about 1:2,000 in most industrialised countries.

The FDI further highlighted that a solely curative approach to tackling the burden of oral health is neither realistic nor sustainable. The organisation asserts that the prevention of oral diseases and promotion of oral health must be at the core of national policies and programmes. In this respect, global and national surveillance should be strengthened to identify risk factors and oral health needs as a basis for developing appropriate approaches and measures, the FDI stated.

The event also saw the launch of The Tooth Thief, an illustrated book for children that includes oral health tips. The book emphasises the importance of good oral health to children to instil good oral care habits from a young age. The foreword was written by Yaya Touré, Manchester City Football Club player and three times African Footballer of the Year, who was this year’s World Oral Health Day ambassador.

The book is available from the Apple iBooks Store and Amazon, and can be downloaded from the World Oral Health Day website, www.worldoralhealthday.com. The complete white paper can be accessed free on the website as well.
Passive micro-volume management of sodium hypochlorite in endodontic treatment

By Les Kalman, B.Sc (Hon), DDS

The passive utilization and micro-volume management of sodium hypochlorite as an endodontic irrigant has been presented with a laboratory demonstration and several clinical cases. By limiting the volume and pressure of sodium hypochlorite, the injurious effects can be minimized while still benefiting from the ideal disinfecting characteristics. Further studies are required to understand the behavior of fluids, especially sodium hypochlorite, within the context of permeability, fluid mechanics and multiphase fluid flow through porous media.

Introduction

Endodontic treatment addresses the removal of the tooth’s internal pulp and microorganisms, primarily due to infection and necrosis. Once proper diagnosis and prognosis has been established, the patient has the option of maintaining the tooth’s form and function while the vitality becomes lost. Current endodontic treatment consists of utilizing rotary files to remove the pulpul tissue of the canal and shape the internal dentin chamber of the tooth. Chemicals, in the form of gels and liquids, are then implemented to disinfect the canal(s) and eliminate bacteria. The chemicals within the canal space are most successful when applied via capillary action. The operator has control of the minimized liquid while ensuring its effective ness.

Micro-volume management of NaOCl has been proposed. The concept is based on the premise that endodontic instruments have irregular surfaces, crucial for dentinal preparation, and that liquids exhibit surface tension characteristics. By placing an instrument into a suitable container, the NaOCl will be carried within the complex network of the instrument (Figs. 1, 2). The operator has control of the minimized liquid while benefiting from its effective ness.

The micro-volume management of sodium hypochlorite has been applied to numerous clinical cases. Post-operative obturation radiographs of completed clinical cases have been presented (Figs. 5-9).

Micro-volume management of NaOCl has been suggested as a delivery modality to maximize its bactericidal effects yet minimize its injurious effects. Surface tension fluid mechanics and permeability suggest that the NaOCl can be carried within the surface irregularities of endodontic instrumentation and deposited into the canal space and percolate within the complex network of the canal. The passive management of the irrigant in micro-volume would greatly reduce complications due to poor handling. CHX has been distinguished.

Discussion

Injury from NaOCl is well established in the literature and has been attributed to three main errors: poor handling, injection beyond the apical foramen and allergy.3 Poor handling injury can result in operator and/or patient injury to the eye and/or skin. Injection beyond the apical foramen can result in the following:

• immediate and severe pain
• edema to adjacent tissue
• edema to the lip, infranor nal region and side of face
• intense bleeding from within the canal space
• skin and mucosa bleeding
• intestinal bleeding
• secondary infection.

Allergy from NaOCl is rare but has been reported and may result in severe pain, a burning sensation, edema and transient paraesthesia.

Methodology

Although there is no universally accepted irrigation protocol regarding endodontic treatment,3 it is the duty of clinicians to apply evidence-based dentistry within clinical parameters to provide their patients with the highest standard of care with minimal morbidity. The use of NaOCl has numerous beneficial factors that maximize treatment success; however, it is the application of the liquid that can cause injury.

Micro-volume management of NaOCl has been proposed. The concept is based on the premise that endodontic instruments have irregular surfaces, crucial for dentinal preparation, and that liquids exhibit surface tension characteristics.3 By placing an instrument into a suitable container, the NaOCl will be carried within the complex network of the instrument (Figs. 1, 2). As the operator inserts the instrument into the canal (Fig. 3), the NaOCl is carried with it. Upon instrument movement, the NaOCl is released into the canal space (Fig. 4). Surface tension and permeability of porous media (dentin) will also increase the ability of the liquid to percolate into the canal.3 This approach is radically different than current philosophies, as the NaOCl is introduced into the canal space in a micro-volume amount without any pressure. The canal system inside a tooth is very complex. Although there is the presence of one or more canals, there also exist numerous micro tunnels, ribbons and sheets throughout the canal network.3 The canals are also housed within a canalicular structure, for which the permeability has been distinguished.3 Although the elimination of the pulp is a relatively predictable clinical procedure, the introduction of liquids into this complex micro-network porous development further complicates matters. If the clinician introduces liquids, then the successful removal of those liquids is key to clinical success.

Concepts of multiphase fluid flow through porous media, and capillaries, 10 permeability of porous media and surface tension fluid mechanisms must be recognized to validate and further advance canal irrigation.

Micro-volume management of NaOCl has been suggested as a delivery modality to maximize its bactericidal effects yet minimize its injurious effects. Surface tension fluid mechanics and permeability3,10 suggest that the NaOCl can be carried within the surface irregularities of endodontic instrumentation and deposited into the canal space and percolate within the complex network of the canal. The passive management of the irrigant in micro-volume would greatly reduce complications due to poor handling. CHX has been distinguished.

By Les Kalman, B.Sc (Hon), DDS

Fig. 1 DENTSPLY Vortex rotary file with sodium hypochlorite. (Photos/Provided by Les Kalman, B.Sc (Hon), DDS)

Fig. 2 DENTSPLY Profile rotary file with dry sodium hypochlorite.

Fig. 3 Micro-volume delivery of sodium hypochlorite with rotary file.

Fig. 4 Sodium hypochlorite in block with rotary file.
The application of micro-volume management of NaOCl suggests that the canal space can be effectively cleaned in a conservative manner. Application of this principle has been applied to clinical cases with little to no post-endodontic sensitivity. Obturation has been completed with Therma-Seal and Thermafil (DENTSPLY). Even though there is evidence of sealer extrusion, the absence of post-operative symptoms and pathology suggests adequate volume for sufficient disinfection. Further laboratory studies are required to understand permeability, fluid mechanics and multiphase fluid flow through porous media and their relation to the micro-management of NaOCl. Additional clinical investigations should be implemented to assess and validate the efficiency and efficacy of micro-volume management of sodium hypochlorite on endodontic therapy.

Conclusions
Introduction of lubricants and irrigants into the canal complex is crucial for endodontic success. The action of fluids in the canal complex must be understood within the context of permeability, fluid mechanics and multiphase fluid flow through porous media.

NaOCl has several advantages for its role as an endodontic irrigant, but its use must be exercised with caution in order to prevent injury.

NaOCl has several advantages for its role as an endodontic irrigant, but its use must be exercised with caution in order to prevent injury.
The power of cross coding: How hygienists can support their patients’ overall body health

By Marianne Harper

Have you lost the excitement? Are you content with what you might now perceive as the same-old, same-old every day? Day after day you may be performing hygiene procedures over and over again, all the while knowing you are helping your patients but perhaps you simply don’t feel as though you are truly making a significant difference in their overall health. If you feel that level of frustration, or even if you don’t, but you are interested in advancing your career, then read on to discover some ways in which you can make a significant difference in the health of your patients.

As you are aware, dentistry is becoming recognized as a medical discipline. We in the dental field are in a unique position to support our patients’ overall body health. Our patients who maintain their regular recall schedules are quite probably seen by us more frequently than they are seen by their primary care providers. “Around 59 percent of adults see their physicians in a year while 64 percent see their dentists, which means we see 25 percent more patients than they do.”

Hygienists can be key players in this opportunity. By thoroughly questioning their new patients and by providing and reviewing medical history forms that are updated with the most current medical questions, hygienists can begin an evaluation of their patients’ medical history. In addition, our established patients may have had a change in their medical history since their last appointment, so a recare update form is an efficient way to inquire about their health. If your practice is not familiar with recare update forms, please check my website to obtain a copy.

What is discovered from these questions can be a strong determining factor in how each patient is handled. Patient questioning should always be followed by dental exams, X-rays, blood pressure checks and clinical observations. For those patients who may have a systemic disorder, your practice should become proactive by referring the patient back to his or her primary care provider.

However, because dentistry has evolved over the last decade, there are more ways that the dental practice can help make these determinations. With the frequency of patients’ visits and the availability of numerous cutting edge diagnostic tools, we have the unique opportunity to administer different types of disease testing that, in the past, were performed only by medical practices.

If you are unfamiliar with the types of medical testing that are available for dental practices to perform, then the following information can make a big difference in the quality of your practice’s treatment, and it may help to make a significant change in how you perceive your career.

First of all, periodontal diseases and caries are bacterial infections, but the majority of dental practices diagnose these conditions through the use of periodontal probes and explorers. Have you considered that medical practices would never begin treatment without determining if they are treating bacteria or a virus? In dentistry, we need to differentiate between aspirin sensitivity, blood dyscrasias, other diseases, fungus, yeast or a cyst; so bacteriologic tests should be performed. Microscopic tests, DNA tests, or bac- teriologic tests should be performed if periodontal infections are apparent.

Tests that can be performed in a dental practice:
• Blood tests: blood sugar  • C-reactive protein (CRP) for inflammation  • BANA for bacterial pathogens or their byproducts  • DNA for the presence of specific pathogens or for patient susceptibility to periodontal disease  • TOPS for inflammatory markers  • Oral HPV testing  • Diabetes testing with a glucometer – finger stick or blood sample taken from a periodontal pocket  • Oral cancer screening (e.g. ViziLite)  • HIV testing  • Screening for cardiovascular disease (e.g. HeartScore System)  • Saliva, biomarker test – measures three specific biomarkers that play a role in cancer development in the oral cavity

As you can see, these tests cover many possible systemic conditions. Your practice will have to determine which staff members are allowed to administer these tests, because your state makes regulations controlling this. Hygienists may be allowed and, if so, this may make a difference in your career. Even if hygienists are not allowed per your state’s regulations, your hygienists may be part of the practice to add these tests to the practice’s procedure mix will be invaluable to the practice. In addition, hygienists need to realize the importance of their observations and questioning of the patients in helping to move these patients to better overall health. If hygienists are allowed to perform tests on the same-old, same-old.

Power of cross coding

There is, however, another area in which hygienists can make a significant difference in their practices. Dental-medical cross...
coding is a cutting edge insurance system whereby dental practices can file a patient's medically necessary dental procedures with their medical plans. Implementing cross coding creates greater ease acceptance resulting in increased patient affordability and practice profitability. Hygienists can play a key role in the implementation of cross coding. Hygienists can be the communicators for cross coding in their practices by alerting the practice of patients whom they believe are medically compromised. Such patients are excellent candidates for cross-coded claims.

As an example, hygienists can inquire about conditions that might indicate that a patient has sleep apnea (Fig. 1). For those practices that treat sleep apnea, the practice would then need to refer the patient for a sleep study before commencing treatment. If the practice does not treat sleep apnea, this referral would be the first referral needed for the treatment of another provider.

Hygienists can also be the champions for cross coding by encouraging that their practices implement a cross-coding system. In most practices, the business office staff will need to have been modified by a specific circumstance. As you can see, cross coding is not an easy system to implement. The answer to easing the difficulty with cross coding is to take a good course on the topic. You also can check out my website, www.artsofpractice management.com, to see the different tools available to help dental practices implement cross coding.

As mentioned already, the patient's benefit from cross coding is that medically necessary dental procedures can be made more affordable. It is possible to file the tests already mentioned with a patient's medical insurance plan. There are diagnosis and procedure codes that apply to these tests, but those are too involved for the scope of this article to provide all of the codes needed. There is no guarantee that these tests would be covered by the plan. According to the Centers for Medicare and Medicaid Services, "the existence of a code does not, of itself, determine coverage or noncoverage." It is certainly worth a phone call to determine coverage. I always advise practices that cross code procedures to give further diagnostic information or to provide information on why a procedure is between the insurance company and the employer, so dental practices have little power to make any plan changes. However, the more that complaints are issued, the more likely that medical insurance carriers will begin to see the necessity for including these types of procedures in their plans.

The full scope of cross coding is much more extensive than just these tests. Dental procedures should be cross coding for the following:

- Trauma procedures
- Oral surgical procedures
- TMJ procedures
- Sleep apnea procedures
- Medically necessary endodontic procedures
- Medically necessary implant and periodontal procedures
- Exams, radiographs and diagnostic procedures for any medically necessary dental procedure

Between implementing disease testing and cross coding, a hygienist will significantly make positive changes to his or her career. These hygienists will not only help patients obtain optimal health, but they can also help make procedures more affordable. Patients will be able to see their dental practice truly cares about the patient and will have more confidence in the practice. This is a true win-win situation. The dental practices will value the contributions of these hygienists, and hygienists will rarely face each day with that "same-old, same-old" feeling.

References

About the Author
Marianne Harper is the CEO of The Art of Practice Management. Her areas of expertise include revenue and collection systems, business office systems and the training of many articles published in dental/medical cross coding.

Harper is a consultant, trainer, lecturer and author. Her published content is entitled Walking — A Guide Through the Cross Walk of Dental to Medical Cod- ing” and her new Code-Hub series on medical cross coding. She also is the author of many articles published in dental/medical cross coding.

Contact her at: The Art of Practice Manage- ment, 2207 Fox Blom Road, New Bern, N.C., 28562, or by email at a.p.m.1@suddenlink.net.
Clinical Tips: Demi™ Ultra and C.U.R.E™ Technology: (Curing Uniformity & Reduced Energy) what this brings versus competition?

By Kerr

**C.U.R.E.™ Technology**

1. **Collimation:** collimated light is light with rays are parallel, and therefore will spread slowly as it propagates. The word is related to «collinear» and implies light that does not disperse with distance. A better collimation translates in more curing power and a less sensitivity to tip positioning.

2. **Depth of Cure:** according to the JADA, %57 of all composite restorations are insufficiently cured (Fan et al., 2002). Demi Ultra, compared to other lights, guarantees, in addition to an optimal curing uniformity, the best depth of cure.

**C.U.R.E.™ Technology**

1. **Tip Temperature:** an increase of °5.5C can cause irreversible damages to pulp.

Thanks to its proprietary C.U.R.E. technology, Demi Ultra is able to maintain low temperatures avoiding any tissue damage. Universal curing? Seems to be a compromise. Light and quality of cure.

The photopolymerization process of dimethacrylate-based dental resins is a reaction triggered by free radicals, which are generated by irradiation of a light-sensitive initiator and open the double bond of methacrylate groups (C=C), generating a chain reaction. The depth of cure can settle by playing on light intensity (or irradiance), wavelength and concentration and/or type of light initiators.

Curing Lights with violet LED to cure alternative photoinitiators provide non-uniform beam irradiance that leads to non-uniform cure. The power is distributed inefficiently and additional energy is needed to cure in depth. This unnecessary energy increases the heat and the risk of pulpal damages.

A non-uniform beam also penalizes the irradiance when increasing the tip distance as can be seen in the graph.

In dental composites, the most commonly used photoinitiator system is a combination of camphorquinone and tertiary amines (CQ/Amine). Other materials are blends of CQ and amines (CQ/Amine). Other photoinitiators.

**Don't Change Batteries, Change Curing Lights!**

The Kerr Demi™ Ultra LED Ultracapacitor Curing Light System represents the latest technological advancement in dental curing from the Kerr Demi brand. It is the first curing light to free dentists from both batteries and cords, while offering the unmatched performance and reliability of a Demetron curing light.

The Demi Ultra is powered by the revolutionary U40-™ Ultracapacitor – exclusive technology that re-energizes to full power in just 40 seconds, for incomparable convenience. Proprietary C.U.R.E. Technology™ allows the Demi Ultra to rapidly deliver a uniform depth of cure with industry leading low temperatures, and the Easy Suite feature set combines simple and intuitive operation with worry-free cleaning.

A new after sales service gives you the peace of mind to know your investment and budget are protected from the hassles of unexpected repair expenses.

Demi Ultra is a quantum leap in curing light technology!

**Easy Suite Feature Set**

- Revolutionary U40-™ Ultracapacitor
- Proprietary C.U.R.E.™ Technology
- Easy Suite Feature Set
- After Sales Service

**Accessories**

- Item nr 35665 - Demi Ultra Light Attachment 8mm
- Item nr 35666 - Demi Ultra Charging dock with radiometer
- Item nr 35667 - Demi Ultra Handpiece
- Item nr 35668 - Demi Ultra Light Shield
- Item nr 35837 - Disposable Hardness Disk Kit (pack of 1)
- Item nr 21042 - Optics Maintenance Kit
- Item nr PEDEMUILTRA100 - Demi Ultra Barrier Bag (pack of 100)

**Order Information:**

**Demi™ Ultra LED Ultracapacitor Curing Light System**

<table>
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<th>Description</th>
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<tr>
<td>35664</td>
<td>Contains: 1 x handpiece, 1 x 8 mm light attachment, 1 x charging dock with radiometer, 1 x power supply, 1 x protective light shield, 1 x hardness disk kit, 1 x -5 pack disposable barrier bag, 1 x IFU</td>
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Source: Dental Advisor, R. Yapp, May 2013
Moreover recent works reports that single diode blue LED light achieve similar degrees of polymerization than broadband (multiple diode) LED and halogen lights, just increasing the curing time when curing clear and white composite shades.

Light guide tip positioning!

The adequate positioning of the light guide tip/attachment can significantly affect the energy received by the RBC, and thereby the quality of its polymerization.

The light should be stabilized during the irradiation procedure.

As the irradiance decreases with the increase of the distance between tip and restoration, the position of the light guide should be perpendicular to the tooth and positioned on the proxim- ity of the tooth surface being restored.

Intensity and depth of cure decreases as the position of the light moves from the perpendicular.

It will be necessary to increase the cure time and/or cure from multiple directions if optimum positioning cannot be obtained.

By European University College

The European University College (EUC), held its official graduation ceremony on February 22nd at the Fairmont the Palm Jumeirah in Dubai.

45 dental specialists were graduated during the event and earned their Master Degree certificates in Orthodontics and Pediatric Dentistry, Diploma in Advanced Education in General Dentistry, and High Diploma in Oral Implantology. A total of 55 guests of honor attended the ceremony including; Dr. Aisha Sultan, President of the Emirates Dental Association and Head of the Dental Department at the UAE Ministry of Health, Dr. Amer Sharif, Managing Director of the Education division of DHCC, Dr. Leila Al Habashi, Head of Pediatric Dentistry Unit at the Dubai Health Authority, Dr. Khadija Al Maqboul, Head of Pediatric Dentistry Unit at the Abu Dhabi Health Authority, and Dr. Hasna Al Saeed, Head of the Orthodontics Unit at the Dubai Health Authority.

The EUC is the first postgraduate dental institution to offer international training programs in the UAE and MENA Region. EUC’s international and “Western-trained” faculty come from reputed Universities and Research Centers based in the USA, Sweden, England, France, and the UAE. Staff selection criteria is based upon their prowess as teachers, clinicians, and researchers are all well known worldwide.

Since the launch of the EUC, the university has run an extensive range of postgraduate programs across a wide range of dental specialties. These high quality educational programs include the latest research and use innovative approaches to learning. There are currently international residents from Asia, Europe and the Middle East. The students have to meet rigorous theoretical, clinical and research requirements in order to meet the international educational requirements and patient care standards.

Professor Donald Ferguson, Dean of the EUC, expressed: “I am very proud and happy to see young professionals achieve the goals of academic and clinical education, and successfully present and defend a Master degree thesis, and assemble records that thoughtfully explain the forensics of patient care. They behave ethically, act responsibly and eye the world with standards of excellence.”

The EUC has been instrumental in enhancing the clinical capacity of its graduates. The university offers state-of-the-art services, latest trends and treatment philosophies, and uniquely handles highly complicated dental cases within the UAE.

The European University College hosts its official graduation ceremony
The Inman Aligner is a highly effective and unique evolution of the traditional spring retainer that moves upper and lower anterior teeth predictably, safely and quickly. This makes it a revolutionary appliance, often described as the “missing-link” between cosmetic dentistry and orthodontics. With a proven track record throughout the UK the Inman Aligner is now becoming highly recognized in the Middle East.

What is unique with the Inman Aligner is that it can be used to align teeth either as a stand-alone treatment or before aesthetic or restorative treatment. In contrary to other treatments only one appliance will be used. The Inman uses super-elastic Nickel-Titanium open coil springs to move upper and lower anterior teeth with light but consistent forces, enabling correction of anterior crowding, rotations and some types of spacing.

Fast and predictable result
Most cases are completed within 6-16 weeks depending on the complexity of the case. The system is removable and very fast, and patients who were previously put off by brackets and months of treatment can now achieve alignment in 6 to 16 weeks, with a brace that can be worn for as little as 16 hours a day. As an Inman Aligner Certified dentist you will understand how to provide a realistic guide of what to expect for each case. For suitable cases, the Inman Aligner is almost always much faster than alternative orthodontic techniques. Treatment is backed up with a full and comprehensive free support forum with many trainers helping to treatment plan cases safely and predictably.

The lecturer - Tif Qureshi
The first dentist in the world to use the Inman Aligner as a major tool for cosmetic dentistry is Dr Tif Qureshi. Dr Qureshi qualified from Kings College London in 1992 and he is the Past President of the British Academy of Cosmetic Dentistry. Dr Qureshi has a special interest in simple orthodontics using removable appliances and was the first dentist in the U.K to pioneer the Inman Aligner. To this date Dr Qureshi has completed over 1000 cases using Aligners as a stand alone treatment and to align teeth before cosmetic dentistry and functional dentistry. At the coming APDC Exhibition in Dubai the 17-19th of June Dr Qureshi will be having a lecture on the subject “Simple and comprehensive free support forum with many trainers helping to treatment plan cases safely and predictably.”

By Inman Aligner
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The Dental market is truly flourishing in Lebanon and in the Middle East
The Dental market is truly flourishing in Lebanon and in the Middle East. The Dental market is truly flourishing in Lebanon and in the Middle East, we could notice that people are more aware of the importance of a healthy oral hygiene and the role of aesthetic dentistry is at a high demand.

How important is the role of the dental technician in the dental team?
These days, the dental media is playing an important role in the development of our industry by sharing all news and updates to a large and wide range of people and highlighting on all new technologies and materials before we could see them in the dental events. OPDL dental events have been well established over the years and have been organized over the years and have been organized. The dental media is playing an important role in the development of our industry by sharing all news and updates to a large and wide range of people and highlighting on all new technologies and materials before we could see them in the dental events.

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One step further with CAD/CAM

By Dr Steven Soo, Singapore

CAD/CAM methods for conventional dental and implant-borne prostheses have gained popularity for a variety of reasons. Despite many advantages in terms of cost and convenience, the uptake of this relatively new technology is slow, hinting at a reluctance to try something new.

Many, if not most, clinicians still choose to have fixed implant-borne multi-unit prostheses fabricated by traditional methods of casting and veneering precious metal alloys. However, the associated high technical and material costs may be prohibitive to the group of patients who need this treatment modality the most. To this end, more cost-effective alloys, including base metal alloys, have been cast and veneered with a variety of tooth-coloured materials with good success. CAD/CAM takes this one step further. In fact, materials such as zirconia, which has revolutionised dental prostheses, would not be in use were it not for CAD/CAM.

There has been much discussion around the problem of achieving passivity of fit, the lack of which, it has been postulated, can contribute to mechanical and biological complications. The multiple steps and materials used in impression taking, casting a working model, producing a wax pattern, casting in metal alloy then veneering in tooth-coloured material all lead to a certain degree of misfit. CAD/CAM can help to address this common problem. The use of digital dentistry is more common than clinicians might think, as the laboratory processes involved have already been widely implemented and dental technicians can take the credit for driving the use of the technology forwards. The next step is to adopt digital technology to replace some of the clinical steps in fabricating a prosthesis, namely the impression stage, which leads to production of a working cast.

These steps can introduce cumulative inaccuracies, as well as consume a variety of materials that are then discarded. In addition, there are time-savings to be made, perhaps not in the initial stages of learning and integrating new technology, but once familiar with the systems involved, all will benefit from the improved and efficient workflow.

My presentation at the Dental Tribune Study Club Symposium highlighted some of the advantages and disadvantages of CAD/CAM. My goal was to enable clinicians to see how it might become more widely accepted in their daily practice and remove some of their reservations. The next generation of dentists will hopefully come to view traditional methods of manufacturing dental prostheses in the same way as we now view fixed partial dentures as a way to replace missing teeth before implants.

Having received his dental degree from the University of Liverpool in the UK, Dr Steven Soo now works as a dental specialist in prosthodontics at Specialist Dental Group in Singapore. During IDEM, he presented a lecture on the benefits of CAD/CAM technology for dental implant and restorative procedures at the Dental Tribune Study Club Symposium on Level 6 at Suntec City.

Straumann abutments now available to 3Shape software users

By Dental Tribune International

OPENHAGEN, Denmark/Basel, Switzerland: Global implant manufacturer Straumann and CAD/CAM software provider 3Shape have been working together to integrate Straumann CARES libraries into 3Shape's software. Yesterday, the new software function was made available to 3Shape software users, enabling them to design and order customised zirconia or titanium abutments with Straumann original implant connections.

Using the new software capabilities, dental technicians who use the 3Shape Dental System software can design abutments and a range of customised prosthetics, including cobalt-chromium alloy, zirconium dioxide, and various full contour materials. These can be ordered with an original Straumann connection.

“Many laboratories are steadfast users of both the 3Shape Dental System and Straumann abutments. Now, they can design highly aesthetic and functional customised abutments and send them directly for manufacturing at Straumann—thereby introducing a wider range of choices for dentists and their patients,” explained Flemming Thorup, President and CEO of 3Shape.

“In addition, 3Shape customers are now able to connect with Straumann dentists and, thus expand their business opportunities,” Frank Henriksen, Executive Vice-President of Customer Solutions and Education at Straumann, added.

3Shape users who wish to benefit from this opportunity may contact Straumann for information on obtaining the libraries. However, availability will depend on the specific system configurations, the companies stated.
event, this year we are involving esteemed speakers as well as fellow dental dealers who are eager to display the latest products in the dental field for 2014. What are your recommendations to the fresh dental lab graduates? I would like to tell all fresh graduates to enrol immediately after their graduation in our dental laboratory order to ensure a better future and uphold the rights of our colleagues and peers. It’s main challenge is to involve securing the rights of our colleagues and perform strict laws for those who would try to practice our profession illegally.

What are your recommendations to the fresh dental lab graduates? I would like to tell all fresh graduates to enrol immediately after their graduation in our dental laboratory order to ensure a better future and uphold the rights of our colleagues and peers. It’s main challenge is to involve securing the rights of our colleagues and perform strict laws for those who would try to practice our profession illegally.

“The human eyes and hands are not predictable to the extent that results can exhibit preciseness of few if not single micron tolerances. Utilizing the very well advanced CAD/CAM software, we are able to come up with almost perfect restoration designs. CAM software are following suit. What we see on the screen is often what we got out of the milling unit or the 3D printer. It is the obligation of every one of us to join this fast moving industry. We owe it to our patients as well as to ourselves to get acquainted with and put in use all available technology to offer the best possible treatment. I believe that Digital and CAD/CAM generated restorations are taking over in setting the standards of dental restorations. They are precise, predictable and much easier to produce. We are, beyond doubt, getting closer to our goal. The perfect restoration seems to be just around the corner.”

“A Faster Way to Straight Teeth”

“The Inman Aligner: one of the best things I have done for my cosmetic practice” Rod Nash DDS

Contact Information
Dr. Munir Silwadi BDS, MRCDSO, DUS, FADI, FICD
CEO, Dr Munir Silwadi Dental Centers
msilwadi@eim.ae

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It is paramount for perfect results to standardize procedures as well as different steps taken to fabricate a restoration. Manual fabrication involves numerous errors that are nothing but part of the human nature. The human eyes and hands are not predictable when measuring and evaluating dimensions, angles, spaces, and all other calculations needed to achieve a satisfactory result. Computers are, beyond doubt, far superior to humans in determining such critical parameters.

Rapid developments in the field of CAD/CAM systems in the last decade are bringing us ever closer to our goal. Nowadays, digital workflow can be implemented with great confidence. Scanners, milling units, and 3D printers are getting so precise to the extent that results can exhibit preciseness of few if not single micron tolerances. Utilizing the very well advanced CAD software, we are able to come up with almost perfect restoration designs. CAM software are following suit. What we see on the screen is often what we got out of the milling unit or the 3D printer. It is the obligation of every one of us to join this fast moving industry. We owe it to our patients as well as to ourselves to get acquainted with and put in use all available technology to offer the best possible treatment. I believe that Digital and CAD/CAM generated restorations are taking over in setting the standards of dental restorations. They are precise, predictable and much easier to produce. We are, beyond doubt, getting closer to our goal. The perfect restoration seems to be just around the corner.”

“The human eyes and hands are not predictable when measuring and evaluating dimensions, angles, spaces, and all other calculations needed to achieve a satisfactory result.”
Predictability in Implant Planning with 3D Imaging - Clinical Case Report

By Norberto Velázquez, DDS

 Greenville, NC, Dr. Ve- lázquez graduated from dental school in 2002 and attended a general practice residency (GPR) in Oklahoma City, Oklahoma from June of 2002 until June 2003. Shortly after finishing the GPR residency, Dr. Velázquez moved to Green- ville, NC and worked in Kinston for the J.H. Rose Dental Clinic as the Dental Director for four years. Dr. Velázquez has ad- vanced education in implantol- ogy and enjoys working on cos- metic procedures, oral surgery, crown and bridge (prosthetics), implants, and dentures. He just finished another intensive implant course.

The case presented represents a typical instance where an implant is required in the area of the first or second premolar. A three-dimensional scan is used to accurately locate the exact position of important anatomical structures or landmarks. The 3D scan and software allow moving, slicing, and viewing the anatomy from any direc- tion. A critical step is the ability to mark the position of the nerve (marked in red in the images below) – this becomes especially helpful when virtual implants are used.

A first look might indicate that the implant on this image (1) could interfere with the inferior alveolar nerve and mental fora- men. This is not the case. This image (2) is a disto-facial view of the 3D scan showing approp- riate clearance between the implant, inferior nerve, and the mental foramen — as indicated by the mint circle. In addition, the Invivo’s software provides a visual indication of such clear- ance by coloring green the im- plant model in the lower left of the screen.

The arch section of the soft- ware shows axial, sagittal, and coronal slices. Multiple views (3) provide a more comprehen- sive understanding of the ana- tomical features of the patient. After surgery, a follow up with a post-operative image (4), either 2D or 3D, can be done based on case necessity.

Dr. Velázquez’s Conclusion

The GXDP-700 system offers several functionalities that ben- efit my patients. The advantage of the extra dimension to both implant patients for me, and orthodontic patients for my wife, is inestimable. This ma- chine becomes a basic part of the diagnostic process for im- plants — like my explorer and mirror. It allows me to see the location of important anatomical structures and landmarks so I can avoid additional or un- necessary invasive procedures.

With the scan, I can inform pa- tients of my implant treatment plan, and show them how the surgery will proceed. They gain confidence in my knowl- edge of their dental anatomy even before surgery begins. Before 3D, a surprise could pop up during surgery. Then, the patient would be disappointed that he or she was not going to get an implant immediately, but needed an additional pro- cedure first, such as grafting. My patients understand that I have implemented this technol- ogy for the sake of their dental health.

For a dentist, the opportunity for improved diagnostic capa- bilities is always a benefit to the patient. While they are not always directly aware of all the advantages, the information that I obtain from these pans and scans is beneficial for their care. I witness these benefits every day, in increased patient communication and more suc- cessful treatment outcomes.

Understanding the Advantages of 3D Dental Imaging

By KaVo

With the advent of any new technology, it’s important for dental professionals to consider not only cost and risks, but also the benefits of switching. In the case of 3D dental imaging, the advantages are clear, granting practitioners and patients alike a better clinical experience.

A dental 3D scan allows clini- cians to view dental anatomy from different angles. A 3D scan can help gain a better view of bone structures, such as ad- jacent root positions, in order to locate canals and root fractures, as well as provide the ability to more accurately measure anatomical structures. These scans also support a wide range of diagnosis and treatment plan- ning, making them extremely flexible. Further, they increase the possibility of treatment suc- cess, granting practitioners greater predictability and con- fidence in preparing for extrac- tions, performing root evalua- tions, and placing implants.

3D dental imaging also delivers the power of repeatability, pro- viding fast and accurate imag- ing that’s consistent—and thus, reliable. Using a 3D dental scan- ner equips dental professionals with a comprehensive view, letting them see specific condi- tions in the region of interest to determine whether a treatment is necessary. Because details show up so clearly, patients can be more confident in a dentist’s decision. In addition, the use of dental imaging technology of- ten creates a more comfortable and engaging dental visit for the patient.

The Gendex GXDP-700 Series features the pinnacle of 3D dental imaging technology, al- lowing dentists to plan for more predictable treatment outcomes by taking advantage of power- ful 3D software analysis and simulation tools. Plus, dental practitioners can control the ex- posure and the slice of scanned areas using the system’s flex- ible field-of-view (FOV) to meet individual patient and clinical needs. As a practice grows to of- fer additional imaging capabili- ties, the GXDP-700 imaging so- lution can be upgraded within your own timeline and budget.

X-ray imaging, including den- tal 3D (CBCT), provides a fast, non-invasive way of answering a number of clinical questions. Dental CBCT images provide three-dimensional (3D) infor- mation, rather than the two- dimensional (2D) information provided by a conventional X- ray image. This may help with the diagnosis, treatment plan- ning and evaluation of cer- tain conditions. Dental CBCT should be performed only when necessary to provide clinical information that cannot be provided using other imaging modalities. Concerns about rad- iation exposure are greater for younger patients because they are more sensitive to radiation.
Restoration is becoming Easier and Affordable for all Dental Practices

By Norberto Velázquez, DDS

O

s Solutions is the title name for the new CAD CAM system from Carestream Dental that was launched in the Middle East at AEEIDC last February. The system consists of an intraoral scanner, CBCT impression scanning system, restoration design software, and chair side milling machine. All of the parts are separate creating an open Web-based system that enables dentists to use the complete product family or choose any of the products as a stand-alone unit. The benefit that this offers is an easy sharing of restoration cases between dentists and laboratories.

The important thing about any system is not having to be tied into using every individual product, software or consumable that is incorporated in that system. Although this may be beneficial if you feel there is security in working with one single supplier you may on the other hand prefer the features of another supplier’s product that you want to use instead of the one that is provided.

At Carestream Dental we have seen many Dentists choose the CS 5500 Scanner to capture images for their digital restoration work. They have preferred the elegant slim and easy to use design of the scanner which makes it simpler and more reliable to capture detailed scans of the patient’s teeth that can then be e-mailed to their laboratory for completion.

The CS 5500 scans patients’ teeth directly to acquire true colour, 2D and 3D images. With an average precision of 50 µm, the CS 5500 scans to a depth ranging from -2 to +13 mm and offers high-angulation scanning of up to 45 degrees. It features a light guidance system that enables dentists to focus more on patient’s mouth while capturing data by limiting the time practitioners need to watch a monitor during scans. The CS 5500 also has an internal heater that prevents the mirror from fogging during digital impression acquisitions. To further streamline the scanning process, the scanner does not require a trolley or the use of powder, saving practitioners time and making the experience more pleasant for patients.

Here is what Leading dentists have had to say about their experience using the CS 5500.

Dr. Carsten Stockleben
Hannover, Germany
http://www.stockleben.com/

“With the CS 5500, it’s easy. You just say ‘I want my scanner,’ put it in, and start. It’s small, it’s light, it can be connected to any computer via USB, so I don’t have to have a big trolley with a computer and a monitor that have to be driven around the operatories. You don’t need powder, you don’t have to mess around in the patient’s mouth, keep it dry, put the powder in, and so on. It makes it much easier. It’s got a guiding system and that allows me to concentrate and to take the impression or the scan in the mouth, and that’s fantastic.”

Dr. Dan Delrose
North River Dental
Ellenton, FL, USA
www.northriverdental.com

“By using the CS 5500 intraoral scanner, we eliminate many of the problems that come with using impression materials and pouring casts—all you have to do is scan the tooth and send the data to your restoration software or the lab. But probably the most important feature of the whole scanner is something so simple—that it’s not connected to a trolley. It’s not connected to a tower or a workstation. You’re going to be able to take this light, ergonomic scanner and plug it right into your workstation in the operatory, quickly and easily.”

Digital restoration and all the benefits it can bring to everyday dentistry, is now available for all dentists to use. The next step is to learn about the technology and to visit the exhibitions and congresses where you can see what is on offer.

Carestream Dental will be exhibiting in Dubai at:

- CAD/CAM & Digital Dentistry International Conference on 9-10 May 2014
- Dental, Facial & Cosmetic International Conference on 14–15 November 2014
- AEEIDC 17-19 February 2015

By Norberto Velázquez, DDS
Isolite wins 2014 Scandefa Award in Copenhagen

By Dental Tribune International

COPENHAGEN, Denmark: Reporting on this year’s Scandefa, the organisers announced that over 10,000 visitors and about 200 exhibitors mainly from Denmark, Sweden and Germany attended the Scandinavian dental trade show from 2 to 5 April. At the opening of the show, dental equipment provider Unident was given the 2014 Scandefa Award for the Isolite oral isolation system.

Isolite is a single-use isolation mouthpiece that retracts and protects the patient's cheeks and tongue, increasing patient safety. It obstructs the entrance to the throat, which not only adds to patient comfort, but also allows the dentist to monitor the patient's airway.

“Using Isolite, practitioners can achieve optimal control of the oral environment and make the treatment more comfortable for the patient at the same time,” Marinette Larsson, Chief Marketing Officer at Unident, told Dental Tribune ONLINE in Copenhagen.

The mouthpiece, which is available in five different sizes, was developed by Isolite Systems, a US medical device manufacturer that specialises in dentistry. Unident is the exclusive supplier of the system in Scandinavia. Founded in 1982, the company today has offices in Stockholm in Sweden, in Horten in Norway, and Copenhagen in Denmark.

The next Scandefa will be held from 15 to 17 April 2015. The annual Scandefa Award recognises the most innovative dental products on the Danish market.
As a professor of surgery and research, P-I Brånemark is considered the father of modern dental implantology (Figure 1). In the early 50’s he discovered the process of osseointegration, which later was referred to as the direct structural and functional connection between living bone and the surface of a load-bearing artificial implant. (Figure 2)

This discovery was a result of a series of vital microscopic experiments on blood in mobile tissues, bone and bone marrow by placing titanium optic chambers in rabbit's tibia. Later it was discovered it was extremely difficult to remove these chambers for further use after a period of healing. (Figure 3)

Since then Brånemark and his team conducted numerous research aimed at Orthopedics, joint replacements, plastic surgery and tumor defects. In 1965 Brånemark treated the first human patient Gösta Larson with titanium dental implants who was missing teeth as a result of jaw deformities. Larson passed away in 2006 and used his implants for more than 40 years. (Figure 4 - page 34)

The initial reaction of skepticism and doubt was overcome in 1982 in North America at the Toronto conference on osseointegration. Here the biology, clinical research and applications of osseointegration were presented to the world and since then for 32 years millions of people have been able to benefit from the life changing contributions of osseointegration.

Today the rehabilitation of patients with oral, maxillofacial and orthopedic impairments has been accepted and adopted by the international community and through a worldwide collaboration and ongoing research and advancements we have gained enormous knowledge for treating our patients. These advancements have allowed the clinicians to apply load-bearing implants with teeth the day of the surgery and this has had a remarkable impact into the quality of the patient's lives.

In 1989 Professor Brånemark founded the first The Brånemark Osseointegration Center (BOC) in Gothenburg, Sweden (www.branemark.com). BOC’s principal task was to offer management for patients with severe oral, maxillo-facial and orthopedic disabilities. There are only 10 such clinics in the world and in the June of 2013 due to its excellence in dental implant treatment the Dubai BOC was founded by Dr Cotsa Nicolopoulos and Dr. Petros Yuvanoglu at the Dubai Healthcare City and named SameDay Dental Implants (www.Sameday.me). This demonstrates a milestone of progress for the health system in Dubai being able to host a BOC in the Middle East.

“With dental implants & new teeth all in one day my life changed thanks to SAME DAY DENTAL IMPLANTS. I can now
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**Lithium-ion rechargeable battery**
With 3-week working life

¹ E. coli, S. mutans and HSV1, HA
Keeping Hygienists in par with Continuing Education initiatives

By Victoria Wilson, Dental Hygiene Therapist, UK

It is our aim of the Dental Hygiene Tribune MEA to keep you, our valuable members and readers, on par with continuing education initiatives across the region. We will target and focus on the most up-to-date treatment methods available, the emerging scientific research and the current best practice techniques used in dental hygiene.

Hygienists or Dental Care Professionals (DCPs) are ideally positioned to provide comprehensive support to dentists and patients – starting from pre- and post- restorative work through to periodontal treatment, maintenance and long-term continuing care. In order to do this effectively, DCPs need to be continually updating and developing their knowledge and clinical skills, as well as being aware of the new technologies on the market.

I welcome the opportunity to bring my enthusiasm for Dental Hygiene Tribune to Dental Hygienists in the Middle East and offer an earnest commitment to meeting the need for high quality training and ongoing support in our commendable profession.

I am dedicated to raising and representing the Continuing Medical Education (CME) team for Dental Hygiene Tribune members to ensure that your interests are being met. With your support, I look forward to developing new programmes for this publication to further encourage collaboration and clinical excellence in the hygiene field.

I would appreciate hearing your preferences for CME topics and any other suggestions that you would like to offer.

Contact Information
Ms. Victoria Wilson, Dental Hygiene Therapist, UK
wilson@dental-tribune.me
www.dental-tribune.me

Maintenance of dental implants for the hygienist

By Biberach/Fiss

Implant dentistry has become more and more prominent in our everyday practice as patients are keen to have implant-borne prostheses than a conventional bridge work or removable dentures. One of the most important factors for long term success of dental implants is the maintenance of healthy peri-implant tissues.

Hygienists are now seeing more of their patients with dental implant and this is only going to increase in the future as implant therapy becomes cheaper.

The role of the hygienist has increased in many ways with regards to dental implants. It is important for a hygienist to be able to diagnose peri-implantitis and to have the knowledge to treat simple to moderate peri-implantitis and to monitor the health of dental implants in the long term as part of the patients regular maintenance.

How do you know when an implant has problems?

It is essential to be methodical when monitoring the peri-implant tissues at review appointments to spot the early signs of peri-implantitis. The clinical markers that are used to assess the presence and severity of inflammation around the implant are:

- plaque and calculus accumulation;
- inflammation of the peri-implant tissues;
- increase in peri-implant probing depths;
- bleeding on probing;
- suppuration from the peri-implant pocket;
- implant mobility;
- radiographic changes.

When probing peri-implant tissues, not only is a minimal amount of CPD required in most countries by law, it can be determined that CPD will not only enhance one’s performance and the overall operations of the facility/clinic, but will result in valuable public awareness for the safety and regulated practices of dental facilities in general.

Introduction

What is CME - CPD?

Continuing Medical Education (CME), otherwise referred as Continuing Professional Development (CPD), is the way in which professionals can enhance their knowledge and skills related through a structured approach.

CPD for dental professionals is an obligation in many countries. A mandatory amount of course-related points must be fulfilled in the form of: lectures, seminars, courses, individual study, peer review, clinical audit or E-learning activities. These hours can be recorded on a personal CPD record providing the courses are designed to advance professional development as a dental professional and is relevant to one’s practice.

Conclusion

Not only is a minimal amount of CPD required in most countries by law, it can be determined that CPD will not only enhance one’s performance and the overall operations of the facility/clinic, but will result in valuable public awareness for the safety and regulated practices of dental facilities in general.

Why is CPD in Dentistry so Important?

Education and qualifications are not only the first step towards obtaining a professional career. CPD is an obligation to one’s profession - not only for the personal benefits for individuals and clinics, but also for the overall perception and confidence that the public has in the dental industry.

Dentistry is constantly evolving through new methods and technologies to better meet the needs of patients. CPD will ensure that dental professionals continue to be at the forefront of this knowledge. It is important for patient comfort, well-being and safety. It is also required by law for all registrants working under the local medical authority to undertake a minimum amount of CPD points in order to maintain the license of the practice. If this minimum is not met by all of the professionals, the license cannot be renewed.

Verifying CPD points

In some countries, such as the UAE, the Governing body acts to verify the CPD provider. Submission of papers for a CPD event must be approved by Dubai Health Authority (DHA), Dubai Health Care City (DHCC) or Health Authority Abu Dhabi (HAAD) prior to an event.

In other countries, such as the UK, parts of US and Canada, verifying the CPD provider is determined by the judgment of the registrant. It is a common requirement to have to keep documentary evidence in these countries for up to 5 years post CPD cycle.

Conclusion

There will generally be documentary evidence that the CPD has been undertaken with concise educational aims and objectives and clear an
In ‘bleeding on probing’ trials over 4 weeks, parodontax® demonstrated significant effects in reducing bleeding gums by 22% (p<0.01)

Bleeding on probing increased after 4 weeks of brushing with the fluoride control toothpaste

| Change vs baseline in bleeding on probing index after 4 weeks |
|---------------------------------|---------|
| Fluoride-containing control toothpaste | Baseline | 4 weeks |
| parodontax® | Baseline | 4 weeks |

Reduced bleeding on probing index after 4 weeks with parodontax®

22% reduction in bleeding (p<0.01 vs baseline)

Adapted from Saxer et al 1994. All interdental spaces from 6 to 16 were tested at baseline and 4 weeks for bleeding on probing on the right side (buccal) and left side (lingual). Findings were recorded as: 0=no bleeding, 1=slight/isolated bleeding, 2=marked bleeding. Mean scores were determined, N=22. Baseline values (Mean SD): Control (fluoride-containing toothpaste) group 24.75 (6.34); parodontax® group 25.40 (6.80). After 4 weeks: Control (fluoride-containing toothpaste) group 26.00 (7.14); parodontax® group 19.80 (7.38). *parodontax® vs control p<0.05.
Every day protection from everyday acids

Modern eating and drinking habits increase the exposure of tooth enamel to dietary acid that can lead to Acid Wear (erosive tooth wear), the biggest contributor to tooth wear.1-4 In the early stages of Acid Wear, a patient’s enamel can become translucent, anatomic features can be lost and molar cupping can occur.

GSK collaborated with leading experts in the field to develop Pronamel Daily Toothpaste to help protect patients at risk of Acid Wear. With its optimised formulation, Pronamel is proven in a range of clinical in situ and in vitro studies to harden acid-softened enamel and prevent against acid challenge.5,6

Not all toothpastes are the same

In laboratory experiments, Pronamel’s optimised formulation ensures more fluoride is available at the patient’s tooth surface to protect against Acid Wear compared to other toothpastes with the same marked fluoride levels.5

Pronamel has been clinically tested in situ to...

- Reharden acid-softened enamel6
- Build protection against future acid challenges6

Figure 2: In situ rehardening microindentation study following treatment with dentifrices4

Adapted from Han AT et al. Bovine enamel specimens were subjected to an erosive challenge. This was followed by fixation to palatal appliances and a 4-hour introral phase in 58 human subjects. This phase included tooth brushing with tested products and a further erosive challenge.

Figure 1: DSIMS imagery to show amount of fluoride at the tooth’s surface in vitro4

Shows the lack of any fluoride uptake
Fluoride retained at the tooth’s surface
Increased concentration of fluoride retained at the tooth’s surface

Adapted from Edwards MI et al. Dynamic Secondary Ion Mass Spectrometry (DSIMS) of the fluoride content of human enamel exposed to a citric acid challenge followed by treatment for 2 minutes with a range of dentifrice slurries.

Pronamel is proven to reharden acid-softened enamel and provide ongoing protection from the effects of Acid Wear:

- Low abrasivity
- Neutral pH (7.1)
- SLS*-free

Daily protection from the effects of Acid Wear

*Sodium Lauryl Sulphate

New Philips Zoom WhiteSpeed Light-Activated Whitening System.
A better experience for your patients and your practice.

**Philips Zoom In-Office Whitening kit makes treatments easier**
Packed in procedural order; you get everything you need for each treatment, including Philips Zoom at-home whitening gel for follow up and maintenance complete in a single package. The Philips Zoom Kit also includes simplified visual instructions.

**Unique products for your sensitive patients**
Each treatment comes with a Patient Post Care and Maintenance kit that includes the Relief ACP Oral Care Gel. This unique formula combines potassium nitrate for sensitivity relief along with Amorphous Calcium Phosphate (ACP) that helps create healthier smiles through advanced enamel protection. To ensure a more comfortable experience all around, instruct patients to use it for 10-30 minutes after treatment.

**New Philips Zoom WhiteSpeed LED Accelerator**
The advanced Philips blue LED technology provides approximately 50,000 hours of use—reducing operating costs, downtime and is 40% more energy efficient. The light also emits 100% greater light intensity* with no compromise to safety. Redesigned to be easier to position and more ergonomic, your patients and your treatment will be better than ever.

**New support for your practice**
Philips Zoom is funding a worldwide public relations campaign to drive patients to dental professionals, and new programs to help you quickly and easily integrate Zoom into your practice.

“With this new light the patient’s sensitivity is minimal, making the procedure much more pleasurable.”
– Juban Dental Care - Baton Rouge, LA

Reveal your patients’ most healthy, radiant smile with Philips Zoom WhiteSpeed

Give your patients the immediate white smile they want and the healthy white teeth they need, with the new Philips Zoom WhiteSpeed. The number one patient-requested professional teeth whitening brand* is clinically proven to deliver superior whitening results in just one office visit. WhiteSpeed is shown to whiten teeth up to 8 shades in 45 minutes; that’s 40% better than a comparable non-light activated system.†

The new Whitening LED Accelerator’s variable intensity settings allow you to customize the output to ensure each patient receives a more comfortable treatment. 91% of patients experienced little to no sensitivity with Zoom WhiteSpeed.‡

Now better than ever — Philips Zoom WhiteSpeed.

* In the U.S.
† Compared to Philips Dash
‡ Results based on 500-person study. Data on file.
Scientists from Norway develop scaffolding to repair severe teeth and jawbone defects

By Dental Tribune International

O

SLO, Norway: Dental researchers at the University of Oslo have developed a new artificial scaffolding that aids bone regeneration. Within a few years, they hope to market their invention to help patients with serious teeth and jaw damage caused by severe periodontitis, mandibular cancer, infection or trauma.

According to the researchers, the artificial scaffolding could be used in particular for cases in which the gap between two bone fragments is too wide, or when large parts of the bone have been damaged through surgical removal or radiotherapy. The scaffolding helps the body repair such serious defects, the researchers explained.

"With the new method, it is sufficient to insert a small piece of synthetic bone-stimulating material into the bone. The artificial scaffolding is as strong as real bone and yet porous enough for bone tissue and blood vessels to grow into it and work as a reinforcement for the new bone," said Prof. Sthl Peter Lyngstadhaas, Dean of Research at the University’s Institute of Clinical Dentistry.

The scaffolding can be produced like cubic blocks and cut into individual shapes to fit into specific bone defects. It is manufactured from a mixture of water and ceramic powder, which is poured through foam rubber that was designed to look like trabecular bone. The ceramic powder consists of medical-grade titanium dioxide monodisperse nanoparticles, which are also widely used as an additive in sweets, toothpaste and baked goods. Once the mixture has solidified, it is heated to a temperature that causes the foam rubber to dissolve into water vapour and carbon dioxide and the nanoparticles to aggregate into one solid structure. It has an open porosity of 90 per cent, containing loosely empty space that can be filled with new bone and blood vessels, which current materials do not provide.

While current materials are degraded gradually, the new scaffolding remains an integral part of the repaired bone, working as reinforcement, Lyngstadhaas explained.

In addition, the generation process could be accelerated by the insertion of bone progenitor cells or bone marrow containing stem cells.

Conventionally, damaged bone is repaired by removing tissue from healthy bones, such as the mandible or hip, for implantation. Patients often experience discomfort and complications after the surgery. This can be avoided by using the scaffolding.

Since the scaffolding has shown positive results in preliminary animal studies, the researchers are currently planning to undertake clinical trials on patients with periodontitis and damaged mandibular bone. They also hope that orthopaedists will show interest in the new method.

The new material was developed in collaboration with Cortal, a Norwegian company that specialises in innovative biomaterials. In order to market their invention, the researchers are currently looking for an industry partner.

Table 2 – Health Authority Abu Dhabi (HAAD) CPD Requirements (1)

<table>
<thead>
<tr>
<th>Principle</th>
<th>Requirement</th>
</tr>
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<tbody>
<tr>
<td>1.</td>
<td>Patients’ interests first</td>
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<tr>
<td>2.</td>
<td>Observe confidentiality</td>
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<tr>
<td>3.</td>
<td>Maintain professional boundaries</td>
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<tr>
<td>4.</td>
<td>Achieve continuing professional development</td>
</tr>
<tr>
<td>5.</td>
<td>Maintain a current professional portfolio</td>
</tr>
<tr>
<td>6.</td>
<td>Use continuing professional development to improve patient care</td>
</tr>
</tbody>
</table>

Table 3 – UK Standards for CPD

1. General Dental Councils, Continuing Professional Development for Dental Professionals, Protecting Patients, regulating the dental team.
2. Policy on Continuing Professional Development (CPD) Requirements, Health Regulation Department, Dubai Health Authority, July 2010.

Table 4 – Example of Professional Development Plan

- Scientific and clinical activities should reflect accepted dental practice or be based on critical appraisal of scientific literature.
- Activity content should be evidence-based without exaggerated claims.
- Activities should have scientific integrity and independence.
- Clinical content should reflect best practice care and evidence-based treatment that is supported by scientific and biomedical research.
Fig. 3a: Excess cement on implant surface.

Fig. 3b: Severe bone loss due to excess cement forced in to the tissues.

Fig. 4a: Subgingival inflammation due excess cement.

Fig. 4b: Note the excess cement on the implant crown.

Fig. 4c: A healthy gingival cuff around an implant.

Fig. 5: Plastic Scalers.

Fig. 6a: 8 mm pocketing UR2.

Fig. 6b: After subgingival curettage of the pocket the patient was shown how to use a large interdental brush with chlorhexidine gel twice a day.

Fig. 6c: Patient reviewed at 2 weeks. The inflamed tissue have reduced exposing the crown margin.

Fig. 6d: U2 pocketing has reduced 5 mm.

Conclusion

Good oral hygiene performed by the patient has a significant affect on the stability of the marginal bone around dental implants. Therefore regular hygiene appointments are necessary to ensure that your patients are maintaining a high standard of oral hygiene around their dental implants.
Complex dental problems and the contribution of adjunctive orthodontics

By Professor Athanasios E. Athanasiou, DSDM

The goal of contemporary dentistry is the maintenance of natural dentition under biologically, functionally and esthetically optimal conditions, for the longest possible period. An increasing number of adult people present a variety of complex dental problems, which concern more than one clinical discipline or specialty. These include caries, periodontal diseases, dental trauma, edentulous sites, malocclusions, or their combination.

This article outlines existing orthodontic therapeutic possibilities for adjunctive dental work and emphasizes the importance of teamwork among the general dentist, the orthodontic specialist, and other dental specialists.

Principles of treatment planning for complex dental problems

The need to formulate problem-oriented treatment plans, which address patients’ chief complaint for complex cases necessitates consensus among the parties involved namely the general dentist, the specialist and the patient. Diagnosis must utilize patient’s data, derived from records interpreted by the clinician using strict scientific criteria. On the other hand, treatment planning constitutes an intellectual process where subjective elements are often involved. It is the path that the well-educated and experienced clinician follows in order to maximize the benefits for the patient, which must be contrasted to the cost and risk involved when certain procedures are adopted (1). An essential requirement for successful interaction is that both general practitioner and specialist are in agreement regarding the advantages and limitations of the treatment chosen.

Adjunctive orthodontics

Orthodontics and periodontics

It has been documented that orthodontic treatment in patients with severe periodontal destruction is no longer a contraindication (5). On the contrary such treatment might even enhance the possibilities of saving and restoring a deteriorating dentition. During the orthodontic movement it is the whole periodontal unit (bone, periodontal ligament, and soft tissues), which moves with the tooth (4). This all-embracing movement has been shown to be beneficial when orthodontic uprighting of tipped molars is undertaken since the crestal bone exhibits predictable and considerable changes (5) (Figure 1). Forced eruption has also been reported to decrease the depth of isolated vertical infrabony defects and to expose tooth structure, thus allowing the prosthetic management of subgingival fractures, caries and lateral root perforations (8) (Figure 2).

Orthodontics and missing teeth

In cases where lateral incisors are congenitally missing and other malocclusion co-exist, in most instances the treatment of choice is the orthodontic movement of the canines to

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Aesthetics and function: Orthodontic – surgical collaboration as a key to success

By Drs Martin Jaroch & Friedrich Banz, Germany

If surgical treatment is only possible to a limited extent and always depends on the behaviour of the growth of the maxilla and mandible in relation to each other, as well as on deformities of the jaw in relation to the other facial bones. Anomalies may be congenital or acquired and may affect patients in childhood already. If so, the focus of orthodontic treatment is not primarily in the aesthetic correction, but is guided by functional and prophylactic concerns. Efficient occlusion and restoration of masticatory function are decisive factors for tooth preservation and prevention of secondary disorders (Figs. 1a–c). Without a doubt, aesthetic improvement, as well as the associated self-awareness, is the main concern of post patients, which can be pursued through surgical correction.

Causes of malocclusion

Generally, patients visit an orthodontic practice only after symptoms or significant anomalies have already appeared. Clinically, this results in late mixed dentition or permanent dentition. Both phases complicate an accurate mapping of the reasons for this malocclusion. In the literature, the causes of malocclusion and the aetiological structure of the symptoms of malocclusion in orthodontic patients are controversial issues. No explicit information on the percentage of patients with acquired or congenital malocclusions can be found in a study by Schopf (1981) on the aetiological factors for tooth preservation and better oral hygiene. This idea is contrary to the results of the study at the University of Greifswald, Germany, that 80% of the symptoms were genetically determined or congenital malocclusions in orthodontic patients are controversial issues. No explicit information on the percentage of patients with acquired or congenital malocclusions can be found in a study by Schopf (1981) on the aetiological factors for tooth preservation and better oral hygiene. This idea is contrary to the results of the study at the University of Greifswald, Germany, that 80% of the symptoms were genetically determined or congenital malocclusions can lead to a pharyngeal constriction, which can manifest as obstructive sleep apnoea syndrome (Hochban et al., 1997). In adults, who have an obvious discrepancy between their maxilla and mandible, it must be clarified whether the deformities are dentoalveolar or skeletal. Owing to the limitations of conventional orthodontic treatment, skeletal discrepancies can rarely be entirely resolved. In those cases, combined orthodontic–surgical treatment is necessary. During growth, it is mostly possible to treat malocclusions successfully without surgery by purely orthodontic treatment using removable appliances or brackets. Children and young people for whom functional, orthodontic treatment has not led to the desired result are treated surgically by following surgical correction depends on the risks of combined treatment and the consequences of untreated malocclusions. Malocclusions can cause numerous side-effects, such as back pain and chronic headaches (Figs. 2a & b). Luxation of the dentoalveolar processes of the maxilla and mandible is assessed on the basis of simulated cast surgery in which the amount of shift is determined. Using these casts, a splint can be fabricated and placed during surgery to fix the determined physiological condylar position preoperatively (Figs. 6a–c).

Teenagers with mandibular asymmetry that cannot be clearly classified should be treated with special care. Should clinical records be available only from the age of 16—whether as a result of erroneous dental records or simply owing to late initial assessment in a specialised practice—accurate early diagnosis of potential unilateral hyperplasia is essential. According to the German Society of Oral and Maxillofacial Surgery guidelines, a medical consultation is recommended. The intra-oral stepped osteotomy is visible. Fig. 1a: oronasal view of the now 20-year-old patient. Fig. 1b: frontal view of the now 20-year-old patient. Fig. 2a & b: Significant changes between the initial assessment of latero-gnathia in 2007 (a) and the beginning of combined orthodontic/surgical treatment in 2011 (b; 19-year-old patient).

Combined orthodontic-surgical treatment requires not only strong and focused interdisciplinary collaboration, but also absolute acceptance of the treatment plan by patients and parents. The treatment is time-consuming and post-operative corrections cannot be excluded. A detailed medical preoperative discussion should inform patients about the risks of combined treatment and the consequences of untreated malocclusions. Malocclusions can cause numerous side-effects, such as back pain and chronic headaches (Figs. 2a & b). Luxation of the dentoalveolar processes of the maxilla and mandible is assessed on the basis of simulated cast surgery in which the amount of shift is determined. Using these casts, a splint can be fabricated and placed during surgery to fix the determined physiological condylar position preoperatively (Figs. 6a–c).

Teenagers with mandibular asymmetry that cannot be clearly classified should be treated with special care. Should clinical records be available only from the age of 16—whether as a result of erroneous dental records or simply owing to late initial assessment in a specialised practice—a previous experience on access to the surgical field and wisdom teeth must be removed before osteotomy in certain cases. Osteotomy can be done on both jaws or can be limited to the maxilla or mandible. However, in many cases it is functional to perform binaxillary osteotomy and to shift both jaws. Today, generally the entire tooth-bearing portion of the jaw is shifted. Segmental osteotomy has not been proven to be very successful in the past and corrections of malocclusions are left to the orthodontic treatment partners. In this field of treatment, the Obwegeser–Dal Pont surgical technique is recommended. This procedure describes an intra-oral stepped osteotomy at the mandibular ramus (Figs. 7a & b). Since Bell and Epker described the concept of binaxillary surgery as the “down fracture” technique in 1975, it has been popular and today you can find it mostly as a combinative technique is possible to draw conclusions about the growth’s behaviour. If the jaw continues to change by absorbing bone or by another way, it is advisable to postpone surgical therapy until the cessation of growth.

Surgical technique

The choice of technique for the osteotomy depends on various factors. A first step is the maxillomandibular analysis. Surgical access to the bone is created, which is split at fixed points. Correction of the bone and bone healing in the new fixed position is accomplished using simulated cast surgery and a fabricated splint. Following surgical modification of the jaw area, it is important to consider the correct position of the jaw and optimal occlusion. This crucial aspect is again performed by the orthodontist as accurately as possible because removing the degree of displacement of the jaw depend on achievable occlusion. Furthermore, teeth have an influence on access to the surgical field and wisdom teeth must be removed before osteotomy in certain cases. Osteotomy can be done on both jaws or can be limited to the maxilla or mandible. However, in many cases it is functional to perform binaxillary osteotomy and to shift both jaws. Today, generally the entire tooth-bearing portion of the jaw is shifted. Segmental osteotomy has not been proven to be very successful in the past and corrections of malocclusions are left to the orthodontic treatment partners. In this field of treatment, the Obwegeser–Dal Pont surgical technique is recommended. This procedure describes an intra-oral stepped osteotomy at the mandibular ramus (Figs. 7a & b). Since Bell and Epker described the concept of binaxillary surgery as the “down fracture” technique in 1975, it has been popular and today you can find it mostly as a combinative technique is possible to draw conclusions about the growth’s behaviour. If the jaw continues to change by absorbing bone or by another way, it is advisable to postpone surgical therapy until the cessation of growth.

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nation of Obwegeser–Dal Pont and Le Fort I osteotomy. The bimaxillary approach seems reasonable, since the maxilla and mandible influence each other during growth. However, it is frequently only possible to obtain a very good and risk-free result by using Obwegeser–Dal Pont surgery. Fixation in split osteotomy of the mandible is usually realised by using minimally invasive plate osteosynthesis. In modified techniques of Obwegeser–Dal Pont surgery, a displaced ramus is fixed using osteosynthesis screws only (Hochban 1997; Figs. 8a & b). This modification avoids the complicated surgical removal of osteosynthesis plates.

Operation risk

Any surgical procedure can lead to unexpected complications, which must always be considered according to the risk–benefit principle. Today, the need for osteotomy remains controversial because a jaw deformity is not a serious illness like a tumor, abscess or bone fracture, which is necessarily treated by surgery. Since deformities are often aesthetic corrections and can be classified as elective procedures, operation safety is a chief concern. Isolated osteotomies of the mandible, which present a significantly lower surgery risk, should be the first choice for orthodontic–surgical interventions.

The most significant risk of osteotomy of the mandible is a probability of about 5% of damaging the sensory nerve, called the inferior alveolar nerve. This can cause sensibility problems of the lower lip and chin area (Figs. 9a–c). Additional serious risks are not expected using Obwegeser–Dal Pont surgery and post-operative bleeding can be controlled very safely.

Interdisciplinary collaboration

The literature review of work done in the 1970s makes clear that today’s conscientious collaboration between surgeons and orthodontists is not a matter of course. Over the years, orthognathic surgery was considered to be the last option for treating orthodontic cases that could not be resolved using standard treatment techniques. Therefore, operations were carried out based on tolerance of dentoalveolar compensation and likely made further corrective surgery more probable.

Today, in almost all cases of malocclusion, orthodontic treatment is preceded by surgical treatment. Nowadays, the planning of the operation based on simulated cast surgery and the creation of a splint is a very safe method by which to achieve predictable and stable long-term results (Figs. 8a & b). Individual dentoalveolar discrepancies in occlusion can be corrected preoperatively or post-operatively by orthodontic treatment. Therefore, interdisciplinary collaboration is always a benefit for the patient and treatment team.

About the Author

Dr. Martin Jaroch
Dr. Friedrich Bunz
Aesthetic and Function Dr. Bunz — Dr. Jaroch & Partner Professional Practice of Orthodontics
Tegningerstr. 5
2853 Radolfzell, Germany
The Middle East region is right up there in terms of Global Orthodontic standards

By Dr. Khaled Abouseeda, KSA

It was a pleasure to interview Dr. Nikhilesh Vaid, who could be ranked as one of the key doctors to flourish and strengthen our orthodontic section in Dental Tribune, bringing it to new heights by displaying a wide screening of Dr. Naush's vast creative achievements. The focal objective was encapsulating the accumulated information I received from him in an easily digestible manner providing a platform for all the diverse ideas, updates, ethics and principles of orthodontic practices and researches Dr. Nikhilesh conveyed. Working with the philosophy of placing an attractively remarkable plan to shine light in the distinguished professionals orthodontists to paint the path forward for our science-related readers. Dr. Vaid is an innovative leader in the field of Orthodontics and has demonstrated leadership skills and played a major role in improving the practice in India, targeting unique researches and development efforts as well as leading growth initiatives.

Dr. Nikhilesh Vaid: To be very honest I have not been an orthodontist for that long, to see a decade-by-decade shift in the parameters it has been an exciting journey. In the last 12 years from when I did start out, the major trends have been the incorporation of technology in all spheres: Diagnosis, Research, Procedures, Marketing and Appliances. A lot of purists feel the skill levels of the contemporary Orthodontist are becoming redundant because of technology; I would like to think otherwise. The key reason for the changing and the only thing constant with any science, Fundamental principles will still govern Orthodontic care delivery, but incorporation of technology will allow us to improve the quality of life of both the orthodontist and the orthodontic patient. Today Micro implants are the main stay of anchorage control, I only use Self Ligating brackets, because of chair side efficiency. Lingual Orthodontics, Aligners, Stereolithography, etc. are the main stay of our teaching and practice protocols. The technology is not the driver, the improved precision in these appliances due to CAD CAM and Robotics.

Back to years of study and residency in India, how can you describe those days? My residency years in Mysoor, India at the JSS Dental College & Hospital were literally, to borrow a line from a famous song, the “best days of my life”. Orthodontic training in India is very regimented and even today the accent is mainly on enhancing dexterity skills, which I think are non negotiable as far as any Orthodontic training is concerned. The programme at JSS was very “cerebral” and “clinical”, in the sense, we were encouraged to think, very often, out of the box. This has influenced us to be receptive to new advances, without the dogma of a particular school of thought. The bonding and the camaraderie amongst colleagues as well as the discipline that kept us on our toes, were actually lessons that have moulded me to assume greater responsibilities in life.

Well the soul of any teaching programme is the Programme Director or a Guide in a Masters Programme, whatever the nomenclature is in any part of the world. The biggest influence in my life has been my Professor, Prof E.T. Roy, who has mentored me as an Orthodontist in my years in my Masters programme. He is a strict disciplinarian, and was responsible for influencing my life beyond Orthodontics as well. It is important to inspire your residents to be complete professionals, Orthodontics is only a part of what we do. The spirit to serve my profession and professional organization is something that he has inculcated in me. Dr Ashok Sinha, Dr Ravindra Gupta, Dr Ravi Sable, Dr Shailesh Deshmukh and Dr Stridip Nagarskehar have taught me Orthodontics at different stages of my life as an undergraduate and graduate student. My colleagues during my Masters programme, and later, most importantly Dr Meghna Vandanek, Dr Gurjeet Singh and Dr Jacob John are also responsible for what I am today. I would like to thank each of these individuals for touching my life and promise to make them proud with everything I attempt to do.

What can you tell us about your experience as the president elect of the Indian Orthodontic Society and Editor in Chief of the Asian Pacific Orthodontic Society?

I have just been elected President Elect of the Indian Orthodontic Society, which is amongst the largest Orthodontic Societies globally. We have an obligation to contribute to the knowledge bank of global Orthodontics, and encourage scientific content of the highest caliber. I will be President in the coming Academic year 2015 (50th Year) of the IOS, which will be a time for us to rejoin and commemorate the past, but at the same time, plan to propel the society, with policies that will enhance our member's lives with the changing global trends in Orthodontics. I was appointed Editor of the APOS Trends in 2011 and the Chief Editor in 2013. Today the Journal is indexed by multiple indexing agencies. I have an excellent young and enthusiastic team which is committed to the cause of achieving excellence in documentation of scientific data from the Asian Pacific region. The journal is indexed by tropical and regional cross-referencing. I have to compliment the Previous APOS President Dr Loh Kai Woh, for his vision, Dr Kazuo Tanne, President APOS and Dr Bryce Lee, Secretary General APOS, for their support as well as American Orthodontics for being the corporate sponsor of this endeavor for 2015-14.

What golden advice could you provide to orthodontic residents to consider in shaping their future careers as Orthodontists?

I don't know if I'm qualified enough to advice, but I am greatly influenced by a quote of our times, “The difference between the 21st century will not be the ones who cannot read or write but the ones who cannot unlearn and relearn new things.”

Science today is progressing at a pace where the global knowledge bank doubles in just a few years. We have to have open minds and the willingness to learn and unlearn some new things.

Today science is progressing at a pace where the global knowledge bank doubles in just a few years.

As having a lot of scientific publications in the field of orthodontics, can you tell us how can we come to a statistically significant scientific conclusion that needs to be published and the benefit of being published?

I believe documentation of every form of scientific data is paramount. That is creating database, which is critical to any form of research and future reference. As long as any form of information serves to enhance the knowledge bank of orthodontics and follows guidelines and procedures of research that are contemporary, it needs to be considered for publication. Statistically significant information also can give information that is of clinical relevance. It’s important to understand that phenomenon.

Conclusion

My main purpose will always revolve around focusing and bringing Professors of the highest level into focus to enhance quality, ensuring this top quality and therefore creating the ultimate satisfaction for our readers. I hope that our crew have gained the trust of our readers by committing to providing the best service possible and improving our content, we are our main components of value. Receiving feedback is always welcome whether positive, negative, thankful or harsh replies, which will always keep us on our toes. I hope that you guide us to our next steps. Continuous improvement of this section is important and I hope this growth is our distinct mission, which we hope would be envisaged to meet your needs.

Contact Information

Dr. Khaled Abouseeda
Consultant Orthodontist
khaledkhaled@yahoo.com
The 2nd International Students’ Dental Conference 2014

By University of Sharjah Dental Students Association

April 9-10, 2014, saw over 700 students from ten countries gather together at the University of Sharjah College of Dental Medicine for the 2nd International Students’ Dental Conference. The conference was opened by His Highness Crown Prince Sheikh Sultan bin Mohammed bin Sultan Al Qasimi who toured all the exhibits from eight companies such as Listerine/HiJ, Crest Oral B and GlaxoSmithKline, asking many questions along the way, before he oversaw the opening ceremonies.

The conference was a huge success for the students of the University of Sharjah Dental Students Association, who created, planned, organized and executed the whole conference of exhibits, poster presentations, oral research presentations and debates. The two debates focusing on the treatment options of endodontics versus implants, and the other debate on where to draw the line between prevention and restoration in cases of incipient caries, drew lots of interest and resulted in lively and sometimes passionate discussion.

Additionally, a number of participation workshops on topics ranging from layering of anterior resin composite, to TML lasers, rotary endodontics, implants, veneers and a suturing clinic gave participants some outstanding hands-on experiences.

All-in-all, the conference was a culmination of very hard work from the Executive Committee of the Student Association and the Organizing Committee.

Dean of the College, Professor Richard J. Simonsen noted in his strong praise of the students that he has never seen a more active and giving group of young people in his over 40 years in dental education.

“It is quite remarkable that a group of 20-year old young students (mainly ladies by the way!) could pull this off” - Prof. Richard Simonsen, Dean of the University of Sharjah College of Dental Medicine

The main organizer, Rawand Naji, the President of the USDSA was very pleased with the program and participation from countries as far afield as Russia and Poland. “Next year we hope to consolidate this conference into a regular annual dental conference and eventually to attract many more students from all over the world to the University of Sharjah” said student-doctor Rawand.

Social events such as a desert safari, go karting, and a dinner cruise in Dubai were added attractions for the international students which also included large contingents of students from the Kingdom of Saudi Arabia, Sudan and Malaysia as well as students from all the local schools.

The President of the USDSA was also supported by the rest of her Board of student-doctors, Mayas Faris, Jumana Lisa Ir-baye, Abeer Sha’al, Shorouk Mahmoud, Sally Masoud Man-

la, Sara Aabari, Deena Rashad and Mohammed Hussein Haider, all from the second-year dental program at US.

“It is quite remarkable that a group of 20-year old young students (mainly ladies by the way!) could pull this off with such success while still studying hard for upcoming final exams,” said Dean Simonsen.

Faculty support was provided by Dr. Karim Sabah and Dr. Eman Mustafa, and huge support was provided by former USDSA Presidents, Faraj Edber and Hiba Abdulhadi, who were the first to give the credit to the student association leadership, and all the many other students who helped out with the execution of this remarkable conference.

Singapoor: In the presence of Singapore’s Health Minister Gan Kim Yong and senior representatives of Koelnmesse, the Singapore Dental Association, and FDI World Dental Federation, the eighth edition of IDEM Singapore was officially opened on 9th April 2014 at the Suntec Singapore International Convention and Exhibition Centre. The Minister, who graced the traditional Opening Ceremony outside the Exhibition Hall on Level 4 as Guest of Honour, congratulated the organisers of the show that, in his words, “has evolved to be a ‘must-attend’ event for all dental healthcare professionals and related industries in the Asia-Pacific region.”

The main organiser, Barry Freydberg on 05 April 2014 at 4.50 p.m. focused on the detection and prevention of oral cancer, which is among the few types of cancer which are currently on the rise worldwide. At the Dental Tribune Study Club Symposium at booth 69-72, Singapore’s own prosthetic expert, Dr Stephen Soo of Specialist Dental Group, will provide insight into CAD/CAM and how its use can benefit workflow in dental practices.

New concepts and methods for dental labs will be discussed at the Dental Technicians Forum, one of the new educational formats specifically targeting other members of the dental profession. In addition to these presentations, lectures for dental hygienist/therapists were also held throughout the days.

Attendance figures are also expected to increase by 12 per cent, with many new visitors coming from nearby countries like Cambodia, Myanmar and Taiwan. “Not just a place where East meets West. Singapore is also increasingly being considered a gathering point for different parts of the East to meet one another,” Dreyer said.

“...has evolved to be a ‘must-attend’ event for all dental healthcare professionals and related industries in the Asia-Pacific region.”

IDEM 2014 is poised to be the largest dental show ever to be held in Singapore since it was launched in 2000. According to Koelnmesse’s Vice President of Asia Pacific, Michael Dreyer, 50 per cent more dental manufacturers and distributors have signed up for the event, which is being held over the weekend at the recently renovated Suntec Convention Centre. Reflecting greater interest from industry players in the Asia Pacific region, national pavilions from China and Japan are also expected to increase by 12 per cent, with many new visitors coming from nearby countries like Cambodia, Myanmar and Taiwan. “Not just a place where East meets West. Singapore is also increasingly being considered a gathering point for different parts of the East to meet one another,” Dreyer said.

“...IDEM also offers the opportunity to share knowledge, ideas and practical applications in dentistry.”

Aside from the trade fair hustle, clinical presentations as part of the scientific programme will continue today at Level 4 with lectures and workshop focusing on fields like prosthetics and orthodontics. A special presentation by US dentist Dr Barry Freydberg on 05 April 2014 at 4.50 p.m. focused on the detection and prevention of oral cancer, which is among the few types of cancer which are currently on the rise worldwide. At the Dental Tribune Study Club Symposium at booth 69-72, Singapore’s own prosthetic expert, Dr Stephen Soo of Specialist Dental Group, will provide insight into CAD/CAM and how its use can benefit workflow in dental practices.

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Dentistry – your dream profession

At Danube Private University, students undergo a six-year course in dental medicine, and on completion of the course are awarded the internationally recognized degree Dr. med. dent. This elite course of study at the leading edge of medical and dental science, utilising state-of-the-art medical and dental equipment, practical facilities and our in-house clinic, stress to both challenge and support its students. We want our graduates to be among the acknowledged leaders of their profession. The dental faculty of the University includes many highly respected scientists who take great pleasure in being a part of a new, innovative project in basic dental studies that is of particular benefit to society – led by our Chancellor, Professor Dr. Dr. Dieter Müssig and our Dean, Professor Dr. Dr. h.c. Andrej Kielbassa.

In addition to instruction in medical and dental subjects, the President of the University, Honorary Consul M.B. Wagner-Pischel, is dedicated not only to the achievement of excellence in research, instruction and innovation, but also to the holistic education of the young people, ensuring that they receive a solid grounding in the arts, literature, science journalism and music, as well as training in empathy. The aim is to promote the well-rounded development of the young people, and equip them with positive approaches for their subsequent career that enhance their communicative intelligence. Dental health and personal care and hygiene play a key role in how people are perceived today. Beauty and mindfulness are regarded more than anywhere else in oral and dental health. A good dentist can be compared to an artist, as she requires an exceptional understanding of form and colour as well as spatial visualisation skills. When combined with the state of the art in medical and dental knowledge, the result is uncompromising excellence in patient treatment.

For President Wagner-Pischel, a life spent in the exercise of a profession about which one is passionate is an important and meaningful life commitment as well as a significant contribution to the welfare of society as a whole. “Our students at Danube Private University have excellent life and education opportunities. We offer them a top dentistry course equipped with state of the art technology that focuses on students’ needs and values them above all else, while upholding the finest traditional humanistic values. Danube Private University emphasises not only medical and dental science, but also human interaction among students and instructors as well as responsibility to both patients and society,” explains M.B. Wagner-Pischel, President of Danube Private University.

To date, the student body of Danube Private University is made up mostly of the children of dentists and doctors from German-speaking Europe. Young people from all over the world are interested in studying at Danube Private University. In response, we are offering a preparatory course of study for students outside of German-speaking Europe.

Composite Veneers and Masking Discoloration; About Red & White Aesthetics; Direct Veneers Diastema Closure; Virtual Articulator and CAD/CAM Designing Workshop.

The second day of the conference will feature the new Dental Hygiene Seminar focused entirely on the Dental Hygienist providing the latest in Periodontal Instrumentation and Oral Prevention and Management of Denume Hypersensitivity.

Additional to the knowledge delegates will exchange, all attendees will benefit from the networking opportunities in the cozy atmosphere provided by Jumeirah Beach Hotel where you can meet your colleagues from across the globe while lunching at Dubai's best restaurant.

All Dentists, Dental Technicians and Dental Hygienists are welcome to get the most updated scientific exchange and view the latest technology, trends and developments in CAD/CAM & Digital Dentistry. The future is here and all are welcome to join.

Contact Information
http://www.duabne-private-university.at/studien.php?id=130 &PHPSESSID=um7ngso5ounere80c0ldcu3ae7

By Danube Private University

Marga B. Wagner-Pischel