**CAD/CAM Conference Dubai grows as fast as Digital Dental Technology**

Conference is co-organized by Emirates Dental Society, Sandi Dental Society, Lebanese Dental Association and Centre For Advanced Professional Practice - 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 from ADA CERP, DHA, HAAD and SCHS, 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 Kurbad, Germany; Dr. Lida Swann, USA; Lee Culp, CDT, USA; Dr. Andreas Mastrorosa Agnini, Italy; Dr. Alessandro Agnini, 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; Lasers; Unconventional Management for Soft & Hard Tissue; Mastering soft & hard tissue; and Clinical and Ti-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, digital dentistry, and health.

**Quest for the Perfect Restoration**

By Dr. Munir Silwadi, UAE

Though our restorations of damaged or missing teeth has always been a tough challenge all the way since ancient Egyptians until our present time. Our restorations of patients' overall body health right up there in terms...

**First Dental Technician Forum highlights current developments in dental labs**

By Dr. Dobrina Mollova, DDS

Singapore's 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 and more.

**NEWS**

Page 25
Scientists from Norway develop scaffolding to...

**Page 42**
Dental photography made simple by Shofu

**ORTHODO TRIBUNE**

Page 28
Aesthetics and function: Orthodontic – surgical...

Page 50
“The Middle East region is right up there in terms...”

**HYGIENE TRIBUNE**

Page 21
Keeping Hygienists in par with Continuing...

Page 56
Case Report Maxillary Implant

**IMPLANT TRIBUNE**

Page 36
Stem cells in implant dentistry

**ENDO TRIBUNE**

Page 36
Visual information and imaging technology in...

“Continuous Education is a top priority for us, first...
dentition, 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-Jinoian, who presented a lecture on minimally invasive restorations with CAD/CAM.

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 their benefits 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 analyzing 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 and a shade guide were also given. hue and value analysis and milling machines. By analyzing 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.

The ceramic fabrication generated a great deal of interest and discussion. The ensuing discussion lasted over an hour with debates sparked about the suitability of alginate impression materials and work-flow management drew a large crowd of not only participants but also industry representatives. The newest developments concern-

“New educational format presented at IDEM Singapore a success”

The new CEREC Omnicam provides powder-free ease of handling and natural color reproduction to provide an inspiring treatment experience. Discover the new simplicity of digital dentistry – exemplified by Sirona’s premium camera portfolio: CEREC Omnicam and CEREC Bluecam. Enjoy every day with Sirona.

Designs and easy handling is a winning combination utilising Adobe Photoshop for ceramic fabrication generated a great deal of interest and discussion during the session.

Fik Jacobs’ presentation on the latest developments concerning 3-D printers, software, bio-compatible materials and work-flow management drew a large crowd of not only participants but also industry representatives. The ensuing discussion lasted over an hour with debates sparked about the suitability of alginate impression materials and scanning, the accuracy of models milled by the inLab MC-XL (Sirona Dental Systems), the shade availability of crown and bridge materials, as well as which zirconia blocks are recommended for good aesthetics.
CEREC Desert Fest

The Palace Hotel Downtown
12-13 September 2014
Dubai, UAE
www.cappmea.com/cerecfest
6TH DENTAL - FACIAL COSMETIC
INTERNATIONAL CONFERENCE

Joint Meeting with
3RD GLOBAL CONFERENCE OF
AMERICAN ACADEMY OF
IMPLANT DENTISTRY

14-15 November 2014
Jumeirah Beach Hotel
Dubai UAE

HANDS-ON COURSES

Indirect Veneers
Dr. Munir Sifwadi, 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 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.

A white paper on world oral health was presented in London last week. (Photo courtesy of FDI World Dental Federation)

By Dental Tribune International

London, UK: 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

www.instrumentariumdental.com

ORTHOPANTOMOGRAPH® 1965 | OP1
2011 | ORTHOPANTOMOGRAPH® OP300
2013 | The journey continues

ORTHOPANTOMOGRAPH®

THE TRUE IMAGING EXPERTS
GO FOR INSTRUMENTARIUM DENTAL

With a legacy of innovation and experience spanning over 50 years, we’ve mastered the clinical excellence valued by true dental professionals. We’re ready for the next 50 years.

As a true professional yourself, are you ready to join us for this journey?

This is the one that started it all. This is the one, that set the benchmark for everyone to follow.
This is the one with a long legacy of innovation.
This is the one which became synonymous with quality –
ORTHOPANTOMOGRAPH®

The ONe

1965 | ORTHOPANTOMOGRAPH® OP1
2011 | ORTHOPANTOMOGRAPH® OP300
2013 | The journey continues

With a legacy of innovation and experience spanning over 50 years, we’ve mastered the clinical excellence valued by true dental professionals. We’re ready for the next 50 years.

As a true professional yourself, are you ready to join us for this journey?

This is the one that started it all. This is the one,
that set the benchmark for everyone to follow.
This is the one with a long legacy of innovation.
This is the one which became synonymous with quality –
ORTHOPANTOMOGRAPH®

The ONE

THE TRUE IMAGING EXPERTS
GO FOR INSTRUMENTARIUM DENTAL

With a legacy of innovation and experience spanning over 50 years, we’ve mastered the clinical excellence valued by true dental professionals. We’re ready for the next 50 years.

As a true professional yourself, are you ready to join us for this journey?

This is the one that started it all. This is the one,
that set the benchmark for everyone to follow.
This is the one with a long legacy of innovation.
This is the one which became synonymous with quality –
ORTHOPANTOMOGRAPH®

The ONE

THE TRUE IMAGING EXPERTS
GO FOR INSTRUMENTARIUM DENTAL

With a legacy of innovation and experience spanning over 50 years, we’ve mastered the clinical excellence valued by true dental professionals. We’re ready for the next 50 years.

As a true professional yourself, are you ready to join us for this journey?

This is the one that started it all. This is the one,
that set the benchmark for everyone to follow.
This is the one with a long legacy of innovation.
This is the one which became synonymous with quality –
ORTHOPANTOMOGRAPH®

The ONE

THE TRUE IMAGING EXPERTS
GO FOR INSTRUMENTARIUM DENTAL

With a legacy of innovation and experience spanning over 50 years, we’ve mastered the clinical excellence valued by true dental professionals. We’re ready for the next 50 years.

As a true professional yourself, are you ready to join us for this journey?

This is the one that started it all. This is the one,
that set the benchmark for everyone to follow.
This is the one with a long legacy of innovation.
This is the one which became synonymous with quality –
ORTHOPANTOMOGRAPH®

The ONE

THE TRUE IMAGING EXPERTS
GO FOR INSTRUMENTARIUM DENTAL

With a legacy of innovation and experience spanning over 50 years, we’ve mastered the clinical excellence valued by true dental professionals. We’re ready for the next 50 years.

As a true professional yourself, are you ready to join us for this journey?

This is the one that started it all. This is the one,
that set the benchmark for everyone to follow.
This is the one with a long legacy of innovation.
This is the one which became synonymous with quality –
ORTHOPANTOMOGRAPH®

The ONE

THE TRUE IMAGING EXPERTS
GO FOR INSTRUMENTARIUM DENTAL

With a legacy of innovation and experience spanning over 50 years, we’ve mastered the clinical excellence valued by true dental professionals. We’re ready for the next 50 years.

As a true professional yourself, are you ready to join us for this journey?

This is the one that started it all. This is the one,
that set the benchmark for everyone to follow.
This is the one with a long legacy of innovation.
This is the one which became synonymous with quality –
ORTHOPANTOMOGRAPH®

The ONE

THE TRUE IMAGING EXPERTS
GO FOR INSTRUMENTARIUM DENTAL

With a legacy of innovation and experience spanning over 50 years, we’ve mastered the clinical excellence valued by true dental professionals. We’re ready for the next 50 years.

As a true professional yourself, are you ready to join us for this journey?

This is the one that started it all. This is the one,
that set the benchmark for everyone to follow.
This is the one with a long legacy of innovation.
This is the one which became synonymous with quality –
ORTHOPANTOMOGRAPH®

The ONE

THE TRUE IMAGING EXPERTS
GO FOR INSTRUMENTARIUM DENTAL

With a legacy of innovation and experience spanning over 50 years, we’ve mastered the clinical excellence valued by true dental professionals. We’re ready for the next 50 years.

As a true professional yourself, are you ready to join us for this journey?
Passive micro-volume management of sodium hypochlorite in endodontic treatment

mCME articles in Dental Tribune have been approved by:

HAAAD as having educational content for 2 CME Credit Hours

DHA awarded this program for 2 CPD Credit Points

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

The passive utilization and micro-volume management of sodium hypochlorite as an endodontic irrigant has been approved with a laboratory demonstration and several clinical cases. By limiting the volume 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 pulpal tissue 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 are then dried and the canal space filled with either gutta-percha or resin to create a hermetic seal.

The chemicals employed to clean and disinfect the intracanal space are vast and include file lubricants such as Prolube (DENTSPLY) and irrigants such as CHX (CHLORhexidine Gluconate). Allergy from NaOCl is rare but has been reported and may result in severe pain, a burning sensation, edema and transient paraesthesia.

Chlorhexidine gluconate (CHX) is an uncommonly used irrigant with several desirable properties. It provides antimicrobial activity against certain aerobic and anaerobic bacteria, exhibits no significant changes in bacterial resistance in the oral microenvironment and has no injurious effect to the skin or mucosa.4 In fact, CHX has a role as an oral rinse at the 0.12 percent concentration.5 Sodium hypochlorite (NaOCl) still remains the most commonly used form of sodium hypochlorite.6 Sodium hypochlorite is effective against broad-spectrum bacteria and has the ability to dissolve both vital and necrotic tissue. However, this irrigant is equally damaging to the patient and has a history of injurious effects.7 Typically the NaOCl is delivered into the canal space with a syringe dose of 2-10 ml that is expelled under pressure. The ability of NaOCl to escape either through poorly sealed isolation or other means can cause serious injury to the patient.8

Injury from NaOCl is well established in the literature6,9,10 and has been attributed to three main errors: poor handling, injection beyond the apical foramen and allergy.9 Poor handling injury can result in operator and/or patient injury to the eye and/or skin.9 Injection beyond the apical foramen can result in the following:9

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

Allergy from NaOCl is rare but has been reported and may result in severe pain, a burning sensation, edema and transient paraesthesia.9

Methodology

Although there is no universally accepted irrigation protocol regarding endodontic treatment, 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.9 By placing an instrument into a suitable container, the NaOCl will be carried within the surface texture 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.1 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.9 The canals are also housed within a tubular structure, for which the permeability has been distinguished.9 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 media9 and surface tension fluid mechanics11 must be recognized to validate and further advance canal irrigation.

Micro-volume management of NaOCl has been suggested as a delivery modality to maxi-
been suggested as the larger volume, positive pressure irrigant that may be delivered into the canal space. CHX has favorable antibacterial characteristics but minimal injurious effects, if mismanagement of the irrigant has occurred. If positive pressure delivery of CHX is required, the operator should regulate the pressure and avoid the risk of injection beyond the apex. The use of EDTA (ethylenediaminetetraacetic acid) could be employed after NaOCl, to minimize the formation of precipitates.

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 ThermaSeal 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.

References
4. 5M ESPE; Periex™ Chlorhexidine Gluconate (0.12%) Oral Rinse Fact Sheet: 2009.

Les Kalman, BSc (Hon), DDS, graduated from the University of Western Ontario with a doctor of dental surgery degree in 1999. He then completed a GPR at the London Health Sciences Centre. He has been involved in general dentistry within private practice since 2000.

He has served as the chief of dentistry at the Strathroy-Midbrow General hospital. In 2011, he transitioned to full-time academics as an assistant professor at the Schulich School of Medicine and Dentistry. Kalman’s research focuses on clinical innovations, including the virtual facebow app. Kalman is also the director of the Dental Outreach Community Services (DOCS) program, which provides free dentistry within the community. Kalman has authored articles ranging from pediatric impression to immediate implant surgery in both Canadian and American journals.

He has been a product evaluator for several companies including GC America and Clinicians’s Choice. Kalman is the co-owner of Research Driven, a company that deals with intellectual property development. Kalman is a member of the American Society for Forensic Odontology, International Team for Implantology, Academy of Osseointegration, American Academy of Implant Dentistry and the International Congress of Oral Implantology.

He has been recognized as an academic affiliate fellow (AAFD and diplomate (ICOF). He can be contacted at ikalman@uwoc.ca.
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 recare 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 the health. If your practice is not familiar with a recare update forms, please check your website to obtain a copy. Again, thorough questioning of all new and established patients is an essential component to getting the full picture of your patients’ health.

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 asparin sensitivity, blood dyscrasias, other diseases, fungus, yeast or a cyst; so oral disease testing should be performed.1 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:
• Oral cancer screening (e.g. ViziLite)
• Oral HPV testing
• Diabetes testing with a glucometer – finger stick or blood sample taken from a periodontal pocket
• Oral cancer screening (e.g. ViziLite)
• Oral cancer screening (e.g. ViziLite)
• Oral cancer screening (e.g. ViziLite)

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 case 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 demand 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 procedure would at least get the ball rolling. If the practice does not treat sleep apnea, the referral would be the last ball rolling for treatment by 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.articlesandmanagement.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 procedure 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 code procedures to contact insurance companies to encourage their patients to complain to their employers. Insurance contracts are 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 practices 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 their health and trust them with 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.

Fig. 2 Blank, original CMS-1500 form, which is printed in red ink, provides spaces for at least four diagnosis codes and six procedure codes. Codes within these code systems provide further diagnostic information or details on why a procedure might 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.articlesandmanagement.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 procedure 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 code procedures to contact insurance companies to encourage their patients to complain to their employers. Insurance contracts are 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 practices 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 their health and trust them with 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.
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 (G-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 irra-

Demi Ultra, thanks to its °60C angle makes the access to the posterior area and the curing phase more comfortable for the patient.

Demi Ultra, compared to other curing lights, guarantees a slight decrease in depth of cure. As the angle decreased from perpendicular, there’s a significant drop in intensity which results in a slight decrease in depth of cure.

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 Kerr Demi Ultra LED Ultracapacitor Curing Light System 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!

NO BATTERY, NO CORD, NO EQUAL

REVOLUTIONARY U40-™ ULTRACAPACITOR

PROPRIETARY C.U.R.E.™ TECHNOLOGY

EASY SUITE FEATURE SET

AFTER SALES SERVICE

Order information:
Demi™ Ultra LED Ultracapacitor Curing Light System

Item nr 35664 Demi Ultra LED Light Attachment 8mm
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

Accessories

Item nr 35665 Demi Ultra Charging dock with built-in radiometer
Item nr 35667 Demi Ultra Handpiece
Item nr 35668 Demi Ultra Light Shield
Item nr 35815 Demi Ultra Power Supply
Item nr 35837 Disposable Hardness Disk Kit (pack of 1)
Item nr 21042 Optics Maintenance Kit
Item nr PEDEMIULTRA100 -Demi Ultra Barrier Bag (pack of 100)

A non-uniform beam also penalized 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 other photoinitiators.
The European University College hosts its official graduation ceremony

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 Shurif, 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.

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 proximality 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.
Revolutionary aligner appliance expanding in the Middle East

By Inman Aligner

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.

One appliance

What is unique with the Inman Aligner is that it can be used to align teeth either as a standalone 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 6 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 UK 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 predictable result”.

High Technology Dental Lab.

Our target: our target is to connect doctors with the highest and newest technology in dental laboratories field

Our mission: we make more than a good job for your patients smile

Our work: ceramic work, zircon work, in-ceram work, in-ceram support by zirconium 90%, e-max work, implant work, acrylic work, chrome cobalt work, orthodontic work, aesthetic smile work

Contact Us: Al Shamael Bldg. next to New Expo Center, Sharjah, Dubai, U.A.E. Tel: 06 5125777, Fax: 06 5125778, Mobile: 050 760 7489, e-mail: HTDL@hotcall.com

“The Dental market is truly flourishing in Lebanon and in the Middle East”

By Rodny Abdallah

Rodny Abdallah: Please share with our readers a short biography including your education and laboratory experience.

Alain Sakr: My Name is Alain Sakr, I am a Certified Dental Technician, graduated from The Universite Antonine at Baabda in 1991. I started my experience as an intern at Claude Thousue dental lab during the summer of the same year. Then I started to run my own dental lab until the present date.

How important is the choice of working for your colleagues and being the President of the Lebanese Dental Laboratories Association?

Recently, I have been elected by my colleagues to run the dental laboratory order for the coming three years. My main role and target will be to develop the order’s vision towards a better future.

Compared to when you first started in the dental lab field, how has dentistry in dental lab developed through the years?

The field of Dentistry has passed a long way since I first started my career. This profession has made a huge upgrade from being a totally manual labour or hand work to an almost fully computerised and mechanical dentistry due to the involvement of scanners, milling devices and 3D printers.

What do you think about the dental lab market in Lebanon and 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.

How important is the role of digital dentistry in the daily work of dental laboratories?

Digital dentistry has impacted the dental laboratory field heavily in a positive way. It is helping in improving the skills and products used in our labs, especially in the aesthetic department. A new demand is being noticed as well in the role of a hybrid dental technicians skills.

What are the plans of OPDL in the coming years? As you have been elected for the coming three years...

My plans as elected president for the coming three years are to make sure that OPDL will continue to make decisions that will further develop our order and could be beneficial for all our colleagues. One of my targets is to push our profession to higher standards and elaborate future workshops with the contribution of opinion leaders in our field worldwide.

How important is the role of the dental technician in the dental team?

The dental technician has an important role in the dental team as he insures the fabrication and the refining of the devices that shall be used in the dental cavity as well as the role of the dentist. They both contribute in creating a good team as one hand does not clap alone.

How important is the dental media in the lab field or the association?

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. What can you tell us about LDDS 2014?

LDDS 2014 (Lebanese Dental Laboratories Show 2014) is truly shaping up to be a remarkable
Now, everyone in your dental team can Shoot!

Ultra-Light
SIMPLE
Compact
Accurate

SHOFU Smart Digital EyeSpecial C-II

- 8 Pre-set dental modes with the option of customized settings
- Intuitive one-touch operation and built-in anti-shake
- Large LCD touchscreen with dental cropping grid lines
- Fast auto-focusing capability and excellent depth of field
- Water and chemical resistant
- Uncomplicated photo management system

For more information, simply contact us or your nearest SHOFU dealer.
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 have been used 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 fabrication, 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

COPENHAGEN, 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.

“My presentation at the Dental Tribune Study Club Symposium on Level 6 at Suntec City.

Many laboratories are steady fast 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 Herren, 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 library. 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 software, we are able to come up with almost perfect restoration designs. CAD 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 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. CAD 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 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. CAD 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 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. CAD 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 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. CAD 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.
Predictability in Implant Planning with 3D Imaging - Clinical Case Report

By Norberto Velázquez, DDS

Greenville, NC, Dr. Velázquez 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 im-
plant course.

The case presented represents a typical instance where an im-
plant 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 abil-
ity 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 appro-
priate clearance between the implant, inferior nerve, and the mental foramens — as indicated by the mint circle. In addition, the Invivo 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.

Gendex imaging solutions at: www.gendex-dental.com

The GXDP-700 system offers several functionalitites that ben-
efit my patients. The advantage of the extra dimension to both implant patients for me, and orthodontic patients for my wife, is in calculable. This ma-
chine has become 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 struc-
tures 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-
yogy 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

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-
 jonent root positions, in order to loca-
canal 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-
er 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-er additional imaging capabilities, the Gendex 700 imaging so-
lution can be upgraded within your own timeline and budget.

X-ray imaging, including den-
tal 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 ra-
diation 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 AEDC 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 except for a open Web-based system that enables dentists to use the complete product family or choose any of the products as a standalone 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 +43 mm and offers high-angle scanning of up to 45 degrees. It features a light guidance system that enables dentists to focus more on patients’ mouths 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 image 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 DeRose

North Rive 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.”

Dr. Ernesto Jaconelli

Ernesto.jaconelli@carestream.com

But if you need to talk, to someone now please do not hesitate to contact me on: Ernesto.jaconelli@carestream.com

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
• AEDC 17–19 February 2015

© Carestream Health, Inc. 2014.
VITA SUPRINITY® – Glass Ceramic. Revolutionized.
The new zirconia-reinforced high-performance glass ceramic.

VITA SUPRINITY material belongs to the new generation of CAD/CAM glass ceramics. Now for the first time this innovative, high-performance material is reinforced with zirconia. This results in a high-strength material and processing safety coupled with an extraordinary degree of reliability. It features a particularly homogeneous structure that ensures simple processing and reproducible results. And what’s more, VITA SUPRINITY offers the benefit of a very wide range of indications. For more information visit: www.vita-suprinity.com  facebook.com/vita.zahnfabrik

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.
“The edentulous patient is an amputee, an oral invalid, to whom we should pay total respect and rehabilitation ambitions”. Per-Ingvar Brånemark

By Safa Tahmasebi DDS MS

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 Larsson with titanium dental implants who was missing teeth as a result of jaw deformities. Larsson 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 disablities. 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.Samedayimplants.com). 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...”

THE REAL CHOICE for pediatric dentistry

NuSmile® PEDIATRIC CROWNS

Dubai Medical Equipment L.L.C.
Tel: +971 6 5308055 www.dme-medical.com
NEW: Philips Sonicare FlexCare Platinum

For outstanding cleaning, even deep between the teeth

Philips has the right sonic toothbrush for every cleaning need. The latest innovation is called Philips Sonicare FlexCare Platinum. Its innovative pressure sensor gives immediate feedback in a simple manner if too much pressure on the brush head minimizes the vibrations. This makes the Philips Sonicare FlexCare Platinum ideal for those of your patients who are worried about using too much pressure when cleaning with an electronic toothbrush. Nine individual settings and intensity levels thereby make adaptation to the individual cleaning requirements possible.

Pressure sensor
This innovative sensor gives simple and intuitive feedback if the brush head is pressed down too hard.

3 cleaning settings
• Clean – ensures optimal plaque removal (standard)
• White – removes discoloration of the tooth surface in 2 minutes, and the front teeth are whitened and polished in a further 30 seconds.
• GumCare – combines 2 minutes in the Clean setting with 1 minute of gentle gum massage for healthy gums.

3 intensity levels
Maximum comfort with the 3 adjustable intensity levels: low (for sensitive areas), medium and high. Each of the 3 intensity levels can be combined with each of the 3 cleaning settings.

Philips Sonicare InterCare brush head
Extra long filaments reach deep into the spaces between teeth and ensure an excellent plaque removal there compared to a manual toothbrush. For better tooth and gum health.

UV-Sanitizer
With the UV light technology from Philips, up to 99% of the bacteria and viruses¹ on the brush head are rendered harmless – in only 10 minutes.

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.

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
wilson@dental-tribune.me
www.dental-tribune.me

Maintenance of dental implants for the hygienist

By Biberachi/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, 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.

Why CME (Continuing Medical Education) or CPD (Continuing Professional Development) is important to Dental Professionals

By Victoria Wilson

By defining Continuing Professional Development (CPD) and outlining the need for it for dental professionals through a series of publications from Governing bodies, it can be seen that with proper planning, goal assessment and verifiable CPD activity, one can not only meet government regulations for CPD but gain insight and skill-set for further professional and personal development.

Method

Review an analysis of CPD for dental professionals from online publications related to bodies in the UK, US, Canada, and the Middle East.

Results

CPD can be obtained through a wide range of activities. A structured approach when undertaking the CPD projects of choice, in line with key targeted learning objectives, is key to achieving a noteworthy and credible progression in job performance.

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.

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. (1)

Why is CPD in Dentistry so Important?

Education and qualifications are 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. (4,5)

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

Reduced bleeding on probing index after 4 weeks with parodontax®

<table>
<thead>
<tr>
<th>Change vs baseline in bleeding on probing index after 4 weeks</th>
<th>Fluoride-containing control toothpaste</th>
<th>parodontax®</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 weeks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 weeks</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

Adapted from Saxer et al 1994. All interdental spaces from 6 to 6 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 (5.80). After 4 weeks: Control (fluoride-containing toothpaste) group 26.00 (9.14); 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. In the early stages of Acid Wear, a patient’s enamel can become translucent, anatomical 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 reharden acid-softened enamel and protect against future acid challenges.

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 from the effects of against Acid Wear compared to other toothpastes with the same marked fluoride levels.

Pronamel has been clinically tested in situ to...

- Reharden acid-softened enamel
- Build protection against future acid challenges

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

- 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 ML 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.

Figure 2: in situ rehardening microindentation study following treatment with dentifrices

P<0.001

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

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

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.

“With this new light the patient’s sensitivity is minimal, making the procedure much more pleasurable.”
– Juban Dental Care - Baton Rouge, LA
Scientists from Norway develop scaffolding to repair severe teeth and jawbone defects

By Dental Tribune International

O

SL0, Norway: Dental re-
searchers at the Universi-
ty 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 periodon-
tis, mandibular cancer,
neurological disease,
traction 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 suf-
icient to insert a small piece
of synthetic bone-stimulating
material into the bone. The ar-
tificial scaffolding is as strong as
real bone and yet porous enough
for bone tissue and blood ves-
sels to grow into it and work
as a reinforcement for the new
bone," said Prof. Ståle Petter
Lyngstadhaas, Dean of Research
at the University of Oslo's Insti-
tute of Clinical Dentistry.

The scaffolding can be pro-
duced like cinder blocks and
cut into individual shapes to
fit 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 mix-
ture 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
lattice into one solid structure. It
has an open porosity of 90 per cent,
containing mostly empty space
that can be filled with new bone
and blood vessels, which cur-
rent materials do not provide.

While current materials are de-
graded gradually, the new scaf-
folding remains an integral part
of the repaired bone, working
as reinforcement, Lyngstadhaas
explained.

In addition, the genera-
tion process could be
accelerated by the
insertion of bone pro-
genitor cells or bone
marrow, containing stem cells.

Conventionally, dam-
aged bone is repaired by
removing tissue from
healthy bones, such as the
mandible or hip, for implanta-
tion. Patients often experience
discomfort and complications af-
after the surgery. This can be avoided by us-
ing the scaffolding.

Since the scaffolding has shown
positive results in preliminary
animal studies, the researchers
are currently planning to un-
dertake 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 devel-
oped in collaboration with Corti-
calis, a Norwegian company that
specialises in innovative bio-
materials. In order to market their
invention, the researchers are
currently looking for an industry
partner.

Table 2 – Health Authority Abu Dhabi (HAAD) CPD Requirements (5)

<table>
<thead>
<tr>
<th>Points for Consideration Prior to Undertaking CPD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. CPD must achieve outcomes that support practice in accordance with local Standards and Regulations.</td>
</tr>
<tr>
<td>2. Proper planning and reflection with a PDP for CPD requirements is advisable.</td>
</tr>
<tr>
<td>3. All CPD should be verified and evidence based treatment that is supported by scientific and biomedical research. (4)</td>
</tr>
</tbody>
</table>

Conclusions

After review, it has been con-
cluded that in order to make CPD most effective to dental professionals:

- 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. (4)

References

1. General Dental Councils, Continuing Professional Development for Dental Professionals, Protection Patients, regulating the dental team.
2. Policy on Continuing Professional Development (CPD) Requirements, Health Regulation Department, Dubai Health Authority, July 2010.
3. Continuing Professional Education Health Authority - Abu Dhabi.
4. Continuing Professional Development, dental Board of Aus-

tralia, February 2011.
5. Continuing Professional Development, dental Board of Aus-

tralia, February 2011.

Contact Information

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

Table 3 – UK Standards for CPD

<table>
<thead>
<tr>
<th>Principles</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Put patients’ interests first</td>
</tr>
<tr>
<td>2. Obtain valid consent</td>
</tr>
<tr>
<td>3. Maintain and protect patient’s information</td>
</tr>
<tr>
<td>4. Have a clear and effective complaints procedure</td>
</tr>
<tr>
<td>5. Have a clear and effective complaints procedure</td>
</tr>
</tbody>
</table>

Table 4 – Example of Professional Development Plan

- 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. (4)
The causes of bone loss are:

- Occlusal overload.
- Bacterial induced inflammation.

Any occlusal overloading needs to be corrected by the implant dentist. Plaque induced inflammation is initially treated non-surgically but depends on the initial clinical presentation. This involves the removal of dental plaque with or without the use of locally delivered or systemic adjuncts. Lesions with probing depth of 5 mm or more and bone loss of greater than 2 mm would need surgical intervention as recommended by the International Team for Implantology (ITI) consensus report Figure1.

A common cause of plaque induced peri-implantitis is excess cement which has been forced into the tissue when the crown is cemented. If the excess cement is not thoroughly removed by the implant dentist, this will induce inflammation of the tissue and possible bone loss. How to maintain dental implants?

It is important that good oral hygiene is performed to maintain healthy peri-implant tissues. The use of toothbrushes, either manual or electric, helps to reduce the amount of plaque biofilm. Floss, including superfloss and interdental brushes is essential for access interproximally. It is very important that oral hygiene for the patient is not made too complicated there by prolonging the time required by using too many oral hygiene aids. In the aesthetic zone, a cross over flossing technique can be used (Figs. 2a-f).

A poor flossing technique or no flossing at all can lead to subgingival inflammation of the peri-implant tissues. It is essential that if a cement retained crown is placed that all the cement is removed as subgingival irritants such as excess cement can provoke an acute peri-implantitis which can cause soreness, swelling, bleeding on probing and eventual bone loss (Figs. 3 & 4).

In premolar and molar areas the use of floss or interdental brushes can be easier for the patient in the case of single unit implant, and in fixed bridgework.

Calcium formation on dental implants is very similar to that found on teeth, the only difference is that the abutment and the porcelain are very highly polished, therefore the calculus is not as tenacious as on a natural tooth. When removing supra gingival calculus from the implant crowns, it is very important not to use stainless steel scalers as this will damage the titanium surfaces. Therefore it is recommended that one uses a material that is softer than titanium either gold plated or reinforced plastic instruments (Fig. 5). It is very important that an ultrasonic is never used on an implant as this will heat up the implant and could kill the bone that helps integrate the implant.

When pocketing has been noted then using the CIST protocol will help treat the majority of peri-implantitis cases. Below is an example of an UR2 with 8 mm pocketing, the site was treated non-surgically with local delivery antimicrobials and with the patient using chlorhexidine gel with the largest interdental brush (Figs. 6a-c). At the 2 week review the pocketing associated with the UR2 has reduced to 5 mm with simple non-surgical therapy any further intervention will need to be reviewed by the implant dentist.

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 (3). On the contrary such treatment might even enhance the possibilities of saving and restoring a deteriorating dentition. During the orthodontic movement it is the entire 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 (6) (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...

> Page 33

Figure 1. Extraction of the lower first molars has resulted several years later to a mesial tipping of the second and third molars (A). When orthodontic uprighting of tipped molars was undertaken the crestal bone exhibited considerable changes (B).

Reduced Treatment Time* Fewer Patient Visits*

Optimize your practice with the award-winning Insignia™ Advanced Smile Design™, providing the largest array of customized appliances including brackets, wires and even clear aligners.

• Delivers Precise and Predictable Outcomes
• No Inventory Costs
• Combine with Lythos Digital Impression system for Greater Savings and More Streamlined Workflow
• Grow your Practice with Digital Technology

For more information please contact:
Tarek Haneya – Area Sales Manager
Tarek.haneya@ormcoeurope.com
Tel: + 971 56 1746 575
Or contact your local distributor, list is available at ormcoeurope.com

© 2014 Ormco Corporation
Aesthetics and function: Orthodontic-surgical collaboration as a key to success

By Drs Martin Jaroch & Friedrich Bunz, Germany

Orthognathic surgery is an important cornerstone in orthodontic treatment of malocclusions. Tooth movement is only possible to a limited extent and always depends on the development of the mandible and maxilla in relation to each other, as well as on deformities of the jaw in relation to the other facial bones.

Abnormalities 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 abnormalities already present. Clinically, this results in late mixed dentition or permanent dentition, as well as malocclusion; all patients can achieve an accurate mapping of the reasons for this malocclusion. In the literature, the causes of malocclusion and the aetiologic structure of the symptoms of malocclusion in orthodontic patients are controversial issues. No explicit information on the percentage of patients with acquired or hereditary malocclusions can be found in a study by Schoepf (1981) on the exogenous factors that lead to the development of malocclusion. However, from the assessment of individual patients' symptoms, all symptoms of malocclusion could be associated with genetic and aetiologic factors only in 48% of patients. Brodman and Sackel (2001) concluded from Schoepf's report that only 20% of the anomalies were hereditary and thus could not be affected by prophylactic interventions. Accordingly, 80% of malocclusions could be resolved through prevention and better oral hygiene. This idea is contrary to the results of the German Oral Health Study. In this study, a decrease in childhood caries was observed. However, clinically, these results were not associated with a lower rate of need for orthodontic treatment. The study at the University of Greifswald, Germany, found that 26.5% of the symptoms were hereditary. Accordingly, 44.5% were exogenous and 53.5% were not precisely determined. The assumption that 80% of malocclusions can be resolved by prevention and better oral hygiene is very questionable.

The varying findings and remarks illustrate the difficulty of clear classification of malocclusion. Nonetheless, the demands of the patient have priority and he expects a symptom-based therapy with stable treatment results. This means that in malocclusion cases that cannot be resolved by functional orthodontics solely, orthodontic-surgical planning can be done before any treatment is attempted by pure dentoalveolar compensatory intervention. Compensatory dentoalveolar procedures could prevent a surgical operation. At the same time, patients may run the risk of protracted treatment without any long-lasting benefit. The decision for or against orthodontic surgery requires interdisciplinary agreement and reliable treatment goals must be defined in advance (Figs. 2a & b).

Target group for orthopaedic surgery

Nowadays, adults make up the majority of patients in the orthodontic practice. They are generally motivated by high socio-cultural demands and the desire for perfect teeth. 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 using removable appliances or brackets. Children and young people for whom functional orthodontic treatment has not led to the desired result are treated surgically early. Surgery always carries the risk of unexpected growth pattern or unilateral abnormal hypoplasia and can affect the results of the operation.

The choice of technique for the osteotomy depends on various factors. Functional orthognathic surgery, 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 the optimal occlusion. This crucial step has always been performed by the orthodontist as accurately as possible because it involves 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 bimaxillary 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 rami (Figs. 7a & b). Since Bell and Epker described the possibility of bi-maxillary surgery as the “down fracture” technique in 1975, it has been popular and today you can find it mostly as a combinatio
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 tumour, 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 osteosynthesis 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.

**Interspecial 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. 10a & 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
Tegingerstr. 5
78315 Radolfzell, Germany

---

**IT IS TIME TO SEE THE FUTURE NOW!**

Invisalign uses 3D CAD/CAM technology to visualize the treatment and a step-by-step simulated results.

---

**INVISALIGN® CERTIFICATION**

RIYADH MAY 17, 2014

- Apply the most healthy orthodontic treatment
- Expand your adult patient practice
- Enhance your competitive edge
- Elevate the patient experience
- Your patients will love it

Dubai Office: +971 4 385 1663
Riyadh Office: +966 56 114 2557
info@invisaligngcc.com
“The Middle East region is right up there in terms of Global Orthodontic standards”

By Dr. Khaled Abouseada, KSA

I t was a pleasure to interview Dr. Nikhilesh Vaid who could be ranked as one of the key doctors to enrich and strengthen our orthodontic section in Dental Tribune, bringing it to new heights by displaying a wide screening of Dr. Nanda's vast crucial achievements. The focal objective was encapsulating the accumulated information I received from him in an easily digestible manner providing a platform for all the different 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 to distinguished professional 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 that. He has played a major role in improving the practice in India, targeting unique researches and development efforts as well as leading growth initiatives.

Dr. Khaled Abouseada: Compared to when you started practicing, how has Orthodontics developed through the past years? What are the driving factors behind this development?

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 practice of the art I have been impressed. In the last 12 years from when I did start out, the major thrust has been the incorporation of technology in all spheres: Diagnosis, Research, Planning, Mechanics 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 skill required for changing and the only thing constant with any science, Fundamental principles will still govern Orthodontic care delivery, but incorporation of technology has improved the quality of life of both the orthodontist and the orthodontic patient. Today Micro implants are the mainstay of anchorage control, I only use Self Ligating brackets, because of chair side efficiency. Lingual Orthodontics, Aligners, Stereolithography, 3D Printing, etc. are the mainstay of our teaching and practice protocols. The third dimension is driving 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 Mysore, 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 we 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 molded me to assume greater responsibilities in life.

Do any of your teachers stand out who encouraged you to pursue this career? What would you tell them now?

Well the soul of any teaching programme is the Programme Director or a Guide in Masters Programme, whatever the nomenclature is in any part of the world. The biggest influence in my life has been my Professor, Prof. T. E. 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’s 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 Ravi Gupta, Dr Ravi Sahle, Dr Shailesh Deshmukh and Dr Sripad Nagarsekhar 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 Vandekar, Dr Gurkeerat 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.

Dr. Nikhilesh Vaid

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 advise, but I am greatly influenced by a quote of ours, “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 open minds and the willingness to be students all our lives. If we can attune our mindsets to this aspect, success in every sphere of life will follow.

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. With respect to the benefits of publication, I would not dwell on the fact that we need it for career enhancement. It is our contribution to our profession. If Andrews did not publish the “Six keys to the occlusion” and Angle, the “classification of malocclusion”, would we have evolved to where we are today?

It is critical to understand that publishing our work is another obligation to our specialty. We cannot do more, we should not dare to do less!

What are your future expectations in Orthodontics?

I envision a tomorrow, where Orthodontic care will be available in every corner of the world, provided by a specialist Orthodontist. From a health care perspective, the scope of orthodontiatrics should also include interdisciplinary and adjunctive therapies. Collaborating with Sleep Medicine, Plastic Surgery, ENT Specialists and other Dental Specialists will be the tomorrow of Orthodontics. As orthodontics using CAD CAM and Robotics will be a regular feature of our appliances as well as our Diagnostic and finishing protocols. Diagnostic Aids will become 3 Dimensional for a fact. Research in Genetics, Bone Biology and Molecular Genetics will play a significant role in the way we approach the growing patient in the next decade. It is an exciting time to be able to witness this change in Orthodontics.

Regarding our Middle East region, as you are an active contributor in many events in the area, what can you say about the Orthodontic mark in the area?

I think the Middle East region is right up there in terms of global standards. We have made significant progress. I have traveled to lecture in UAE, Jordan, Lebanon and Oman, and was impressed with the quality of work and enthusiasm in the region.

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, my aim is to provide the best service possible and improving our material are our main components of value. Receiving feedback is always welcome. I4 whether positive, negative, thankful or harsh replies, which will always keep us on our toes. My aim is to guide us to our next steps. Continuous improvement of this section is a top priority, and is the mark of our growth, which we hope would be envisaged to meet your needs.

Contact Information

Dr. Khaled Abouseada
Consultant Orthodontist
khaledabouseada@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/J&J, 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 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 TMI, 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 highlight on the dental calendar and eventually 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, Marys Faris, Jamuna Lisa Ibbye, Abeer Sha’al, Shoumuk Mahmoud, Sally Masoud Manla, Sara Anbari, Deema Rashad and Mohammed Hussein Haider, all from the second-year dental program at CoS. “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 Sabih 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.

The 2nd International Students’ Dental Conference 2014 was supported by IDEM, the largest dental show ever to be held in Singapore since it was launched in 2000. According to Koelnmesse, the international organizer of IDEM, 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,” said that the ongoing support of Guar’s Ministry and other sponsors is a testament that IDEM has firmly consolidated its status as the focal event for the Asia-Pacific dental community. “Besides the opportunity to interact with friends and dental professionals from around the world, IDEM also offers the opportunity to share knowledge, ideas and practical applications in dentistry,” he said.

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 Singapore Expo. Reflecting greater interest from industry players in the Asia Pacific region, national pavilions from China and Japan are being held over the weekend at the recently renovated Singapore Expo. Reflecting greater interest from industry players in the Asia Pacific region, national pavilions from China and Japan are currently on the rise worldwide. At the Dental Tribune Study Club Symposium at booth 6P-22, Singapore’s own prosthodontic expert, Dr. Stephen Sue 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.

Still lots to see and discover at IDEM

By Dental Tribune International

Singapore: 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 9 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.”

Praise was also given by Singapore Dental Association’s President Dr Kuan Chee keong, who said that the ongoing support of Guar’s Ministry and other sponsors is a testament that IDEM has firmly consolidated its status as the focal event for the Asia-Pacific dental community. “Besides the opportunity to interact with friends and dental professionals from around the world, IDEM also offers the opportunity to share knowledge, ideas and practical applications in dentistry,” he said.

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 Singapore Expo. Reflecting greater interest from industry players in the Asia Pacific region, national pavilions from China and Japan are currently on the rise worldwide. At the Dental Tribune Study Club Symposium at booth 6P-22, Singapore’s own prosthodontic expert, Dr. Stephen Sue 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 in 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 focussing on fields like prosthodontics and orthodontics. A special presentation by US dentist Dr Barry Freyberg on 05 April 2014 at 4.30 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 6P-22, Singapore’s own prosthodontic expert, Dr. Stephen Sue 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.
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, stresses 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 revered 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 Dentine 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.