Super-high translucent zirconia Ceramill Zolid FX for highly aesthetic anterior and posterior restorations

By Amann Girrbach

Ceramill Zolid FX – this is the strong alternative to lithium disilicate, as the super-high translucent zirconia blanks from Amann Girrbach can now be used to fabricate highly aesthetic monolithic or anatomically reduced restorations in the anterior region and up to 5-unit bridges in the molar region without having to forego the excellent material properties of zirconia. In addition, Ceramill Zolid FX does not age, which ensures long-term strength and stability of the restoration. Ceramill Zolid FX is processed and fitted in the patient’s mouth without additional expense and also using standard luting material, as is the usual practice with zirconia restorations.

In accordance with the integrated product philosophy of Amann Girrbach, Zolid FX is not a single product but a whole system solution consisting of material and method.

A coordinated staining concept will therefore soon be available for Zolid FX Classic, which enables precise, reliable staining according to the VITA classical shade guide.

Amann Girrbach will also soon supply the super-high translucent zirconia blanks Ceramill Zolid FX Preshades for restorations, which are fabricated as efficiently as possible without a staining process.

Interview with Abdo Salem - Amann Girrbach Sales Manager MEA

By Dental Tribune MEA/CAPPmea

Amann Girrbach started its activities in the Middle East region in 2010 and has been growing ever since. Dental Tribune MEA / CAPPmea has the pleasure to interview Mr. Abdo Salem, Sales Manager MEA to find out more about the company in the area.

Dental Tribune MEA: Mr. Abdo Salem, congratulations on the continuous achievements at the innovative Amann Girrbach. How do you explain the constant success to innovate and serve your customers in the MEA region over the years?

Abdo Salem: Amann Girrbach started its sales activities in MEA in 2010 and has strengthened its presence here by having a dedicated team based in Beirut offering Helpdesk support in Arabic, French and English speaking languages as well as a technical support and assistance team. Furthermore we established an AG training center based at the Antonin University where a professional instructor with dental technician educational...
The new dental care system proven to reverse the enamel erosion process

By Dental Tribune MEA/CAPPnews

Dubai, UAE: Monday 16th of February 2015, over 100 dental professionals gathered at the Armani Hotel Downtown Dubai, UAE for the launch of the new dental care system which proves to help reverse the early and invisible stages of the enamel erosion process. Dental Tribune MEA/CAPPnews interviews Unilever expert Dr. Fred Schaefer on his views.

Dental Tribune MEA/CAPPnews: Dr. Fred Schaefer, what is NR-5 or rather Regenerate Technology? Dr. Fred Schaefer: Regenerate Enamel Science™ is a dental care system. It is the first system able to help reverse early and invisible stages of the erosion process, and regenerate enamel with exactly the same minerale of which tooth enamel is made. The Regenerate system contains the exclusive NR-5™ technology with 5 international granted and pending patents.

Regenerate Enamel Science™ is a completely novel way to apply effective anti-enamel erosion care because it combines an Advanced Toothpaste for daily brushing with a Boosting Serum for direct application of the NR-5™ technology onto tooth enamel on three consecutive days once a month.

The NR-5™ technology is a unique combination of calcium silicate, sodium phosphate and fluoride. Whilst standard fluoride treatments help to protect from enamel erosion, clinically-proven Regenerate Enamel Science™ is the first system able to help reverse the early invisible stages of the erosion process and regenerate enamel with exactly the same mineral (hydroxyapatite) from which tooth enamel is made.

How has Unilever’s new NR-5™ technology proven to reverse the enamel erosion process?

To answer this question we need to understand first how the NR-5™ technology works. When brushing calcium silicate and sodium phosphate combine with saliva to form hydroxyapatite. Finally the calcium silicate particles deposit (stick) onto the surface of enamel. The calcium silicate particles then trigger the formation of crystals of hydroxyapatite on the tooth surface.

The second step was to study in the laboratory whether the invisible erosion damage of tooth enamel could be restored. A series of studies using small pieces of enamel were carried out according to internationally accepted protocols and procedures. The enamel samples were analysed and measured to determine the beneficial effect of the NR-5™ toothpaste and the direct application boosting serum.

The results of these studies showed:

- the combined treatment of NR-5™ toothpaste and NR-5™ boosting serum provided 82% recovery of enamel hardness after three days.
- the NR-5™ boosting serum gave a 45% benefit compared to the NR-5™ toothpaste alone.
- the combined treatment of NR-5™ toothpaste and NR-5™ boosting serum provided significantly greater recovery of enamel surface micro-hardness in comparison to a normal toothpaste.

Finally, the NR-5™ toothpaste and NR-5™ boosting serum were tested in human volunteers. The results confirmed that the combined use of the NR-5™ toothpaste and NR-5™ boosting serum provided a greater regenerative benefit to acid-damaged tooth enamel than a normal toothpaste.

What was the motivation and inspiration to produce such a formulation over ten years of research and development?

The motivation was to give the consumer an improved dental care system specifically designed to help against the challenges we observe in our modern, healthy diet and our enamel. The inspiration came from research into the repair of bone in which the same silicate – phosphate mineral of which bones and teeth are made we postulated that the same technology could prove beneficial in regenerating acid-damaged tooth enamel.

How will Unilever convince dental professionals that the new NR-5™ Regenerate System is better than its predecessors and that it should replace the everyday regular toothpaste used?

Unilever has carried out extensive basic and applied scientific research on this new technology and provided clear proof of the effectiveness of the NR-5™ toothpaste and NR-5™ boosting serum. The main results have been published in a peer-reviewed scientific journal and are available to academic researchers and dental practitioners worldwide. We are convinced that the daily use of the NR-5™ toothpaste combined with the direct application of NR-5™ boosting serum – a completely novel and unique way of using an oral care product – will significantly help consumers in protecting their tooth enamel from damaging effects of the erosive acid challenges our modern diets and lifestyle.

What is the role of the advanced toothpaste also which to work in conjunction with a Boosting Serum to get the full effect? If so what are the prices for both the toothpaste and serum for the MEA region?

Our studies have shown that the best effect can be achieved by using the NR-5™ toothpaste and NR-5™ boosting serum together. Serum is for 100 KED and Toothpaste for 60 KED. What is your view on Dentistry in the Middle East and do you think the NR-5 will be successful in this region?

The dental profession in the Middle East is highly sophisticated and of world-class standard. Nevertheless, the consumers in the Middle East represent a global picture of dental care needs and oral hygiene practices. As noticed in other regions, the relatively high living standard has increased the risk of dental erosion from modern diet and lifestyle, for example consumption of carbonated drinks and fresh fruit such as oranges. For these reasons, we see a clear need to give the consumer an improved product system to help maintain healthy teeth able to withstand the challenges of modern life. We are convinced that NR-5™ toothpaste and NR-5™ boosting serum will therefore have a big role to play in this and be a success also in this region.
Clinical case study:
esthetic anterior restoration with VITA SUPRINITY

By Daniel Carmona Cando, MDt, Spain

**Initial situation**
The case documentation shows a 39 year old patient who presented at Dr. Diego Alexander Cardenas’ practice in Barcelona, Spain, with two aging metal-ceramic crowns and loss of soft tissue in regions 11 and 21 (Fig. 1).

Following comprehensive consultation, she opted for a new crown restoration fabricated using VITA SUPRINITY. Crucial in this respect was the unique characteristic of this new material that combines the esthetic potential of a glass ceramic with the improved strength provided by reinforcement with zirconia.

**Complexity and material selection**
Just how complex this case actually was only became apparent following removal of the inadequate restorations for preparation: the tooth stumps were strongly discolored and fitted with gold metal abutments. The question needed to be addressed as to whether the planned restoration could mask this sufficiently in order to achieve a satisfactory result from a visual perspective. In the LABORATORIO DENTAL FONTCAR laboratory, we met this challenge by combining the esthetic possibilities afforded by VITA SUPRINITY using the cutback technique with the low-melting fine-structure feldspar ceramic VITA VM 11.

**Milling and reworking**
The inLab MC XL system (Siroena Dental GmbH, Wals, Austria) was used for virtual design and milling of the crowns. Following the CAM process, reworking of the new high-performance glass ceramic should only be carried out at low pressure using fine-grained diamond-tipped milling tools as well as special polishing instruments. For cost-effective surface processing that is gentle on the material, the technical and clinical versions of the VITA SUPRINITY Polishing Set are recommended. For crystallization firing, any vacuum furnace that supports slow cooling can be used. The crowns can be placed directly on to honeycomb firing trays with platinum pins, without using firing paste.

**Final result**
Despite the unfavorable initial situation, VITA SUPRINITY enabled a comparatively good final esthetic result to be achieved in highly efficient fashion, restoring the patient’s natural smile. The expectations and hopes of the patient and the entire treatment team were met in full. We would like to thank master dental technician Thomas Gausmann for his enormous local support!
Torsten Oemus further pointed out that one of the main implications of these trends was the growing importance of com-munication working in the field of dentistry. This development offers promising opportunities for Dental Tribune International as well. The digital, educational, and event-related elements of the company’s product portfolio are becoming increasingly important in this context. In response to the growing demand for digital dentistry technologies, Dental Tribune MEA / CAPPmea intends to apply its extensive expertise in organizing CAD/CAM & Digital Dentistry International Conferences, in order to provide support to the Digital Dentistry Show (IDS) launched by DTI in Milan, Italy. Altogether, there will be six Digital Dentistry Shows in 2015 carried out in cooperation with similar major events in Athens, Moscow, Budapest, Shanghai, Istanbul, and New York.

Another fresh development that has become part of the DTI portfolio is the innovative e-commerce plug in for the dental-tribune.com website. Its layout now features selected products in the company profile and in news articles by including external links to local on-line retailers. In this way, the company is offering dealers and manufacturers a platform to show their products and thus generate leads and sales. The facility is already functional and being used on the Dental Tribune MEA / CAPPmea on-line page for the Middle East. The hard working day finished with a delicious partner dinner where networking and discussions continued. On the second day, workshops in different topics took place helping the new partners who recently joined to get up to speed.

Dental Tribune MEA / CAPPmea, covers the third largest region in the DTI Portfolio and has grown with tremendous speed over the three years. The company provides the largest dental media distribution in MEA through bi-monthly printed publications, daily on line news and e-mailed newsletters. The Dental Tribune MEA / CAPPmea media reaches regularly over 45,000 dental professionals in the MEA region and, together with DTI, provides information services to over 800,000 dental readers worldwide.

Impressions from the IDS Week – CAPP in Cologne

As usual, Dental Tribune was the best performing Media at IDS. DTI further published five today publications – the IDS official trade show newspaper, an ultimate business guide for visitors and exhibitors.

Oemus Media Group, which is the German counterpart of Dental Tribune, broadcasted live news events with active 24/7 coverage of the International Dental Show during the whole period of 10-14 March. As part of the duty, a dedicated on-site editorial team was equipped with live studio tools and a production team operating from within the soundproof walls of the Dental Tribune Media Lounge editorial room. Dental Tribune MEA / CAPPmea, as part of the team worked closely with the organizers and dental societies to cover IDS press conferences, lectures, presentations and contests. In addition, exclusive interviews, industry reports and image galleries have been published in newspapers and on-line at www.dental-tribune.com. Subscribers to the Dental Tribune MEA / CAPPmea e-newsletters and social platforms have received exhibition highlights and news every day. Furthermore, an e-paper version of the respective daily issue was sent out through e-newsletters. All press conferences have been covered by Dental Tribune representatives and published live in over 24 languages.

Once again, the Dental Tribune Media Lounge surprised the industry with the cozy friendly atmosphere and excellent ambience for networking. From morning until evening, the lounge welcomed B2B industry “movers and shakers” and dental professionals to meet, network, plan new marketing tools and advance their business interests. Dental Tribune International further invited its partners to a number of cocktail receptions to the DTI Media Lounge. During the receptions, attendees received business updates on international markets and had the opportunity to connect with their peers and leaders from the dental industry. The feature events included a Russian Night, a CHANNEL 5 Night, a Chinese Night, and a Brazilian Night. These evenings underlined key points in the respective dental markets focusing on latest movements. The DTI Media Lounge was once again the host of the elite dental industry professionals and high-end international dentists.

CAPPmea at IDS 2015

For the third time CAPPmea experienced a very successful presence at IDS Cologne sparking up large interest within the industry through its Dental Tribune MEA Media and CAPPmea’s educational programs. CAPPmea is the only UAE based company to exhibit for the last 6 years at IDS Cologne. With its
Maintain your patients’ confidence and satisfaction with their dentures by helping them overcome daily social, emotional and physical challenges.

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SEM images of denture surface.

*In vitro single species biofilm after 5 minutes soak

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• also available as flowable version

Dental desensitising varnish
• treatment of hypersensitive dentine
• fast desensitisation
• fluoride release
• easy and fast application
Dr. Dominique Caron

By Dr. Dominique Caron, France

I had a dream. In 1980 you still might have been a small child but I was already running my own practice for 2 years and I was facing what many of you, dentists, are facing today: I was wasting my time with temporaries. The Lab always took too long and was not always on time. The prosthesis done were not always fitting. These were time. The prosthesis done were too long and was not always on poraries. The Lab always took I was wasting my time with tem-

Once upon a time, 26 years ago, we already had electricity (yes we did). Sirona was still Siemens and I was told about a strange saga that started in 1983 in Switzerland. In a valley, between trolls and cows, some kind of Steve Jobs, Dr. Mormann and Brandestini were developing a saga that started in 1985 in Swit-

As for same cutting-edge in novations, you are dealing with people who target quality, ethics, safety, improvement more than short-term business; this might be appealing to some of you.

Once using this system, you be come part of some kind of club gathering colleagues who look out for the best of their patients.

Dr. Dominique Caron and CEREC BLUE CAM

“Dr. Dominique Caron and CEREC BLUE CAM”

In 1989 in France, we were 85 dentists having CEREC amongst 42,000 dentists at the time.

For 26 years every morning, I am happy to come to the clinic and work with the best tools.

In the UAE we are lucky, our outstanding colleague, Dr. Do brina Molova built a unique structure CAPpraca that organizes the best dental meetings, don’t miss the opportunity, come to the next CAD/CAM event and join the CEREC team.

In 1989 in France, we were 85 dentists having CEREC amongst 42,000 dentists at the time. We preserved from that time a kind of family spirit you can still feel when you visit the Siroua booth. Everywhere else, you will see col leagues coming and staying just to hear and talk about what they like. Have a look yourself next time. Everyday I make 5 or 6 CEREC restorations and after the grinds are taken I say to my patients who looking at the screen: “Tea? Coffee? Now enjoy the rest of your day please, for one time to use my play station.”

Join the family. Stop working and start playing! 

Editorial note: Further details available from the author.

Contact Information

Versailles Dental Clinic
Al Razi Building 64, Block A,
First Floor, 1096
Dubai Healthcare City
Dubai, UAE

www.versaillesdentalclinic.com
+971 4 4298288
The first ISO 9001 certified dental centre

By Dr. Ammar Alekri, Bahrain

Cosmetics is a necessity. We then start talking about the cosmetic treatment of teeth of which Dr. Alekri said explaining: “There is a misconception about what is called teeth cosmetics that it is some sort of luxury. This is not accurate because most of these treatments are necessary.”

Dentist, oral and dental surgeon Dr. Ammar Alekri stressed that most of the treatments the teeth need are necessary to achieve the perfect health of the mouth and teeth, and that is what is called “a cosmetic treatment”, also necessary to maintain healthy teeth.

He further explained that the role of dentists is preventive in the first place and therapeutic in the second. He continued: “Yet, the general culture that we have now directs the individual not to resort to the dentist until after feeling pain. We are aiming at changing this cultural pattern and are trying persistently to persuade everyone of the importance of maintaining the periodic examinations, especially dental examinations.”

Prevention is better than cure
Dr. Ammar Al-Ekry started his speech talking about hopes of dentists to take a more preventive than therapeutic role with patients of dental clinics. He said that: “The general culture in our society creates a correlation between consulting a physician and the disease. This concept is incorrect, and this pattern of thinking should be changed.”

He pointed out that it is very important for the person to visit the physician at a very early stage and proactively prevent any medical conditions from appearing. He continued: “When a person specifies a periodic schedule to visit the dentist once every 6 months, this will allow the dentist to examine the mouth and teeth, and remove lime from the gum and teeth as well as other accumulations if needed. At the same time, the dentist will be able to identify any medical conditions in an early stage and provide the appropriate treatment for them.”

Dr. Ammar further mentions that many of those who are treating themselves from tooth decay or gum disease or other diseases believe that the treatment ends at the last session of the therapeutic program, thus neglecting the periodic examination. They only resort to the dentist when they feel pain again.

He pointed out that implanting missing teeth due to a disease or a symptom is very necessary for a proper chewing process of food. He said: “From a general image prospective, losing teeth at maximum. “Another example that illustrates the need for “cosmetic dental treatment” is obvious for any patient whoundenervent nerve treatment. The treated tooth becomes rigid, similar to an object made of glass and prone to break, it becomes very important to protect the tooth by cocooning it what is commonly called “a crown”. Dr. Ammar added: “It is ironic that insurance policies cover nerve treatment so disease, while not covering the second part of the treatment which is protecting the tooth with “a crown” from any break. The insurance policy covers removing the broken tooth, yet doesn’t cover teeth implanting considering this to be cosmetic surgery. He pointed out the importance of validating insurance responsible and reconsidering this topic very well to define the difference between treatment and cosmetics in mouth and teeth diseases.

Modify your life style
When addressing the issue of disease prevention, Dr. Alekri said: “As individual can protect himself from a lot of teeth and gum diseases by modifying his life style, which causes a lot of health problems at the level of oral health and overall health.”

Dr. Alekri added: “Dietary habits and quality of food that we eat, generally, lack adequate servings of vegetables, fruits, milk and milk products. These food types contain a small percent-age of sugars and rich with basic components that human body needs.” He also added: “In contrast, a food and beverages that we eat daily are rich in sugars, acids and industrial colors and the most prominent example of this are soft drinks. I have found that it is the cause behind a lot of the mouth and teeth diseases that afflict Center clients in the age group between 12-22 years.”

Dr. Alekri also expressed his dissatisfaction with the significant spread of the habit of smoking among Bahrainis between males and females, indicating negative effects on the teeth and mouth. He hoped that the society could change the dietary patterns and trend towards healthy dietary patterns and quitting unhealthy habits as such mentioned.

Tooth Engineering
As for his objectives that made him open the Dr. Ammar Alekri Dental Centre, Dr. Alekri said: “The opening of a private clinic or medical center is considered the ambition of every doctor and the financial capability contributes to acceleration or slowing down the achievement of this dream.” He added: “Tamkeen, that supports small and medium enterprises, contributed in with my support, developing my clinic that was built on the philosophy of paying attention to the patients before the start of treatment, as it supplied the clinic with the latest high-quality devices in the field of dental treatment, which included Lasers, X-ray equipments and assistive devices in dentistry.”

Dr. Alekri added: “Comes before the equipments, the medical staff that specializes in various dental treatments, especially the cosmetic treatment of all kinds, which offers on my hands and at the hands of Dr. Mohamed Issaili. Referring to that they had received many of the necessary courses of beauty therapy at the University of UCLA (one of the most prestigious American universities).”

Dr. Ammar said: “The centre departments are equipped with an electronic network linking all departments with each other from the Department of Registration and Revelation to the six clinics, then to the Radiology Department. Today, our centre has become a “paperless work, environment”. He explained: “Our commitment to our patients to provide the best treatments within the professional standards in the field of oral health and dental care, has qualified us to get the quality certificate ISO 9001: 2008, the certificate that enhance the confidence of our clients to our center, and assured to us the progress of work in the organization.”

According to the highest professional standards and certified by accredited party, Alekri said: “That made us very happy, the consulting body (Jacon) revealed to us that the center had applied a lot of technical and administrative matters that matched the requirements for the adoption of quality certification, according to the testimony of Bureau Veritas, the accredited party of the issuance of the certificate in the world.” He also added: “This is what makes us proud and determined to provide the best services according to the highest standards of quality, also leads us to accelerate the completion of our future plans to obtain quality certification in other areas, especially the environment.”

He also revealed his ambition to manufacture dentures inside the center, he said: “Big advances in the world of medicine quoted treatment for advanced stages on both the treatment methods and the devices used.” He added: “Recently, the acquisition of the necessary devices for manufacturing dental dentures at clinic has been made, hence I have the ambition to acquire the devices used to design the dental dentures.”

He explained: “The device will also enable me to make the design of tooth dimensions which I want to plant for the patient, then it will send the data to the company specialized in the dental industry. This will save the time and will ensure that the dental implants process will be done by structures that I have done, which ensures higher quality.” He said that he seeks to fulfill his dream of establishing a specialized clinic that brings together all the modern technology which offers the best services to the highest standards.”

“Cosmetic Dentistry is a necessity”

By Dr. Ammar Alekri, Bahrain. ISO 9001 certified.

Dr. Ammar Alekri Dental Centre in Bahrain. ISO 9001 certified.

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Dr. Ammar Alekri Dental Centre in Bahrain. ISO 9001 certified.
Immediate implant placement long term success: a case report

Dr. Bernard Alliot, U.A.E.

Summary
Immediate implant placement is sometimes a risky procedure particularly when we are replacing front teeth, patients are always expecting quick aesthetic results. This case report will try to show you how this procedure can be provided with a reduced risk for the patient.

Key words
Immediate implant placement, patient selection, aesthetic results, long term success, case report

Introduction
In case of immediate implant placement, the selection of the patient and the site are of primarily importance. This selection will have to integrate anatomical and pathological factors. The following factors will have to be taken in consideration as it has been recommended by the FDI consensus (EVANS & CHEN /2000):
- medical status
- smoking habits
- patient's aesthetic expectations
- lip line
- periodontal biotype
- shape of teeth crowns
- infection at implant site
- bone level at adjacent sites
- restorative status of neighbouring teeth
- width of edentulous space
- soft tissue anatomy
- bone anatomy of alveolar crest

One of the most important considerations will be the difficult detection of the patient periodontal biotype!

Fig. 1. Thin periodontal biotype
Fig. 2. Triangular teeth, long pointy papilla and thin periodontal biotype
Fig. 3. Patient at first consultation
Fig. 4. Square teeth, short papilla and thick periodontal biotype
Fig. 5. Radiograph at first consultation
Fig. 6. Extracted tooth with root resection
Fig. 7. Implant and bone graft covered with collagen sponge

Soft tissue biotype was previously called gingival biotype or periodontal biotype (OLSSON & LINDBERG /1991), but since the advent of implants, this has been renamed to encompass tissue around both teeth and implants (KAN & al /2005). The term refers to a composite or aggregate of four features of the soft tissues and the teeth they surround that build up to a specific picture:
- gingival width (keratinized tissue width)
- gingival thickness (thick or thin)
- papilla height and proportion
- crown width and height ratio

Fig. 8. Implant and bone graft covered with collagen sponge

Thin scalloped periodontal biotypes (Fig. 1 & 2) are characterized by:
- highly scalloped soft tissues and bone contours
- delicate and friable soft tissues
- narrow band of keratinized tissue
- thin bone with dehiscences and fenestrations
- long pointed teeth
- long tapered teeth
- thin peri-implant soft tissues

Concerning thick biotypes, the distance from the root surface to the oral epithelial surface can be less than 2mm, inflammation will involve all the structures (cementum, periodontal ligament, bone and gingiva) rapidly resulting in a recession. bundles bone (lamina dura) is very likely to be the buccal plate we can expect considerable collapse of the socket, resulting in a contour deficiency; bone grafting and compromised position / angulation of the implant, especially if patient is getting implant treatment in the aesthetic zone.

Concerning thick biotypes, defects in the form of a thick alveolar housing around the teeth, the 2mm radius of inflammation will damage cementum, ligament and bundle bone only producing a periodontal pocket. Patients may end up with less alveolar deficiency; restorative treatment can be viewed as being more predictable and less demanding. Peri-implant tissue health seems to depend to there being immobile keratinized tissue around the emergent restoration:
- thin peri-implant soft tissues seem to be more prone to recession and less likely to develop nicely formed papillae around implant restorations;
- tissue recessions around implants seem to result in absence of immobile keratinized tissue more quickly than around natural teeth, possibly because the shoulder of most implants are placed more apical to the cemento-enamel junction of the teeth they replace.

The concept of surrounding an implant is associated with increased risk of development of peri-implant diseases and authors recommend an augmentation of the keratinized tissue as one of the treatment strategies in managing peri-implantitis.

A thick soft tissue biotype is a desirable characteristic that will positively affect the aesthetic outcome of an implant supported restoration because thick soft tissue is more resistant to mechanical and surgical insults, it is less susceptible to mucosal recession and has more tissue for prosthetic manipulation (COOK & al /2011). Therefore, although tissue biotype is an inherent trait that varies from patient to patient, it can be transformed through precise management of the implant position, implant design and prosthetic design such that a desired aesthetic outcome is achieved (FU & al /2010).

Most of the literature on implant success rates has not differentiated correlation with the gingival biotype, although it is increasingly accepted that the biotype and tissue volume have an important impact on the aesthetic outcome and minimizing the risk for post-restorative tissue instability.

Before to restore the implant with a final crown we took measurements in consideration the latest recommendations concerning cementation on dental implants (I.T.E / 5th Consensus 2013):
- after bone level implants placement, if the depth of the mucosa margin is deeper than 1.5mm, screw-retained prosthetics are highly recommended,
- reduce the quantity of cement used to cement prosthetic restoration,
- if the patient has been treated previously for periodontal diseases, use only temporary cement, you will have the possibility to remove the superstructure in order to treat an eventual peri-implantitis.

At the time of the final restoration, it is also very important to keep in mind predisposing factors leading to cement retention around dental implants:
- the soft tissue connection around dental implants (epithelial adhesion with hemidesmosomes and absence of connective tissue attachment) which is different from natural teeth (epithelial attachment and connective tissue attachment),
- the gingival placement of the implant more or less deep than the cemento enamel junction of the natural teeth,
- the abutment selection: abutment with a fixed restorative margin 2.5 mm to the implant neck or one-piece implant with a built-in restorative margin,
- the radiographs are unable to show the presence of retained cement on buccal and palatal / lingual side-sides,
- the cementation issues: excessive quantity and unsuitable type of cement used,
- the maintenance controls not always respected by a majority of patients.

At the end of a period of healing of 10 weeks, we can see the very good positioning of the soft tissues (Fig. 11), the implant has been exposed (Fig. 12), the depth of the sulcus was more

Table 1

Case report
Patient is a man, 45 years old; he is presenting good health, he is non-smoker and his oral hygiene is good. He complained five years ago (in 2010) about the presence of a recent discharge between 11 and 21, and about a slight mobility to tooth 21 (Fig. 5)

After complete examination, we detected the presence of a root resorption (Fig. 6), so it has been decided to extract this central incisor and to replace it by a dental implant. A complete aesthetic risk assessment of the patient and the site has been done and the results are presented in red inside of Table 1.

An extraction without incisions has been done using periotome in order to preserve the surrounding bone and soft tissues. A Straumann® bone level implant (length 12mm / diameter 4.1mm) has been placed inside the socket in a palatal position and the remaining gap (around 1.5mm) between the implant and the buccal bony wall has been filled with a bone graft Bio-Oss®, and the top of the socket has been protected with a Colla con® withoutatures (Fig. 7 & 8) (CORDERO /2014).

Then at the end of the same appointment, the extracted tooth (full crown and 5 mm of the root) has been used as temporary restoration and fixed to the adjacent teeth using a metal grid. The presence of this previous tooth was of primarily importance in order to support the surrounding soft tissues and more particularly the papilla on both sides of the implant (Fig. 9 & 10).

GMClincs
Caring About Health

Dr. Bernard Alliot - GMC Clinics / Dubai - U.A.E.
Versailles dental clinic news

By Dental Tribune MEACAPIProem

If you say French expat community in Dubai, you say Versailles Dental Clinic.

Dr. Dominique and his wife, Veronique Caron, founders of Versailles Dental Clinic in Dubai are very present in the French expat scene in the Emirates. They sponsor many French community events including the “pinacle” French Business Council Gala Dinner.

Along with other distinguished companies, Versailles Dental Clinic was the Silver Sponsor of the Gala Dinner this year.

“Supporting the French Community in the UAE and providing them and all residents of the UAE with outstanding dental care is one of our main priorities” confirms Veronique Caron.

Along with the founder of CAPPmea, Dr. Dobrina Mollova, the Versailles Dental Clinic team are establishing the standards for excellence in dentistry in the region.

Fig. 9. Extracted tooth placed as temporary restoration

Fig. 10. Extracted tooth fixed using metal grid

Fig. 11. Temporary restoration after 10 months

Fig. 12. Implant exposure after 10 months

Fig. 13. Low smile with permanent crown

Fig. 14. Permanent restoration after 1 years

Fig. 15. Permanent restoration screwed retained after 5 years

Fig. 16. radiographic control after 3 years

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Contact Information
GMC Jumeirah - Dental
Box 11962
Dubai, U.A.E.
T: 04 344 9150
M: 055 4503329
www.groupgmc.com

Dr. Dominique Caron and Mr. Obaid Al Susadi CEO of Emirates Delta Investment Abu Dhabi

Dr. Dominique Caron

Madame Veronique Caron

Mr. Obaid Al Susadi CEO of Emirates Delta Investment Abu Dhabi, Mr. Hassain Al Jaziari FBC Honorary President and Dr. Dominique Caron

Dr. Dominique Caron, Mr. Obaid Al Susadi CEO of Emirates Delta Investment Abu Dhabi, Madame Veronique Caron
Midline diastema closure with direct-bonding restorations

By Dr. Sushil Koirala, Thailand

Midline diastema (MD) are spaces of varying magnitude between the crowns of fully erupted maxillary and mandibular central incisors. Keene describes MD as anterior midline spacing greater than 0.5 mm between the proximal surfaces of adjacent teeth. Incidences of maxillary and mandibular MD are 14.8 and 1.6 %, respectively. MD can occur in temporary, mixed or permanent dentition and may be considered normal for many children during the eruption of the permanent maxillary central incisors. When incisors first erupt, they may be separated by bone and the crowns incline distally because of the crowding of the roots. With the eruption of the laterals and permanent canines, the MD reduces or even closes completely. Etiological factors of MD are described by various researchers. Angle concludes the presence of an abnormal frenum to be the cause of MD (Fig. 1) view that has been supported by other researchers. According to Tait, the frenum is the effect and not the cause of the incidence of diastema. He reports causes such as ankylosed central incisors, flared or rotated central incisors, anodontia, macrodontia, dento-alveolar disproportion, localised spacing, closed bite, facial type, ethnic and genetic characteristics, inter-premaxillary suture and midline pathology. Weber lists the causes for spacing between maxillary incisors as the result of high frenum attachment, microdontia, macroglossia, supernumerary teeth, peg laterals, missing lateral incisors, midline cysts, habits such as thumb sucking, mouth breathing and tongue thrusting.

Therefore, the etiological factors can be summarised as follows:

1. Developmental: microdontia, missing laterals, mesiodens, macrodontia, macro hypertrophic fibrous frenum;
2. Pathological: midline cysts, tumours and periodontitis;
3. Neuromuscular: oral habits, such as tongue thrusting during speech, swallowing or abnormal pressure during rest.

Clinicians must be prepared for patients visiting the dental office with the aim of having their diastema closed in order to fulfill their psychological (aesthetic and beauty enhancement), functional (pronunciation of ‘r’ and ‘s’ sounds and cutting foods with anterior teeth) and/or health (oral health maintenance) problems. Treatment options for diastema closure depend on the etiological factors and complexity of the MD. It is suggested that treatment of a MD should be delayed until the eruption of the permanent canines. However, the pathological causes should be ruled out and treated at an early stage, for example extraction of supernumerary teeth (mesiodens) and surgical treatment for the removal of midline cyst, tumour and periodontal pathologies. Surgical, orthodontic (comprehensive/short term), periodontal, direct bonding, and indirect restorations are the treatment modalities that can be used alone or in combination to achieve harmony in terms of patient’s aesthetics, function and health. MIDC by definition is “a holistic approach that explores the smile defects and aesthetic desires of a patient at an early stage and treats them using the least intervention options in diagnosis, treatment and maintenance technology by considering the psychology, health, function and aesthetics of the patient.” The MIDC concept as the profession’s movement that encourages all clinicians to select diagnosis, treatment and maintenance modalities that are the least invasive in order to preserve healthy oral tissues while still achieving the natural aesthetics outcome in the best interests of the patient’s health and happiness.

Following, I will demonstrate the clinical use of MIDC TP (minimally invasive cosmetic dentistry treatment protocol) to close or reduce the diastema in clinical practice (Fig. 1). The direct bonding procedure with the application of the Flowable Frame Technique (FFT) is presented here as a special technique.

Case presentation
A 20-year-old female patient presented with the complaint that she did not like her smile because of the large gap between her upper front teeth. The patient was very concerned about her smile aesthetics and also aware of her speech difficulties.

Phase I: Understand
In the first step of Phase I, the patient’s perception, lifestyle, personality, and desires were explored in a personal interview and through completion of the MIDC self-smile evaluation form. The patient, who exhibited a high dental IQ, evaluated her smile as below satisfactory. After the interview, the disease, functional and aesthetic defects of her smile were explored.

Fig. 1. MIDC TP.
In the design step, a new smile was proposed as the second option. However, because of financial constraints, the patient preferred the second restoration without frenectomy of the study model. In order to support the plastic matrix strip, composite brush was used in the final step of the MD closure.

The Flawable Frame Technique
The FFT is a simple restorative technique developed to speed up the placement and simplified refinement of material when restoring challenging anterior aesthetic cases such as large Class IV or Class III defects and diastema closure or reduction. As the name suggests, this technique requires flowable composite (both shade A1 and A2) as frame material, a plastic strip, composite brush and other usual instruments for direct resin restorations.

Clinical steps in the Flawable Frame Technique
The following steps are to be taken:

1. After the completion of etching, priming and bonding of the tooth surfaces, insert a simple plastic strip to the level of gingival and occlusal margin of the tooth to be restored (Fig. 2).

2. Support the plastic matrix strip lingually with your index finger to create a lingual contour (Fig. 2).

3. Inject the flowable composite directly on the buccal surface of the tooth (either opaquous or translucent) and smooth it to a thin layer with a sharp instrument or a diamond point if required (Fig. 4).

4. Light cure the flowable composite and remove the plastic strip. A flowable frame is now ready (Figs. 5 & 6). The color, shape and thickness of the flowable frame can be adjusted using the sharp edge of the hand instrument or a diamond point if required.

The advantages of the FFT are: - time and cost saving (no direct or indirect mockup required); - thickness of the layer of restoring materials (dentine, enamel and opaquous group) can be predetermined; - as with the silicone template method, an opaque halo, mas- siveness, and transparent areas in the proximal and incisal areas can be created;

- smooth, polished surface is achieved with minimal finishing;

- smooth adaptation of the restorations can be achieved even in the gingival sulcus;

- it is the most suitable lingual frame creation technique for diastema reduction or closure.

Material selection and clinical steps for diastema closure
Material selection for diastema closure should be guided by optical properties (light transmission and diffusion characteristics) and tissue responses of the materials (restoration in diastema normally touches the gingival tissue and sulcus).

Amongst the various materials available, Hispcer is another grade of intrasurfaces and composite resins. They have the fluoride release and recharge of glass ionomers and the aesthetics (shade, polish and optical properties), handling and physical properties of composite resins. Hispcer restorative and adhesive systems have good bio-compatibility and have been reported not to result in long-term post operative sensitivity.

They have also been found to possess anti-plaque formation properties. Hence, Hispcer restorative materials and adhesive systems were selected to close the MD in this case.

Beautiful Flow Shade #AT with Hispcer adhesive system FLBond II (SHOFU Inc.) were used in FFT to create the lingual frame. Beautiful II (SHOFU Inc.) dentine shade A1 and enamel shade were used in the finishing of the defects using the bi-layered technique developed to achieve the desired aesthetics with an invisible restoration. The Direct Cosmetic Restoration Kit and the Super-Snap Rainbow Technique Kit (both SHOFU Inc.) were used to prepare the teeth and polish the final restorations (Figs. 7–12).

Conclusion
Diastema closure or reduction in clinical practice requires detailed case analysis. The success of this treatment depends on etiological factors, size and extent of the diastema, and the patient’s affordability in terms of treatment time and costs involved. The MRCD TG guides the clinician and the patient and helps both to understand, plan and complete the clinical case using diagnosis and treatment modalities that are the least invasive sive in order to preserve sound tooth structure and achieve natural aesthetics considering the patient’s best interests.

Contact Information
E: drsushilkoirala@gmail.com

Table 1

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Table 3

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Current guidelines for the use of nitrous oxide inhalation analgesia/axiolyis in pediatric dentistry

By Dr. Manal Al Halabi, UAE

Abstract

1. Inhalation of nitrous oxide/oxygen is considered a safe and effective approach to reduce anxiety to enable children to accept dental treatment better and to enhance pre-procedure mobilization. In addition, it helps in maintaining of general anesthesia.

2. Current medications including local anesthesia cannot be obtained in less than 50 percent of the children. The administration of nitrous oxide/oxygen inhalation analgesia/axiolyis may be helpful to expedite the delivery of procedures that are not particularly uncomfortable, but require the patient not move. By reducing or relieving anxiety, the patient may be able to tolerate unpleasant procedures, discomfort, or pain.

3. The analgesic effect of nitrous oxide/oxygen inhalation analgesia/axiolyis is relatively more predictable among the majority of the population.

4. Nitrous oxide is a colorless and nearly odorless gas with an in-distinct, sweet smell. It is an effective analgesia/axiolyis agent producing central nervous system (CNS) depression and euphoria with slight effect on the respiratory system. Nitrous oxide has multiple mechanisms of action. The analgesic effect of nitrous oxide appears to be initiated by endogenous opioid peptides release from neurons which results in activation of opioid receptor and descending Gamma-aminobutyric acid (GABA) receptors and modulatory pathways that modulate nociceptive processing at the spinal level. The anxiolytic effect involves activation of the GABA receptor both directly and indirectly through the benzodiazepine binding sites. Nitrous oxide demonstrates rapid uptake, it is absorbed quickly from the alveoli and held in a simple solution in the serum. It is relatively insoluble, passing down a gradient into other tissues. The concern lies in whether pharyngeal-laryngeal reflexes remain intact. This problem can be avoided by not allowing the patient to go into an unconscious state. Nitrous oxide has been associated with bioenvironmental concerns because of its contribution to the greenhouse effect. Bacteria in soils and oceans emit nitrous oxide naturally; it is produced by humans through the burning of fossil fuels and forests and the agricultural practices of soil cultivation and nitrogen fertilization. Altogether, nitrous oxide can account for five percent to the greenhouse effect. Only a trivial fraction of this five percent (0.5 to 2 percent) is currently emitted, however, is the result of combined medical and dental applications of nitrous oxide gas.

5. The decision to use nitrous oxide/oxygen inhalation analgesia/axiolyis should be offered to children with mild to moderate anxiety to enable them to accept dental treatment better and to facilitate coping across sequential visits. The decision to use nitrous oxide/oxygen analgesia/axiolyis must always utilize alternative behavioral guidance modalities, the patient's dental requirements, the effect on the quality of dental care, the patient's emotional development, and the patient's physical considerations. Nitrous oxide generally is acceptable to children and can be titrated easily. Most children are enthusiastic about the administration of nitrous oxide/oxygen inhalation sedation in general, or they are physically compromised patients. Reduced gagging. Potentiate the effect of sedatives. Disadvantages of nitrous oxide/oxygen inhalation analgesia/axiolyis: Disadvantages of nitrous oxide/oxygen inhalation may include: 1. Weak potency. 2. Significant dependence on psychological reassurance. 3. Interference of the nasal hood with sleep. 4. Patient must be able to breathe spontaneously. 5. Patient must be able to tolerate unpleasant procedures, discomfort, or pain. 6. Aid in treatment of the men- der pharyneal reflexes. 7. Reduce gagging. 8. Potentiate the effect of sedatives.

6. By reducing or relieving anxiety, the patient may be able to tolerate unpleasant procedures, discomfort, or pain.

7. This is of particular advantage where appropriate for dental treatment better and to facilitate coping across sequential visits. The decision to use nitrous oxide/oxygen inhalation sedation in general, or they are physically compromised patients. Reduced gagging. Potentiate the effect of sedatives. Disadvantages of nitrous oxide/oxygen inhalation analgesia/axiolyis: Disadvantages of nitrous oxide/oxygen inhalation may include: 1. Weak potency. 2. Significant dependence on psychological reassurance. 3. Interference of the nasal hood with sleep. 4. Patient must be able to breathe spontaneously. 5. Patient must be able to tolerate unpleasant procedures, discomfort, or pain. 6. Aid in treatment of the men- der pharyneal reflexes. 7. Reduce gagging. 8. Potentiate the effect of sedatives.

8. Fitness for nitrous oxide/oxygen inhalation analgesia/axiolyis. Review of the patient's medical history should be performed prior to the decision to use nitrous oxide/oxygen analgesia/axiolyis. This assessment should include: 1. Allergies and other adverse drug reactions. 2. Current medications including the history of use, dosage, route of administration, and allergic potential.

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10. Nitrous oxide and its derivatives have been associated with serious cardio respiratory depression and cardiovascular side effects. Allergic and other adverse drug reactions. 2. Current medications including the history of use, dosage, route of administration, and allergic potential.

11. The decision to use nitrous oxide/oxygen inhalation analgesia/axiolyis should be offered to children with mild to moderate anxiety to enable them to accept dental treatment better and to facilitate coping across sequential visits. The decision to use nitrous oxide/oxygen inhalation sedation in general, or they are physically compromised patients. Reduced gagging. Potentiate the effect of sedatives. Disadvantages of nitrous oxide/oxygen inhalation analgesia/axiolyis: Disadvantages of nitrous oxide/oxygen inhalation may include: 1. Weak potency. 2. Significant dependence on psychological reassurance. 3. Interference of the nasal hood with sleep. 4. Patient must be able to breathe spontaneously. 5. Patient must be able to tolerate unpleasant procedures, discomfort, or pain. 6. Aid in treatment of the men- der pharyneal reflexes. 7. Reduce gagging. 8. Potentiate the effect of sedatives.

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10 Years of Successful “Continuing Dental Education” by CAPPmea

By Dental Tribune MEA/CAPPmea

Dental Tribune MEA/CAPPmea will mark a significant milestone in the history of the Centre For Advanced Professional Practices (CAPPmea) in Dubai, which has come to celebrate its 10th anniversary. This event is a landmark not only for CAPPmea but also for the entire Dental Society in the Middle East, who have participated in CAPPmea’s Continuing Dental Education programmes. The dentists are those who are at the forefront, driving the industry in the right direction through valuable feedback, experience, and increasing demand for high level technology and education.

Thanks to the hard work of our colleagues, sponsors, partners, and supporters for the last 10 years, CAPPmea has built a frontrunner standard committed to the highest echelons of continuing dental education. A big “Thank You!” is owed to all participants, followers and partners, having helped CAPPmea develop the professional training tools adjusted to the specific needs of the region.

CAPPmea has been an American Dental Association (ADA) CERP Recognized Provider for the last 5 years, specializing in CME and CPD dental programmes - conferences, hands-on courses, workshops, and self-instruction events. During the past 10 years, CAPPmea facilitated over 556 CME programmes with over 320,000 international participants taking part. With the opening of CAPPmea Asia in 2012, the professional reach of CAPPmea expanded to the Asia-Pacific region and beyond. In 2012 CAPPmea also joined a global family of 96 publishers by becoming the proud licence owner of the Dental Tribune Middle East & Africa edition. Over the last 5 years, CAPPmea has delivered yearly six print and digital newspaper publications to over 45,000 dental professionals in the MEA region, 24 newsletters to more than 45,000 active online subscribers, and through an international website the latest industry news and scientific articles are reaching the largest dental community worldwide – an audience of over 300,000 dental readers.

A Decade of Education – Passion for Quality and Perfection

“It is unimaginable how fast time has passed. It is already 10 years ago that I started CAPPmea as a center for professional training, quickly growing into the creation of two very important international conferences, namely CAD/CAM & Digital Dentistry and Dental-Facial Cosmetic International Conferences. Today, even if I would want, it is not possible to stop these events. There is a huge demand for the education and showcasing of the fast developing dental industry.” – Dr. Dobrina Mollova, Managing Director CAPPmea, emotionally commenting on the achievements.

The 10th CAD/CAM & Digital Dentistry International Conference will be celebrated jointly with CAPPmea’s 10-year anniversary. The journey in the last decade came along with many challenges related to the incredible pace of growth of industry and new technologies, particularly in digital dentistry. Ten years ago, one could not imagine that such opportunities existed. They are now available to change dentistry and improve dramatically the patient care. All from diagnostics, planning to the treatment in term of precision, time consuming and aesthetic treatments.

What has been accomplished in the past 10 years is truly significant. CAPPmea would like to express its highest appreciation of the role of our business partners, industry, sponsors and supporters in helping CAPPmea make the success story that it is today. Thanks to all who have worked with CAPPmea, sharing the challenges and the passion that come along. Thanks to all dentists, dental technicians, dental hygienists and assistants, who followed us in this decade of fast development of dental industry and technology. We look forward to another decade of being together.

For more information please visit www.cappmea.com

CAD/CAM & Digital Dentistry significant growth in Middle East in last decade

By Dental Tribune MEA/CAPPmea

DELRAL, UAE: Behind great achievements are great people. Over the last 10 years the Centre For Advanced Professional Practices (CAPPmea) International Conferences have hosted some of the finest dentists in the dental profession. Dental Tribune MEA managed to catch their opinion on the milestone 10 year anniversary of CAPPmea prior to the 10th CAD/CAM & Digital Dentistry Intl Conference on 08-09 May 2015.

Dental Tribune MEA/CAPPmea: Where was CAD/CAM & Digital Dentistry 10 years ago?

Dr. Julian Caplan, U.K.: 10 years ago CAD/CAM was being heavily used by laboratories but still had limited capabilities chairside. The limitations of the camera and the software reduced the clinical options and the interplay between CAD/CAM technology in-surgery and CAD/CAM technology in-lab. The software was “2D” but there were still few “players” in the market.

There were a number of competitors beginning to enter the arena and this would be a catalyst for established companies to make radical changes to their systems. Prof. Aref Shakar, Egypt: CAD/CAM & Digital Dentistry was dealt with if it came from Mars in our region 10 years ago.

Many dentists were dealing with this topic as “Not for every dental field”. But with such a specialized event like CAD/CAM & Digital Dentistry Intl Conference in Dubai, the awareness of this field became more and more and now is an open market.

In 2012, CAPPmea has expanded to the region in Dubai, which has come to celebrate its 10th anniversary. The journey in the last decade came along with many challenges related to the incredible pace of growth of industry and new technologies, particularly in digital dentistry. Ten years ago, one could not imagine that such opportunities existed. They are now available to change dentistry and improve dramatically the patient care. All from diagnostics, planning to the treatment in term of precision, time consuming and aesthetic treatments.

Lutz Ketelaar, Germany: Many dentists were dealing with this topic as “Not for every dental field”. But with such a specialized event like CAD/CAM & Digital Dentistry Intl Conference in Dubai, the awareness of this field became more and more and now is an open market.

Lutz Ketelaar, Germany: Dental digital dentistry was driven by closed systems, creating a lack of understanding of their technologies. The major driver for CAD/CAM were full ceramic restorations, ZrO2 an upcoming material that just could create single restoration.

Mark Morin, USA: CAD/CAM was available but only provided a limited scope. The number of users was very small. There was only one company that made the machine. It could only do limited types of restorations and there were limited materials available to make the restorations.

Dr. Munir Silwadi, Canada: 10 years ago CAD/CAM dentistry was more or less in its infancy stage. Though chairside systems, such as the CEREC chairside system from Sirona, were well in a reasonably advanced stage, most of the dental laboratories oriented systems were just learning to crawl. Very few dental manufacturers ventured into this technology. A side from some high precision milling units, such as the Evertest Milling Unit from KaVo, both hardware as well as software did not enjoy the required features to warrant predictable and precise restorations.

This was mainly driven through a lack of understanding on the lab side though. I remember the Procera days, where a scanner which just could create single restorations was enough to win fans all around the world with a central manufacturing solution using Al2O3, on the other hand a DCX in-house system which was on exhibitions, grinning restorations out of hip material. The switch came with the ZrO2 green stage material, as it allowed to mill economically ceramic materials.

Even though there was no movement for open systems, the industry made the implementation of CAD/CAM possible, due to support and training of dental technicians. Information Technology was never part of the dental world and the majority of dental technicians did not even believe that soft- and hardware would change their
whole working environment. Even just a couple of years ago, lab owners told me that they are still waiting for the right system to go for, unless there was the perfect system. I believe there is still no perfect digital solution, but we are getting closer. We have to admit however that hand craft was neither perfect - but we adapted perfectly to the conditions.

Rik Jacobs, The Netherlands: 10 years ago, the dental industry in terms of CAD/CAM was in an exploring stage, definitely in 10 years ago, the dental industry sectors of dentistry have changed. Of course the highest advancement, but orthodontics, endodontics fields have gained a new value. The traditional methods have become less important, and the ability to treat technical glass materials which natural opalescence and fluorescence.

Dr. Mark Morin, USA: The advantages that CAD/CAM offers to the dental practice over conventional technologies are numerous. The first one is efficiency. The ability to do crowns in one visit helps increase the profitability of the dental office. It allows us to participate in more of these PPO type insurance plans since it helps us control our cost by eliminating the lab expense and a second appointment. Studies have also shown how the use of digital impressions are much more accurate and predictable than the traditional impression technique. It also benefits the patients because it makes the treatment predictable and convenient.

Lutz Ketelaar, Germany: CAD/CAM allows a constant high quality of restorations, not only depending on manual skills in dental education - this is not the end of the classical dental technicians, otherwise we could also expect PC-gamers who play flight simulators to take over your next flight to Europe. Dental knowledge allows to use the instrument of CAD/CAM to become a perfect solution for an efficient workflow in high, mid and low price segment.

Rik Jacobs, The Netherlands: Predictably the dental office management, relieving the clin- ian and costs savings.

Dental Tribune MEA: Given the proven positive results, what are the reasons why some dental practices are remaining on the sidelines when it comes to CAD/CAM technology?

Dr. Julian Caplan, UK: There are many reasons but the main reason is perceived cost of the systems to purchase. However this is only because the practitioner has not understood the savings that they would make in materials and laboratory costs.
SIRONA LLC founded in Dubai to support a direct operation for UAE private market

By Sirona

D UBAI, UAE: IIDS Cologne was once again a record breaking trade fair. Sirona presented itself to industry professionals as an experienced specialist in the field of digital technologies for dentists and dental technicians. This was borne out by spectacular innovations in optical systems, laser therapy as well as by pioneering new developments for CEREC and treatment centers. For the Middle East region, dental professionals will be able to see these latest innovations during the anniversary upcoming 10th CAD/CAM & Digital Dentistry Int Conference in Dubai on 09 May 2015 – Jumeirah Beach Hotel.

As the dental market leader and a technology pioneer, all at Sirona are passionate about enhancing our products and services. We are permanently investing in research and development, as well as our global sales and service structures. Being close to our customers is essential, which is why we have 28 sites around the world where we work together to advance global dental health.

In May 2015, Sirona LLC will be founded in Dubai in order to support a direct business operation towards the private customers market in the Middle East. The big success of previous years has been recorded through increasing sales and services experienced by Sirona in the region. This is an important step for Sirona in improving the delivery of professional sales, after sales and dental education to the UAE market. Sirona LLC will continue to work alongside MPC in order to fully service the needs of the Government sector which remains equally important.

With UAE being a significant hub for its business and education in GCC, the setting up of Sirona LLC underlines the constant commitment to researching, development and better servicing of the end-user with surpassed quality to the dental industry whilst remaining reinforcing the image of Sirona worldwide. This will be achieved through a fully dedicated Sirona sales and technical team and Product specialists who will work closely together to deliver premium services to the private market in the UAE.

As you can imagine we have much more to share, so Sirona encourages you to browse our website and review the highlights of 2014 and novelties of IDS 2015. You will enjoy diving into our world of innovation and reading about some of Sirona’s advancements, both within this issue of Dental Tribune MEA and on our official website as well as through all of our online channels.

Make sure you visit Platinum Sponsor Sirona at the upcoming 10th CAD/CAM & Digital Dentistry International Conference on 08-09 May 2015, Jumeirah Beach Hotel where we will present the latest trends and developments for the first time after IIDS Cologne.

Contact Information

Dr. Ameen Alsd
Area Manager GCC & Pakistan
Country Manager Saudi Arabia
Some Dental GmbH
E: ameen.alsd@sirona.com

Further innovations in CAD/CAM: what is the future you foresee?

Dr. Julian Caplan, UK: There are numerous future possibilities for CAD/CAM. One of my major interests is giving patients a new smile in one day. At the moment this is labor intensive and requires a broad knowledge of micro and macro tooth morphology. My hope is that there will be an integration of CAD/CAM with photography and imaging linked with intelligent software. This will allow the dentist to set parameters specifying smile design requirements and find the right combination for a multitude of smile designs to be created which will be ready to be milled immediately.

Prof. Atef Shaker, Egypt: Well, as a professional in the CAD/CAM field, I am so ambitious about what is ahead of us, we should allow for a rapid and continuous coning and what will be possible in dental materials, hardware & software. This places a big weight on the shoulders of the manufacturing companies and their R&D departments and we are relying on the professional organization of “CAPPMEA” to be the link chain between the manufacturers and the dental technicians. The future is bright for CAD/CAM. The future will bring dentist and labs closer together for a better, faster and more economic service towards the patient. Necessary patient data and scheduled appointment can be shared between both parties, manufacturing sites involved and their status shared - the workflow gets lean. The dental field of restorations is limited, but it still needs innovations and progress in finding appropriate - possible technical approaches also need to be affordable - Dental treatment is in direct competition with luxury goods, vacation or even affordable standard of living. We can learn a lot from the US about marketing the beauty business of dentistry, but should not forget that we also need highly educated and trained dental technicians to achieve future success.

Dr. Mark Morin, USA: The future is bright for CAD/CAM. I think we are going to see a complete digital platform in dental offices with full connectivity to all technologies. I also see the ability of the CAD/CAM technology to help us diagnose and treatment plan our cases. By taking a picture before we are doing a 3D analysis it can help us determine whether treatment is necessary and what procedure is best.

Lutz Keteleur, Germany: The future will bring dentist and labs closer together for a better, faster and more economic service towards the patient. Necessary patient data and scheduled appointment can be shared between both parties, manufacturing sites involved and their status shared - the workflow gets lean. The dental field of restorations is limited, but it still needs innovations and progress in finding appropriate - possible technical approaches also need to be affordable - Dental treatment is in direct competition with luxury goods, vacation or even affordable standard of living. We can learn a lot from the US about marketing the beauty business of dentistry, but should not forget that we also need highly educated and trained dental technicians to achieve future success.

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Dr. Mark Morin, USA: The limit”.

Discussing the advantage of CAD/CAM technology, I believe that the “Sky is the limit”.

Prof. Atef Shaker, Egypt: Well, as a professional in the CAD/CAM field, I am so ambitious about what is ahead of us, we should allow for a rapid and continuous coning and what will be possible in dental materials, hardware & software. This places a big weight on the shoulders of the manufacturing companies and their R&D departments and we are relying on the professional organization of “CAPPMEA” to be the link chain between the manufacturers and the dental technicians. The future is bright for CAD/CAM. The future will bring dentist and labs closer together for a better, faster and more economic service towards the patient. Necessary patient data and scheduled appointment can be shared between both parties, manufacturing sites involved and their status shared - the workflow gets lean. The dental field of restorations is limited, but it still needs innovations and progress in finding appropriate - possible technical approaches also need to be affordable - Dental treatment is in direct competition with luxury goods, vacation or even affordable standard of living. We can learn a lot from the US about marketing the beauty business of dentistry, but should not forget that we also need highly educated and trained dental technicians to achieve future success.

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FKG Dentaire launches first anatomic finisher for root canal treatments

By FKG

The latest innovation from FKG Dentaire lets practitioners treat complex root canal systems and clean once impossible-to-reach areas with minimal impact on the dentine. Made with a highly flexible Ni-Ti-based alloy, the XP-endo Finisher follows the contours of the canal with an improved reach of 6mm in diameter—or 100-fold that of a standard instrument of the same size.

“With the XP-endo Finisher, we can finally solve a common problem for dentists,” said Thierry Rouiller, CEO of FKG Dentaire, one of the world’s leading manufacturers of endodontic instruments. “They’ll now be able to reduce the risk of future infection by offering patients a deeper cleaning for a better root canal treatment.”

Studies using micro CT technologies show that standard NiTi files manage to clean just 45 to 55 per cent of the canal walls, leaving debris and bacteria to accumulate in areas left untouched. However complex the morphology of the canal, dentists can use the XP-endo Finisher following a root canal preparation starting at diameter ISO 25. A unique FKG alloy, the MaxWire (Martensite-Austenite electropolish-flex), gives the instrument unparalleled flexibility so it can remove debris from those hard-to-reach areas, while limiting the impact on the dentine.

“Now (the canal) is cleaner, perhaps two to three times compared to the conventional techniques we have today,” said Dr. Gilberto Debelian, Norway.

The instrument also features a strong resistance to instrument fatigue, thanks to its zerotaper design, and is simple enough for dentists to quickly learn to use. The XP-endo Finisher joins a growing list of innovative high-precision products patented by FKG Dentaire to meet the most demanding needs of general practitioners and endodontists around the world.

Contact Information

For further information, contact the team at:
FKG Dentaire SA
Crêt-du-Locle 4
2304 La Chaux-de-Fonds
Switzerland
T +41 32 924 22 44
info@fkg.ch
www.fkg.ch

FKG Dentaire launches first anatomic finisher for root canal treatments

Interview with Dr. Martin Trope

By Dental Tribune MEA/CAPMen

Dental Tribune MEA has the pleasure to interview Dr. Martin Trope, past Endo program director at University of Pennsylvania, and chairman of the Endo division at Temple University Dental School and University of North Carolina Dental School. Dr. Trope was also the Director of the American Board of Endodontics.

Dental Tribune MEA: Dr. Martin Trope, you have lectured and provided training in the Middle East several times. What is your experience and feeling of the level of Endodontics in the MEA region?

Dr. Martin Trope: The level of the dentists who have attended my courses is very high. I don’t really know the general level of endodontics in each country. The variability comes in what the dentist can afford in terms of cutting edge technology. In some countries the fees charged for root canal treatment limits what the dentist can afford. This is a universal problem so not limited to the Middle East.

How important is it for a dentist to specialize, particularly in Endodontics and what is the reason you chose to do so?

There are some cases that require additional expertise. I don’t think it is important for a dentist to specialize but to recognize those cases where a specialist is needed. I like to do one thing well so endodontics suits my character although I must admit sometimes it can be very tedious.

How do you stay up to date with the latest technologies

> Page 41

3D efficiency —
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The first impression is the final impression, but...?

By Dr. Ehab Heikal

From a fancy looking clinic to a friendly smile, first impressions are no doubt the most vital impression you will ever make in business so it is important to get it right first time.

But no, this does not just mean making sure that your feet aren’t on the desk when serving a customer or making sure there is a permanent smile imprinted on your face at all times. It is more about the other details.

First impressions are really important in any industry, but in the current economic climate they are more important than ever before. Our patients are continually faced with making so many decisions that we have to make the right impressions in their minds to make it easier for them to choose us. This is a vital part of any dentist practice management program.

Shifting away from an obsession with first impressions is vital as it can create an encompassing, so shift well clear of only treating your patients extremely well on your first ever contact with them. We all know that in the current economic situation it can be very easy to lose some of your most valued customers, so be sure not to count your chickens before they are more important than ever before. Our patients are more important than ever before. Our patients are more important than ever before.

The success of your practice is in the hands of everyone within it and depends on their delivering a good service. Any weak link in the chain will have a negative effect on your practice and on your ability to deliver a value service to patients and run a successful dental business. The point of managing performance is to make sure that the performance of your team contributes to the success of your practice, and taking action to improve things when this does not happen.

If you manage performance effectively it will mean that everyone in your practice understands:

• what the practice is trying to achieve;
• their role in helping the practice achieve its objectives;
• what they need to know and what they need to be able to do to fulfil their role;
• the standards of performance required;
• how they can develop their own performance and contribute to development of the practice;
• how they are doing, and if there are performance problems what can be done about them.

However, good performance management looks at how people do their job as well as what they do. So, how a person approaches their job, or the way they behave as part of a team or communicate with patients and the rest of the team is just as important as what tasks they actually

The foundation of this usually involves creating a unique selling advantage.

- Then create a good marketing strategy, which will attract the right type of patients to your practice. The kind of patients who are more likely to be interested in your specific type of dentistry or service.
- You need to get your entire team in on the action of what you are trying to do.
- Create systems within the clinic on accomplishing the unique experience for your patients, which complies with your marketing message.
- Customer service is a key element - excellent provision of your dentistry.

We all want staff who are engaged, take pride in their job and show loyalty towards the practice. If your team can see the bigger picture and how their role contributes to the success of the practice they are more likely to do their best for you. Performance management is about continuously improving the performance of individuals and in so doing improving practice performance.

And that's not just good for the practice – it's good for patients too.

Contact Information

Dr. Ehab Heikal
eheikal@eheikal.com
BDS.MBA.DBA
Practice Management consultant

Fiona Stuart-Wilson
DentalTribuneMiddleEast&AFricaEdition.com
DentalTribuneMiddleEast&AFricaEdition.com

How are we doing? Getting the best from your staff

By Fiona Stuart-Wilson

If we lived in an ideal world where nothing ever went wrong, patients always took up treatment plans and arrived for their appointments on time and staff never went sick we probably wouldn't need to talk about managing performance. However, we might want to believe that staff know what they need to do and will get on with it to the best of their ability at all times, we all know this is unlikely to happen.

Give open, honest and direct feedback regularly so that people know what they are doing well just as much as what they are not doing well, and establish a performance review system which allows for two way discussion.

We all want people who are engaged, take pride in their job and show loyalty towards the practice. If your team can see the bigger picture and how their role contributes to the success of the practice they are more likely to do their best for you. Performance management is about continuously improving the performance of individuals and in so doing improving practice performance.

And that's not just good for the practice – it's good for patients too.
Look at the bigger picture

By Eniko Simon

Analyse data to understand the performance of your dental business. There are many important decisions we have to make when managing a dental clinic. We make these decisions on gut instinct or based on previous experiences or by analysing data that is available for us.

Most of the dental clinics I have been working with had some understanding of the power that data can add to their business. It is essential that you regularly track a wide range of data across your clinic to allow you to have a good understanding of your business. Nowadays there are fantastic dental software such as Software of Excellence or R4 very well known on the market. These dental software can assist dental businesses to analyse important key performance indicators and gain a better understanding of their business.

Some data that you need to look at – who are your patients, how did they hear about your clinic, nationality, age group, your chair occupancy in your clinic, the hourly turnover your associates generating, how many new patients you have monthly and many more KPIs we can look at. Undeniably collecting clean and reliable data and analysing it in a consistent way is part of 21st century management.

Data is the fundamental ingredient in decision making, figuring out where to focus your resources, create your targeted marketing approach.

Taking control of your data
The data on its own has no meaning, it can not provide the full picture, it does not take into account the values you stand for and the culture you are trying to create in your dental business or your patients’ personal feelings they feel about your clinic.

Practice data alone can not be used to guide the success of the clinic. In order to fully utilize the facts and figures they need to be put into context. Hours spent collecting data is wasted if the bigger picture not taken into consideration.

The clinic’s short and long term goals needs to be agreed upon and once you are on your journey the collected data can demonstrate if you are on the right track to achieve your goals.

The numbers provide an effective tool to help manage and control the growth and development of your dental business but do not set the strategy you need to adopt.

Constantly analyse your data – look at how your clinic is performing. The right data at the right time will aid your decision making process regarding your finances, marketing, operations of your clinic – but be ensure that you control your data and put it into context.

Always understand the “whys” to know the way forward to the “hows”.

Eniko Simon
Clinic Manager/Consultant
Dr Roze & Associates Dental Clinic
eniko@dradubai.com

Contact Information
The winning combination – CAD/CAM work and 3D CBCT data in one software

By Planmeca

The field of digital dentistry is rapidly evolving, with new dental technologies emerging as part of a more efficient and comprehensive workflow. By pairing Planmeca CAD/CAM solutions with X-ray units in the Planmeca ProMax® 3D family, dental professionals can bring together a wide range of detailed information for treatment planning and diagnostic purposes. This seamless combination of CAD/CAM and 3D CBCT technology has opened new doors in creating a new standard of care for patients – offering high-quality features for different specialties, all available through one software interface.

Planmeca Romexis® is the only dental software platform in the world to combine all imaging and the complete CAD/CAM workflow. This powerful solution is at the heart of the Planmeca ecosystem, as it provides dental professionals with the ability to acquire more detailed data sets than ever before. Planmeca Romexis includes advanced tools for all specialties, such as implant planning and other restorative treatments. The software presents dental clinics with a superior way to increase their patient flow and improve the level of care offered.

Seeing more than ever before

Planmeca ProMax

Bringing together CBCT data and CAD/CAM work provides a comprehensive level of care and patient safety. Planmeca ProMax® 3D imaging units reveal intricate information on soft and hard tissue structures, including the mandibular nerve canal, while the Planmeca PlanScan® intraoral scanner captures precise data above the gum line. This combination of these data ensures a complete understanding of any case and makes 3D prosthetic designing quick, accurate and easy. Clinics are able to operate more flexibly, as restorations can either be milled at a clinic with the Planmeca PlanMill® 40 milling unit, or easily sent to a dental lab in an open STL data format.

The rise of same-day dentistry

A more active role in the manufacturing of restorations opens up avenues for dental clinics to significantly increase their patient volume and grow their business. A streamlined digital workflow ensures the full utilisation of resources, leading to a more efficient treatment environment. Same-day dentistry is as beneficial for patients as it is for clinics; instead of two visits, patients can be treated in one hour – with no temporary crowns or physical dental models required.

Open architecture for maximised efficiency

Standardised data is the driving force behind many of the latest developments in digital dentistry, as it guarantees the interoperability of images and dental data across different hardware platforms – reducing costs, increasing predictability and enhancing patient safety. Bringing Planmeca’s CBCT and CAD/CAM systems together through the Planmeca Romexis software platform makes effective chairside dentistry a reality and presents dentists with a streamlined opportunity to substantially grow their practice.
**Contraindications for the use of nitrous oxide/oxygen inhalation analgesia**

- **Use of analgesic/anxiolytic agents to be consulted before administering**
- **Methylene tetrahydrofolate reductase deficiency**
- **Cohalan deficiency**

Whenever possible, appropriate medical specialists should be consulted before administering analgesic/anxiolytic agents to patients with significant underlying medical conditions (eg, severe obstructive pulmonary disease, congestive heart failure, sickle cell disease, acute otitis media, recent tympanic membrane graft, and acute severe head injury).

**Technique of nitrous oxide/oxygen analgesia/anxiolysis**

The practitioner who utilizes nitrous oxide/oxygen, the sedation technique proposed and of appropriate alternative methods of pain and anxiety control must be familiar with available devices, the patient and their parent or guardian must be given clear and comprehensive pre- and postoperative instructions in writing. The practitioner should provide written instructions to the parent regarding pretreatment dietary precautions, if indicated. In addition, the patient's record must include indication for use of nitrous oxide/oxygen inhalation, nitrous oxide dosage (ie, percent nitrous oxide/oxygen and/or flow rate), duration of the procedure, and post-treatment oxygenation procedure. The record should also include documentation of the patient's response to the use of nitrous oxide and the postoperative instructions. Adult dental personnel should also be familiar with emergency systems associated with nitrous oxide, it is recommended that exposure to nitrous oxide be minimized by the use of effective scavenging systems and periodic evaluation of the delivery and scavenging systems.

**References**


The full list of references is available from the publisher.

**Contact Information**

Manul Atfalaty BDS MS
Associate Professor & Programme Director, Postgraduate Programme in Paediatric Dentistry
Himunah Bni Mohammed College of Dental Medicine
Dhaka Healthcare City P.O.Box: 9096712184
Tel: 880-91-7142468206 | 880-91-7142468877
E-mail: dhalifb@Mailplus.com.
Bigger than ever: IDS 2015 reports visitor, exhibitor and area increase

By Dental Tribune International

COLOGNE, Germany:
On 14 March, the 50th International Dental Show (IDS) in Cologne closed after five days with a record result. The organisers reported that about 136,500 visitors from 151 countries attended the most important trade fair in the dental industry, which represents an increase of nearly 11 per cent compared with the 2015 IDS. A new record was also set with regard to the number of exhibitors and exhibition space. A total of 2,201 companies (+6.9 per cent) from 56 countries presented their latest innovations, product developments and services over 157,000 m² (+6.2 per cent). More than 70 per cent of the exhibitors came from abroad (+2 per cent). In addition, the number of visitors from Germany increased by 4.5 per cent.

“We managed to make the International Dental Show in Cologne, both nationally and internationally, even more attractive, making it the most successful IDS ever,” concluded Dr Martin Rickert, Chairman of the Association of German Dental Manufacturers (VDDI).

Katharina C. Hamma, Chief Operating Officer at IDS organiser Koelnmesse, stated: “The increasing international attendance once again underlines the character of the IDS as the world’s leading trade fair for the dental industry. Particularly strong growth was recorded at the International Dental Show in the number of visitors from the Near and the Middle East, the US and Canada, Brazil, as well as China, Japan and Korea. We also noticed re-emerging business in the southern European market, especially Italy and Spain.”

The 2015 IDS focused on intelligent networking of components for computer-based dentistry. As computerised processes have gained increasing importance, digital systems in diagnostics and production today span the entire workflow from the practice to the laboratory.

A visitor survey showed that more than 75 per cent of attendees interviewed were either satisfied or very satisfied with the show. Overall, 95 per cent of the visitors surveyed would recommend visiting business partners at IDS and 77 per cent plan to attend the show in two years’ time.

The next IDS will be held from 21 to 25 March 2017.
DTI Media Lounge Where movers and shakers in the dental market meet

By Dental Tribune International

COLOGNE, Germany: Over the past week, the International Dental Show (IDS) drew thousands of people from all over the world to Cologne. As an IDS tradition, Dental Tribune International (DTI) invited its partners to a number of cocktail receptions to the DTI Media Lounge. During the receptions, attendees received business updates on international markets and had the opportunity to connect with their peers and leaders from the dental industry.

The traditional Russian Night was celebrated at the DTI booth on the first day of IDS. The event was organised in collaboration with the Russian Dental Association, the Moscow Dental University, and Dentalexpo. Ilya Brodetski, General Director of Dentalexpo, provided some insights into the Russia dental market and its importance for the global dental industry. Currently, there are 85,000 dentists and 25,000 dental technicians in Russia. The market has a yearly supply turnover of US$ 1 billion.

On the second day of IDS, DTI hosted the CHANNEL3 Night, which was organised together with Exit Strategies, for the first time. About 80 key opinion leaders from 15 countries gathered on Wednesday at DTI’s ME-DIA Lounge for their annual meeting. As part of the event, Harvard professor Myron Nevins received the first annual PI Brånemark Award. The number three in CHANNEL3 signifies the three channels of sales in the dental industry: sales by dealer, direct sales and sales resulting from the work of key opinion leaders. The group consists of leaders from all three areas.

On 12 March, industry partners of DTI gathered for the DDS WORLD and Chinese Night in Hall 4.2. In 2014, DTI launched its Digital Dentistry Show, the first exhibition to focus solely on digital products and applications for dentistry, in Milan in Italy as part of International Exposidental. The show will travel around the world and be present in all major dental markets. Participants of the night were informed that the next DDS World show will take place in Athens from 22 to 24 May 2015 and will be organised in collaboration with OMNIPRESS. Further shows in 2015 are planned in Moscow, Budapest, Istanbul, Shanghai and New York. The event on Wednesday was also attended by representatives of the Chinese Stomatological Association.

The Brazilian Night on 13 March attracted many people. The event was a joint project of DTI and Associação Paulista de Cirurgiões-Dentistas (APCD), the São Paulo association of dental surgeons, with which DTI entered into an international media agreement in 2013. Under the contract, DTI’s today trade show newspaper became the official and exclusive publication at the Congresso Internacional de Odontologia de São Paulo (CIOSP), one of the leading congresses worldwide.

CHANNEL3 Night was attended by almost 100 guests. (Photograph: Robert Strehler)

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www.fdi2015bangkok.org
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Planmeca presents real-time visualisation of jaw movement and other highlights

By Dental Tribune International

Cologne, Germany: In comparable visualisation and measurement data of mandibular 3-D movements in real-time are possible with the new Planmeca 4D Jaw Motion system now on display by Finnish dental equipment manufacturer Planmeca in hall 11.1 at IDS in Cologne. According to Vice President of the Group, Tuomas Lokki, to whom Dental Tribune International had the opportunity to speak on Tuesday morning, the system is available for the camera feature of Planmeca ProMax 3D Mill and Max X-ray units and requires no additional hardware.

“The solution is unique in the sense that you can see in real time whatever movement the patient is making with the jaw and what happens when the patient is moving or biting,” he explained. “Afterwards we can use that to analyse the bite and the situation around it and combine that with the CAD/CAM data to have the bite analysis.”

Besides this innovation, Planmeca also has its complete renewed Planmeca Romexis 4.0 on display, as well as the Planmeca Romexis Smile Design software that allows dentists to create harmonious new smiles for patients, among other things. The company’s overall presentation is bigger and better this year with about 200 sqms additional booth space compared to 2015.

Connectivity and digital workflow are a particular focus of this year’s presentation, Lokki said. “We have a very good technology range. The challenge is to bring it into practice so that dentists can efficiently work and get the benefits of all that technology,” Lokki said.

Lokki added that in the future, practices will be an all-around connected system, for which the IDS is a good example. “We have seven kilometres of cable here connecting everything. Every single product here is connected, and that is the way it goes. It is all about productivity, whether it is CAD/CAM or imaging.”

Imaging expert Carestream Dental introduces latest trends at IDS

By Dental Tribune International

Cologne, Germany: Global manufacturer of imaging solutions Carestream Dental presented the latest trends in oral imaging and CAD/CAM technologies yesterday at their stand at the International Dental Show (IDS) in Cologne. The company is one of few that offer a complete product range in the field of dental imaging.

“We have a complete portfolio from film to 3-D imaging,” said Frank Bartsch, Trade Marketing Manager at Carestream Dental.

The company introduces several novelties at this year’s IDS, one of them being the compact and intra-oral scanning system CS 7200. The new scanner offers dentists all the advantages of the digital storage phosphor imaging technology without them having to change their normal workflow.

In addition, Carestream Dental announced the release of its new imaging system CS 9100SC, an advancement of its renowned system, CS 9100, for the second half of 2015.

At its booth, Carestream Dental offers individual consultations for interested visitors in order for them to find out which imaging solution is the right one for them and how they can optimise their own workflow. Moreover, the manufacturer offers dentistry students the opportunity to download its 3-D diagnosis software, “3D Viewer” and “Demo-volumen,” for free during IDS.

To learn more about Carestream Dental’s products, IDS attendees can visit the company’s booth (T040/L049/T045/T049) in Hall 10.2.
KaVo Kerr Group Prepares to Present 35 + New Products at the 36th IDS in Cologne

By KaVo

New products in Digital Imaging, CAD/CAM, Equipment and Consumables further cement organization’s role as global innovation leader.

KaVo Kerr Group, a global portfolio of leading dental brands, presented 35+ new products at the 36th International Dental Show (IDS) in Cologne. KaVo Kerr Group delivers products and solutions to 99% of dental practices worldwide, making IDS — the world’s leading trade fair for the dental industry — the ideal stage to share the latest KaVo Kerr Group has to offer. The meeting, March 10-14, 2015, expected more than 125,000 attendees from 149 different countries.

The 35+ launches include brand new products, products released in North America but new to the global market, and updates designed to take legacy products to the next level. These releases will cover everything from Digital Imaging, to CAD/CAM, Operatory Units, Handpieces, and a wide range of Consumables. The breadth and depth of product development on display not only reinforces the role of KaVo Kerr Group as a leader in innovation, but will highlight the organization’s unmatched role in delivering complete workflow solutions and introduce its own sophisticated approach to digital dentistry.

Among the 35+ products introduced at IDS, highlights included:
- The KaVo Lythos Introral Scanner is designed to replace traditional impressions, facilitating a fully integrated workflow. Dentists can capture highly detailed images quickly, without powder, in an intuitive and flexible scanning workflow that offers the clinician maximum flexibility, easily rescue anytime during the scanning process, review data at any point during or after processing the scan, or use the touch screen to rotate the model in an infinite number of ways for heightened visibility of captured data. Dentists can proceed to complete design-in-office or outsource complex design cases to KaVo’s unique Remote Design Service by wirelessly uploading scan data to the cloud.
- The KaVo MASTEEnumatic Series offers excellent visibility and access for speed increasing instruments, combined with maximum precision and durability. Its new design and product features — including a 20% reduction in head size — make it the ideal replacement to the 12-year-old KaVo GENTLEpower.
- Kerr elementsfree: Kerr Endodontics is proud to introduce its latest innovation in endodontic obturation, the cordless elementsfree obturation system. Designed for use with the warm vertical condensation technique, the elementsfree obturation system offers both downpack and backfill capabilities in a cordless design — giving dentists and endodontic specialists the freedom of movement to perform endodontic procedures anywhere without restrictions.
- The KaVo ESTETICA E70/E80 Vision is a delivery system designed to help dental professionals get in touch with their vision for optimized chairside treatment. Product features include sensitive touch screens with a completely new user interface; hygiene center with automated cleaning programs; a modern patient communication system with integrated introral camera and hi-res KaVo EID screens; and unique system software CONEXIO for direct access to all relevant patient data. Its innovative suspended chair concept allows dentists to in-office or outsource complex patient cases to KaVo’s unique Remote Design Service and KaVo’s unique Remote Design Service.

On the evening of March 10, 2015, KaVo Kerr Group hosted the “Art of Innovation” event, inviting dental professionals, dealers, partners, industry leaders, and global media to see many of the new products up close. This first-class event took place at the Flora Köhn, an historic formal park and botanical garden located adjacent to the Cologne Zoological Garden.

“It was just over a year ago that KaVo Kerr Group formally brought together our world class dental brands under one identity, with shared values and a lasting commitment to the dental profession,” said Henk van Duijnhoven, Senior Vice President of the KaVo Kerr Group. “We have started the work of taking more than 500 years of combined experience among these market leading brands and translating that expertise into leading product innovation that improves patient care and enhances clinical workflows for dental professionals. We can’t wait to showcase our unmatched global brand on this one-of-a-kind global stage.”

Contact Information
Visit www.kavokerrgroup.com for more information.

Media Contact
Thais Carter, Senior Manager
KaVo Kerr Group
Thais.carter@kavokerrgroup.com

Visit www.idem-singapore.com for more information.
An Interview with Torsten Oemus, CEO of DTI

By Dental Tribune International

Cologne, Germany: Under the motto “Proven Digital Solutions”, global dental manufacturer Sirona presented many product novelties for the modern dental practice and launched its new digital solutions portfolio on 10 March at the International Dental Show in Cologne. Sirona’s new products aim to support the work of dentists with innovative instruments and equipment, as well as provide efficient digital workflows and optimal comfort during treatment.

The company sees itself as one of the main drivers of digitalisation in the dental industry. “Sirona quite simply is digital dentistry,” said Jeffrey T. Slovin, President and CEO of Sirona. To digitalise and thereby simplify dentistry, the global manufacturer developed several integrated digital solutions for efficient workflows in implantology, endodontics, orthodontics and prosthetics that are presented at this year’s IDS.

Sirona looks back at a long history of developing digital solutions to improve dental workflows. “Twenty years ago, not only did we introduce the world’s first fully pano- ramic X-ray machine on the market, but as many as 50 years ago with CEREC, we made digital impressions and computer-aided dental restoration suitable for our customers,” Slovin said. “Our path and the history of the company stand for successfully clinically tested and scientifically proven technologies that set quality standards.”

Among other things, the company aims to set standards in the field of digital imaging by introducing a completely updated product range for intraoral, 2D and 3D radiography as well as the novel SIEDESIX 4 software for capturing, processing and archiving X-ray images. With its innovative digital X-ray technology and the perfect interplay between hardware and software, Sirona’s imaging systems ensure a reliable diagnosis, even in complicated cases, and yield X-ray images of the highest quality and free of noise.

Sirona employs a workforce of 3,500 at 20 locations worldwide and markets its products in more than 135 countries on all continents. The company develops, manufactures and markets a complete line of dental products, including CAD/CAM restoration systems (CEREC), digital intraoral, panoramic and 3D imaging systems, treatment centers and dental handpieces.

By Dental Tribune Middle East & Africa

Sirona press conference on 10 March

This year, CAPPMEA is celebrating its 15th anniversary during the tenth CAD/CAM and Digital Dentistry International Conference (CDIC) in Dubai. What is your impression of the rapidly developing digital market?

Firstly, I wish to congratulate CAPPMEA on reaching this important milestone! The CAD/CAM and Digital Dentistry International Conference in Dubai is one of the largest global gatherings concerning the latest developments in digital dental technologies. The conference has certainly paved the way for the high acceptance of the digital workflow in offices across the region and worldwide. Digital dentistry is not simply a trend, but it will continue to change the entire workflow in dental offices and is certainly changing the way all service and product providers interact. Thousands of new dental products have recently been introduced at the International Dental Show. Their commercial success and acceptance, however, highly depend on the effective communication of their benefits and on the training of dental professionals on how to integrate them into their daily routines. Product innovation is not an issue; changing long-established workflows certainly is. I am fairly sure that dental professionals will adapt to competitive advantages. We might even see entirely new professions being created, combining clinical, technical and engineering skills, which are needed to operate complex CAD/CAM devices.

How will DTI continue to develop, improve and better serve its clients?

We regard these dramatic changes in the marketplace undoubtedly as an opportunity for our business to grow, as communication, information and education are key drivers of the market. We will further develop our media portfolio, together with our reach, in response to the market. Our main growth areas right now are the further expansion of our e-learning community (www.dtstudyclub.com), and our high-end Tribune OME (www.tritribune.com). All these initiatives serve the purpose of creating strong global communities and marketplaces with a critical mass through a global reach, where dental professionals and product and service providers can effectively interact and achieve their goals.
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Sensodyne Repair & Protect harnesses advanced NovaMin® technology to help build a robust hydroxyapatite-like layer over exposed dentine and within dentine tubules.1–5 With Sensodyne Repair & Protect, you can do more than treat the pain of dentine hypersensitivity – you can repair and protect your patients’ exposed dentine.

Ultra-low abrasion for your patients who need sensitivity relief and seek gentle whitening

 Clinically proven to relieve your patients’ dentine hypersensitivity*1-4

 Active lifting and prevention of extrinsic dental stains5-7

 Ultra-low abrasive formulation appropriate for your patients with exposed dentine8

Recommend Sensodyne – specialist expertise for patients with dentine hypersensitivity

*With twice-daily brushing

By Dental Tribune International

Geneva, Switzerland: World Oral Health Day (WOHD), which takes place annually on 20 March, inspired many national dental associations, dental students and other participants around the globe this year to organise a wide range of awareness-raising activities. According to the FDI World Dental Federation, reports are only just coming in from around the world and signs are that the event has exceeded expectations.

Over 300 students gathered in Amsterdam in the Netherlands for the second edition of the ToothCamp, a theatrical informative event that seeks to educate children and adolescents about dental issues. The participants were able to try out dental tools, as well as learn more about the benefits of eating healthily and about the importance of optimal oral health through exciting chemical experiments with acid and lime or porcelain and abrasives under the supervision of biology, chemistry and physics experts.

Hong Kong’s Department of Health organised an oral health carnival, which attracted an audience of about 2,300 local citizens. Through interactive games, exhibitions on oral health information and teeth-cleaning demonstrations, the public were reminded of the importance of taking care of one’s oral health from an early age by adopting good oral self-care habits and seeking regular professional oral care.

In Costa Rica, the second edition of Lavatón was organised by the Colegio de Cirujanos Dentistas de Costa Rica, the local dental association. Dental professionals participating in this initiative visited more than 35 schools to educate students on toothbrushing, disease prevention and important oral hygiene habits. On 20 March, thousands of students across the country brushed their teeth simultaneously as part of Lavatón.

In Vietnam, over 6,000 people participated in the Run for Life WOHD 2015 race, which was sponsored by the Vietnam Odonto-Stomatology Association, Unilever and the Vietnamese Ministry of Health.

Unilever Kenya’s Closeup toothpaste brand and the Kenya Dental Association kicked off a new partnership in the town of Naivasha to support the WOHD “Smile for life” campaign with free dental check-ups and tooth-brushing lessons that they will be rolling out across the country.

The “Smile for life” message was also broadcast to the world via the giant NASDAQ screen in Times Square in New York. A collage was shown of pictures that were individually created by users of a poster application specially introduced by the FDI for WOHD.

As the official media partner of WOHD 2015, Dental Tribune International provided comprehensive coverage of the FDI’s message. Among other activities, the publisher helped promote WOHD 2015 through news articles, banners and advertisements in its various international print publications and on its website, www.dental-tribune.com, including a topic page solely dedicated to WOHD 2015.

On World Oral Health Day, 20 March, the “Smile for life” campaign poster was shown via the famous NASDAQ screen in Times Square in New York. (Photograph: FDI World Dental Federation)

Over 100 countries celebrate World Oral Health Day
Shape and colour – factors in sectional matrices as well?

By Prof. Claus-Peter Ernst

Direct composite restorations can now be considered the standard treatment method in the posterior region [1, 3]. However, treatment success can differ significantly with regard to extension and strength, and this can have a definite influence on long-term survival. There are many factors that determine the long-term success of a composite restoration: tightly sealed edges are primarily guaranteed by the adhesive technique [2]. For dental materials, besides low shrinkage stress [4, 11], the material also has a high flexural strength [6, 10] in order to minimise the risk of the restoration undergoing a cohesive-type failure. A fractured filling is clearly a more dramatic event for the patient than a discoloured edge. For the patient, the success of direct posterior tooth treatment with composites thus depends on its stability. Besides the adhesive technique and the selection of materials for the restoration, the crucial key function of correct light polymerisation also plays a decisive role [5]. It is completely possible to double the flexural strength of one’s own composite just by using the correct light curing and light curing technique. A further possible influence on the stability of the interproximal contact is investigated in the present case – similar to case 1.

The anatomical shape of the interproximal surfaces is crucial. This is shaped like a natural tooth, the interproximal contact is at the height of the tooth equator and the marginal ridge is not too eccentric. This reduces the risk of ridge fractures – both purely cohesive-chipping fractures as well as more complex, mixed cohesive/adhesive failure patterns. Langone et al. [9] were able to show that the stability of an interproximal composite restoration can be increased significantly by using an anatomically shaped matrix. The correct positioning of the interproximal contact also facilitates the achievement of sufficient contact strength – provided clamping rings are used correctly. Surprisingly, the interproximal contact strength is not the result of the pressure of a wooden wedge; it is primarily caused by the separation force of the sectional matrix foil [7, 9]. Autonomically – as a side effect – fewer interproximal food impactions occur as a result.

For this reason, sectional matrices are now the first choice when it comes to correctly designing interproximal contact surfaces. Circular matrices, even when they are anatomically shaped, should be used when it is not possible to fix sectional matrices in place. This is the case, for instance, for distal cavities on the last tooth in a row, as well as for teeth that are not accurately seated in their position as for example a rotated tooth. The general acceptance of sectional matrix systems is also shown by the extensive range of sectional matrices and rings, which are now available. In general, sectional matrices can be roughly divided into two groups: dead-mat soft matrices and stable steel versions. The supporters of dead-mat soft matrices like their easy mouldability and adaptability to the tooth. However, critics dislike their lack of sta-

Clinical case 1: Upper right 2nd premolar

The 48-year-old patient was treated six months ago with a Biodentine (Septodont) filling to the upper right upper premolar (Fig. 1). The temporary filling is now to be replaced with a definitive composite restoration (tooth 15). The temporary filling is made of composite under rubberdam isolation.

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What more safely used sectional matrix systems.

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Clinical case 2: 1st lower right molar

The 50-year-old patient presented with a cohesive type fracture in the mesio-occlusal amalgam filling of his lower right 2nd molar (Fig. 7). In the distal marginal disruption caused by reactions in the metal films, a traditional wooden wedge was used cervically to tighten the cervical margin. Then the LumiContrast separation ring can be used in two versions; firstly, as shown in the figure, corresponding to a classic Silver separation ring. However, there is also the possibility of fitting small triangular silicone sleeves that enable improved interproximal sealing of the sides, as they help press the sectional matrix films to the sides of the interproximal preparation surfaces. However, this was not necessary in the present case. Figure 5 shows the cavity conditioned with phosphoric acid gel, figure 4 shows the adhesive surface sealed with a traditional two-bottle adhesive (Optibond FL, Kerr). The restoration was built up of a nano hybrid composite (Venus Diamond A3/Herœus Kulzer); figure 10 shows the finished composite filling (Optibond FL/Kerr, Venus Diamond A5/Herœus Kulzer); figure 10 shows the finished, polished restoration.

Clinical case 3: 1st lower right molar

The 50-year-old patient exhibited a traditional two-bottle adhesive system (Venus Diamond A3/Herœus Kulzer); figure 10 shows the finished, polished restoration.

Clinical case 3: 1st lower right molar

The 50-year-old patient exhibited a traditional two-bottle adhesive system (Venus Diamond A3/Herœus Kulzer); figure 10 shows the finished, polished restoration.
HEALTHIER & STRONGER TEETH*
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Toothpaste from the No.1 toothbrush brand used by dentists themselves worldwide
Reflecting on oral-health's good-old iodine days

By Patricia Walsh, RDH, USA

While anxiously waiting for the “Downtown Abbey” television se-
ries to start up again, I got my English history fix by reading the his-
tory of Wentworth Castle. The book covered the trials and tribulations of an aristocratic family in a home three times the size of Buckingham Palace. I was taken by surprise when the author mentioned the cause of death of a high-ranking noble-
man as “quinsy throat.”

In modern times, with the ar-
rival of antibiotics, you wouldn’t hear of this — at least not in a de-
veloped nation. The more I thought about it, I don’t think I had heard the term “quinsy sore throat” for a very long time. And now, if your throat is start-
ing to close off, you’ve probably gotten yourself to an emer-
gency room “pronto.” It is an abscess in the peritonsillar area.

While tonsillitis is more com-
mon in children, both kids and adults are susceptible to quinsy. One can only assume that if the breathing restrictions don’t kill you, the resulting septicaemia might later. A quinsy sore throat can infect both the blood supply and individual organs.

I can recall having my tons-
ils removed in the first grade at school nurse when I was start-
ing to “come down with some-
thing.” A tall canister of extra long cotton swabs were one of the staples of her office.

I can’t say whether there’s any scientific proof that tonsil paint-
ing reduced cases of severe tonsil phi-
llitis. But I do know that some homeopathic remedies call for gargling with carbolic acid. How about Betadine solution even today. I’ve also heard that eating three or four marshmallows helps to soothe a sore throat. Apparently it has something to do with the gelatin. I suppose if you’re not eating at all, any caloric intake will do, so it might as well be fun!

Washington’s epiglottis

George Washington’s phys-
ician mentions his quinya sore throat prior to his death at age 65. He was thought to have suf-
fered from a quinya sore throat that quickly turned into epiglotti-
sitis — most likely his cause of death. The swelling of his epi-
 glottis cut off his air supply. He also suffered from malaria, TB and smallpox during his life-
time. How sad that it may have been a very bad sore throat that got him in the end. The blood-
letting technique that was used at the time probably hindered his recovery as well.

When I was a dental hygiene student, we were occasionally brought to a local city clinic to do checkups on grammar school children. These children were the poorest of the poor and were seen on old WW1 wooden field chairs. There was no money in the budget for fancy things like “disclosing tablets.” Instead, we used iodine on long cotton swabs to paint the teeth and dis-
close the plaque, our instructor kept the large bottle of iodine. The iodine that a physician uses is water-based as opposed to the alcohol-based type available for home use. We used eye droppers to fill up small little glass-dappen dishes for each patient. I would think the taste alone would put children off dentist-
tory for some time to come. We rinsed their mouths with a rub-
hber ball syringe, and they expec-
ted to be suctioned into a kidney basin. Con-
sidering the number of patients I currently see with known iodine allergies, it’s amazing we never heard of any children having a reaction. This, along with red-dye allergies are now more “allergy aware” then they once were. There is prob-
ably an equal number of chil-
dren with red-dye allergies who would have done no better with the modern disclosing tablets.

In spite of iodine’s unpleasant taste, I have been known to rec-
ommend sublingual irrigation with a Betadine solution (brand name for povidone-iodine). The key to this is the dosage. I tell the patient that if the water turns brown, they’ve added too much. There is a huge tempta-
tion to use too much because most drug stores sell only very large bottles. But between the bad taste and the potential for staining, it’s easy to why less is more. Iodine kills the gram negative bacteria that live in the darker recesses of a deep peric jet.

There is another clinical appli-
cation for iodine in dentistry. An iodine staining test used to assist in discerning black spot activity, as mentioned in “Periodontics Revisited” by Shalu Bhatla, MD. The clinician can paint the “false positive” area with a white prep, then apply the iodine and subtract the free attached gingiva. “A tall canister of extra long cotton swabs were one of the staples of her office.”

Iodine getting harder to find

Iodine crystals are the form of choice for illegal drug labs, some smaller manufac-
turers are known to combine it with Mecurochrome and merthiolate — i.e., more than $100 worth. When I asked my local pharma-
cist about Walgreen’s policy, he pointed to the surveillance cam-
eras above the tincture of iodine shelf. Legitimate medical labor-
tories that do gram staining now have additional paperwork due to the restrictions on iodine strengths and quantities.

Iodine getting harder to find

The old-time iodine bottle with the skull and crossbones sit-
ing in the medicine cabinet has come and gone. In this new age of communication and en-
tertainment, I wonder if a child would even be put off by the discolored tongue and halitosis. When it was determined that mercury was detrimental to one’s overall health, Mecuro-
chrome was banned from gen-
eral use. The U.S. Food and Drug Administration set very strict limita-
tions on the sale of Mercuro-
chrone in 1998 and stated that it was no longer considered to be a GRAS (generally recognized as safe) over-the-counter product. Methiodide was another com-
monly found antiseptic and an-
tifungal agent that was banned because of its mercury content.

Iodine was determined by the U.S. Justice Department to have a role in the production of methamphetamine and is now a restricted drug. I won’t recommend bringing back any-
thing more than 4 fl. oz. of tinc-
ture of iodine from your next Mexican vacation. Scrape your feet on a coral reef, and you might find yourself detained at customs for questioning about your toiletry kit.

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• Clinically proven to whiten teeth in just 1 week.

Infection control in an era of emerging infectious diseases

By Eve Cury, USA

More than three decades after the emergence of human immunodeficiency virus (HIV) as a global pandemic, more than any other infection, it is possible to single out HIV as the prime cause of changing infection control practices in dentistry. Prior to the mid-1980s, it was uncommon for dentists and allied professionals to wear gloves during routine dental procedures. Many dental clinics did not use heat sterilisation, and disinfection of surfaces was limited to a cursory wipe with an alcohol-soaked gauze sponge. This was despite our knowledge that HIV was highly virulent and had been spread in clusters in the offices and clinics of infected dentists and that dentists were clearly at occupational risk for acquiring HIV.

Today, many take safe dental care for granted, but there is still much to be done in ensuring an infection-free environment for providers and patients. HIV has fortunately proven to be easily controlled in a clinical environment using the same precautions as those effective for preventing the transmission of HBV and hepatitis C virus. [1] These standard precautions include the use of personal protective attire, such as gloves, surgical masks, gowns and protective eyewear, in combination with surface cleaning and disinfection, instrument sterilisation, hand hygiene, infection control education, and other basic infection control precautions. Sporadic reports of transmission of blood-borne diseases associated with dental care continue, but are most often linked to breaches in the practice of standard precautions.[2]

Emerging and re-emerging infectious diseases present a real challenge to all health care providers. Three of the more than 50 emerging and re-emerging infectious diseases identified by the Centers for Disease Control and Prevention and the World Health Organization (WHO) include Ebola virus disease (EVD), pandemic influenza and severe acute respiratory syndrome. [3, 4] These previously rare or unidentified infectious diseases burst into the headlines in the past several years when they exhibited novel or uncharacteristic transmission patterns.

Concern about emerging infectious diseases arises for several reasons. When faced with a particularly deadly infectious disease such as EVD, which can be spread through contact with an ill patient’s body fluids, health care workers are naturally concerned about how to protect themselves if an ill patient presents to the dental clinic. With diseases such as pandemic influenza and severe acute respiratory syndrome, which may be spread via inhalation of aerosolised respiratory fluids when a patient coughs or sneezes, the concern is whether standard precautions will be adequate. In addition to standard precautions, treating patients with these diseases requires the use of transmission-based precautions. These encompass what are referred to as contact, droplet and airborne precautions for diseases with specific routes of transmission. Transmission-based precautions may include patient isolation, placing a surgical mask on the patient when he or she is around other people, additional protective attire for care providers, and in some cases the use of respirators and negative air pressure in a treatment room. In most cases, patients who are contagious for infectious requiring droplet or airborne precautions should not be treated in a traditional dental clinic setting.

Uploading a patient’s medical history at each visit will assist dental health professionals in identifying patients who are symptomatic for infectious diseases. Patients with respiratory symptoms, including productive cough and fever, should have their dental treatment delayed until they are no longer symptomatic. Additionally, health care professionals who are symptomatic should refrain from coming to work until they have been free of fever for 24 hours, having taken the necessary medication for 24 hours.

In most cases, a patient with symptoms as severe as those experienced with EVD will not present for dental care and therefore extraordinary screening and protection protocols are not recommended. If a patient is suspected of having a highly contagious disease, he or she should be referred to a physician, hospital or public health clinic. Dental professionals should take action to remain healthy by having vaccinated according to accepted public health guidelines, understanding that the recommendations may differ according to country of residence. Performing hand hygiene procedures at the beginning of the day, before placing and after removing gloves, changing gloves for each patient, wearing a clean glove, gown, mask and shoes, as well as family and school teaching, is increasing. High levels of tooth decay in developing countries such as Thailand are primarily related to poor living conditions, the high intake of sugars, poor oral hygiene practices, low exposure to fluoride for disease prevention, as well as limited availability of and access to appropriate, unaffordable or unavailable oral health services.

According to figures of the FDI World Dental Federation, between 60 and 90 per cent of schoolchildren worldwide have cavities but the majority of dental decay remains untreated due to inappropriate, unaffordable or unavailable oral health services.

The study, titled “School-based intervention for improving the oral health of children in southern Thailand”, was published in the March issue of the Community Dental Health journal.
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*With twice-daily brushing

Translucent Zirconia... Can it be esthetic enough for the esthetic zone?

By Aiham Farah, CDT, Syria

The ongoing evolution of restorative materials is bringing dentists more options than ever before to achieve the most desirable mix of properties. In the field of laboratory-fabricated restorations, clinicians and their lab partners have long been seeking to balance aesthetics, strength, and ease of use.

While the concepts of strength and ease of use are well understood, aesthetics are of course more subjective, yet can still be discussed in some objective terms. When we speak of aesthetics in this category, we typically mean two things: color and translucency. In order to best mimic natural tooth structure, a restoration must reflect, scatter, and absorb light similar to the way that a natural tooth does. Lithium disilicate has proven popular in recent years, thanks to its high performance in the esthetic category.

Today, Zenostar Zirconia is one of the top ranked high esthetic Zirconia, in our current test on the material below. I used all the working techniques instructed by the material manufacturer (staining tech on one set, and cut-back tech on the other), but I implemented my own experience in order to pull out its esthetic optical properties, and display it for you in this case report, so you can be the judge whether it's esthetic enough for the esthetic zone!

What is Zenostar?

Zenostar materials are partly sintered (chalk-like) zirconia disks, in both pre-shaded and non-shaded versions (Fig. 1), when sintered to full density, it demonstrates strength of more than 900 Mpa ((MO. 1150mpa)/ T. 1200mpa), and fracture toughness of double that of the glass infiltrated ceramic. Milling is carried out with an enlargement factor of approx. 20-25%.

Zenostar offers a versatile range of processing options, providing maximum flexibility and reliability.

For instance, IPS emax ZirPress can be pressed onto it, or IPS emax Ceram can be veneered onto it. Or even the shade and stains (from IPS emax Ceram kit or Zenostar Art Modul) can be used to characterize a full contour restoration to their high translucency and enhanced esthetic properties.

What's the concept behind the disks (T & MO)?

Zenostar T discs are particularly suited for the manufacturer of monolithic restorations, supplied in pre-shaded basic shades, allowing easy reproduction of all the 16 shades and 4 bleach (Fig. 2).

The fact that Zenostar disks are matched to the IPS emax press input range, is important to the success of full dental rehabilitation, (for instance; IPS emax veneers on anterior teeth and Zenostar full contour bridges on posterior teeth), to guarantee the shade match. IvoclarVivadent made it simple by having relevant coding for the Zenostar T (Translucency) to the emax press LT (Low Translucency).

Never the less, Zenostar MO (Medium Opacity) disk is also available and particularly suitable for aesthetic frameworks on discolored preparation and metal components, where a full masking even with a thin layer is guaranteed.

Fig. 1.
Fig. 2.
Fig. 3.
Fig. 4.
Fig. 5.
Fig. 6.

> Page 3C
is faced with a jungle of systems to fabricate its frameworks and restorations. At this point Amann Girrbach benefits from its more than 55 years of experience in CNC-technology and we do not offer single products but these complete processes just mentioned. The combination of both makes us able to offer one of the most versatile and technically adapted CAD/CAM-system in the market.

This experience values and knowledge in mechanical engineering and CAD/CAM makes it possible to produce our products with a high proportion of in-house manufacturing which includes also the in-house production of the control units as the core of the machines. Thus we can adapt our system components to the very specific requirements of the dental markets. We hope that we can remain in this leading position also in the future.

Amann Girrbach continues to grow in the region. How important is education for you and getting your newest technologies across to your customers and potential clients?

Education and knowledge transfer is essential for dental technicians in general as well as for our customers. Although our systems can be used intuitively, we are talking about complex systems consisting of software and hardware components that can be combined with various materials and techniques to get the best results. Furthermore our customers come from different generations and differ sometimes strongly regarding the access to modern technologies. For these reasons we offer a wide variety of education and training either by our local training centers or online by webinars or video tutorials that can be downloaded from our homepage.

IDS 2015 once again whitened many novelties, which new systems will AG be exporting to the MEA region?

How will you educate your clients to see the benefits?

As we have seen at the IDS this year our inhouse milling machines Ceramill Motion 2 and Ceramill Mikro – a new small 4-axes unit for dry millable materials – in combination with the diversity of CAD/CAM materials is of great interest to our customers in MEA region.

In addition to our presence in the CNC technology we are working on new materials such as the super-high translucent zirconia Ceramill Zolid FX that could be quite successful in MEA. It is easy to process but it is also a perfect material to achieve high aesthetic results in the anterior regions as it was previously only possible with lithium disilicate. At the same time this zirconia does not undergo ageing but maintains it strength over the long term. In accordance with the integrated product philosophy of Amann Girrbach, Ceramill Zolid FX is not a single product but a whole system solution consisting of materials and method. A coordinated staining concept will therefore soon be available which enables precise, reliable staining according to the VITA classical shade guide. Customers who want to process this material can visit our training centres or online by webinars or video tutorials that can be downloaded from our website.

What are the plans for the rest of this year and 2016 for Amann Girrbach in the MEA region?

Surely we strive to strengthen our sales activities so we will continue supporting our customers in the region and provide them with the latest knowledge and updates on our novelties. This year we will be renewing our training center at the Antonian University and have a complete new setup that can match the demand and the growth of the region. This way we will be able to receive more and more of our customers. At the moment the project is already in process and we will announce it as soon as it has reached its final stage.

Additionally we are planning to have a helpdesk based in the Kingdom of Saudi Arabia to be able to assist our biggest installed base in the region in parallel with our local distributor.