By DTI

DAEGU, South Korea: Although equivalent alternatives have become available over the past decade, dental amalgam remains in use as a restorative material for dental caries in children in many countries. The safety of dental amalgam, however, is still a controversial issue among experts, as it has been associated with developmental disorders and systemic conditions. A Korean study has recently provided evidence that dental amalgam exposure can affect systemic mercury concentration in children.

In order to assess chronic exposure to elemental mercury, researchers at Kyungpook National University in South Korea evaluated mercury concentrations in urine samples from more than 1,000 children aged 8–11, who also underwent oral examination. They found that children with more than one amalgam filled tooth surface exhibited significantly higher urinary mercury concentrations than those with none. The researchers thus concluded that dental amalgam exposure could affect systemic mercury concentration in children.

A number of studies have indicated that mercury exposure could be involved in problems in early brain development. Mercury has also been associated with adverse health effects relating to the digestive and immune systems, as well as the lungs, kidneys, skin and eyes. Awareness and recognition of these health and environmental implications have led to a ban on the use of dental amalgam in some high-income countries. However, dental amalgam restorations are still taught in the dental curriculum in South-East Asia. In Myanmar, for example, about 50 per cent of fillings placed are of amalgam.

The study, titled “Dental amalgam exposure can elevate urinary mercury concentrations in children”, was published online on 1 February in the International Dental Journal.
Indian dental patients in favour of chairside medical screening

By DTI

MUMBAI, India: A number of international studies have already indicated that oral health professionals could play a greater role in detecting chronic disease. Given the high prevalence of cardiovascular disease, diabetes mellitus, tuberculosis, HIV/AIDS and hepatitis B in India, researchers have now assessed patient attitudes towards and willingness to participate in medical screenings in dental settings in the country.

In the study, adult patients visiting five university-based dental clinics and one private practice were asked about their attitudes towards and willingness to participate in chairside screening.

Almost 90 per cent of the study participants in the clinical group and about 95 per cent in the private group reported willingness to undergo HIV/AIDS screenings in a dental setting.

In addition, the researchers found that the majority of patients were willing to pay 150 Indian rupees (36 per cent in the clinical group and 92 per cent in the private practice group, US$ 2.25) for medical screenings. According to the World Bank statistics, the gross national income per capita in the country is 1,370 Indian rupees (US$ 23.47).

According to a US study published in the American Journal of Public Health in 2014, chairside screenings in dental practices for the most common chronic diseases could save the health care system more than US$100 million annually.

Roland DG announces changes in leadership

By DTI

HAMAATSU, Japan: Roland DG, which offers a range of milling machines for dental laboratories and 3-D printers, has announced that Masahiro Tomioka is resigning as chair of the company from March 31.

Tomioka, who joined Roland DG in 2014, has broad experience and a spirit of innovation. He spearheaded the transformation of the company into a more progressive and innovative organisation to achieve sustainable growth, Fujikata said.

“My goal is to shift our business to a new digital era model that will serve as a foundation for the next big leap in growth by capitalising on our GlobalOne business platform. Together, we will unlock the full potential of our employees worldwide in order to realise new markets with products and services that exceed customer expectations,” Fujikata said.

Fujikata, who joined the company in 2014, has broad experience and a spirit of innovation. He spearheaded the transformation of the company into a more progressive and innovative organisation to achieve sustainable growth, Fujikata said.

“Roland DG offers a sophisticated product line with a passionate culture and family spirit. While upholding its corporate culture and spirit, I intend to turn the company into a more progressive and innovative organisation to achieve sustainable growth,” Fujikata added.

According to a US study published in the American Journal of Public Health in 2014, chairside screenings in dental practices for the most common chronic diseases could save the health care system more than US$100 million annually.
By DTI

GENEVA, Switzerland: Every World Oral Health Day (WOHD), which is celebrated annually on 20 March around the world, is held under a new and specific theme. This year’s WOHD will focus on raising awareness of the link between good oral health and overall well-being, with the slogan “It all starts here. Healthy mouth. Healthy body.”

Oral disease affects 3.9 billion people worldwide, with between 60 per cent and 90 per cent of children globally suffering from tooth decay. Yet, poor oral health goes far beyond the initial implications of dental disease and tooth decay; it has been associated with a number of health conditions, such as heart disease, pancreatic cancer, pneumonia and lung disease. In a recent study, 40 per cent of people with serious periodontal disease also reported suffering from an additional chronic condition.

Despite these links, people are unaware of the long-lasting and wide-ranging effects of poor oral health. Therefore, WOHD 2016 will shed light on the importance of good oral health in a simple and engaging way, encouraging understanding that good oral health is fundamentally intertwined with overall well-being.

The WOHD 2016 website, www.worldoralhealthday.org, focuses on communicating that prevention, early detection and treatment are key to ensuring the best outcomes and reducing oral disease and associated health complications.

A series of dynamic and engaging material, including a global video, new smartphone game, media strategy and social media content have been designed to inspire people across the world to participate in the WOHD campaign and improve their oral health regime. Dental professionals, companies and institutions that would like to be involved in this year’s WOHD activities are invited to e-mail WOHD@fdiworldental.org for a full campaign guide, which is available in English, French and Spanish and includes materials for download, such as poster visuals, social meme designs and information on the WOHD video and smartphone game.


The WOHD 2016 website, www.worldoralhealthday.org, focuses on communicating that prevention, early detection and treatment are key to ensuring the best outcomes and reducing oral disease and associated health complications.

A series of dynamic and engaging material, including a global video, new smartphone game, media strategy and social media content have been designed to inspire people across the world to participate in the WOHD campaign and improve their oral health regime. Dental professionals, companies and institutions that would like to be involved in this year’s WOHD activities are invited to e-mail WOHD@fdiworldental.org for a full campaign guide, which is available in English, French and Spanish and includes materials for download, such as poster visuals, social meme designs and information on the WOHD video and smartphone game.

Tetric® N-Ceram Bulk Fill
The nano-optimized 4-mm composite

Discover the new time-saving composite

4 mm to success
• Bulk filling is possible due to Ivocerin®, the patented light initiator
• Special filler technology ensures low shrinkage stress
• Esthetic results are achieved quickly and efficiently in the posterior region

www.ivoclarvivadent.com
Ivoclar Vivadent AG
Bendererstr. 2 | 9494 Schaan | Liechtenstein | Tel.: +423 235 35 35 | Fax: +423 235 33 60
SHOFU: Fastest growth from China

By DTI

SINGAPORE: SHOFU Dental Asia-Pacific attended the 6th International Dental Conference and Arab Dental Exhibition (AEEDC) in Dubai this year to introduce its new abrasive dental materials and equipment manufacturer has been eying the region for a long time, but ongoing market restrictions remain a challenge. However, SHOFU is also targeting countries in Asia Pacific that promise stronger growth.

While trade show attendees from the Middle East expressed great interest in Shofu’s materials and digital dental cameras, the company feels that the market conditions do not facilitate foreign investment. “Our meetings were good—although the fair could have been more—we met dentists and dental students from the UAE, Kuwait, Iran and Iraq. This is a big market, especially for Asian companies, but the market needs to open more to ease import and export,” stated Patrick Loke, Managing Director of SHOFU Dental Asia-Pacific, during AEEDC. Given the company’s hands-on approach, SHOFU is continuing its care- ful assessment of business opportunities before possibly opening a production facility or sales office in the Middle East.

SHOFU was founded in 1922 in Kyoto at the time when growing national debt and political uproar endangered Japan’s strong economy. The company initially produced high-quality porcelain teeth for the local market, but soon added abrasives, silicone polishers, composites and amalgam fillings to its portfolio. The 1970s saw the opening of new manufacturing facilities in Japan and sales offices in the US and Germany, while Asia Pacific remained relatively untouched despite SHOFU’s geographical proximity.

SHOFU finally established a new subsidiary in Singapore in 1980. Since then, Shofu Dental Asia-Pacific has reached a number of milestones in the region. In 1985, Shofu began operating in China with the establishment of a worldwide sales network and opened a production facility and sales office 20 years later. Back then, the country had only 50,000 dentists and fewer than 200 dental clinics to serve its 1.3 billion people—about 400,000 dental professionals would have been needed to provide adequate oral health care according to Western standards.

In the last decade, the Chinese government has invested substantially in dental training facilities and schools. The result was an increase in dental clinics that led to double-digit growth in relatively new market segments, such as dental implants.

Patrick Loke is very pleased with SHOFU’s sales in China. “We see the fastest growth coming from China. For the most part, China is now a fully developed country with huge opportunities to conduct business. We have experienced a double-digit increase in Chinese sales and the nation remains our most important market in the region,” he said during AEEDC. “Other countries in the South-East Asian region are also developed but growth is slower. However, India is coming up.”

The TOTAL C-RAM is particularly indicated for the cementation on enamel, dentine, metal, ceramic, porcelain, zirconium composites and features a bonding strength that is 50 per cent superior to that of CIVARIN on zirconia, the French company said.

New permanent resin cement

By DTI

PARIS, France: Complementing its bonding range with TOTAL C-RAM, dental product manufacturer and restoration expert Itegra Clinical has launched a new self-etching and self-adhesive permanent resin cement.

The TOTAL C-RAM is particularly indicated for the cementation on enamel, dentine, metal, ceramic, porcelain, zirconium & composites and features a bonding strength that is 50 percent superior to that of CIVARIN on zirconia, the French company said.

In an effort to extend its leading market position, Straumann recently established a new country organisation and distributor network that is intended to cover all of the provinces of China. Anthogyr’s dental implant system has been registered in and is established in China, where it is positioned as a high-quality, attractively priced option, according to the company.

Straumann, Anthogyr partner

By DTI

BASEL, Switzerland/SALLANCHES, France: Straumann and Anthogyr have announced that they have entered into a new partnership that will see Anthogyr’s business activities in China being transferred to Straumann by the middle of the year. Furthermore, the Swiss dental implant company has acquired a 30 per cent stake in the French manufacturer.

The agreement, according to both parties, is to become effective by the end of March this year. Financial details of the deal were not disclosed.

24537 Neumünster / Germany
Dental Material GmbH
Tel. +49 43 21/5 41 73
Fax +49 43 21/5 19 08
Internet www.promedica.de

Light-curing micro-hybrid composite
• applicable for various indications and all cavity classes
• high translucency and a perfect colour adaption
• Polissable to a high gloss
• excellent physical properties for durable fillings
• high filler content
• packable consistency (also available as Composan LCM flow)

**Composan LCM**

Highest quality made in Germany

**Composan LCM**

Dental Material GmbH
24537 Neumünster / Germany
Tel. +49 43 21 / 5 41 73
Fax +49 43 21 / 5 19 08
Internet info@promedica.de

**PROMEDICA**

*Light-curing micro-hybrid composite*

*Proven Better*

*Composan LCM*
Just **ONE STEP to perfection**

**Bulk Fill**

- Deep Cure up to 4mm
- Low Shrinkage
- Remarkable Handling
- Anti-plaque
- Fluoride Release & Recharge
- Withstands Heavy Stress

**BEAUTIFIL-Bulk** is formulated with a unique balance of filler-resin chemistry to maximize light penetration for optimum cure depth and low polymerisation shrinkage stress while assuring remarkable shade match and sustained fluoride protection.

For more information, simply contact your nearest SHOFU dealer.

**SHOFU DENTAL ASIA-PACIFIC PTE. LTD.**
Tel (65) 6377 2722  Fax (65) 6377 1121  eMail mailbx@shofu.com.sg  website www.shofu.com.sg
Aesthetic composite layering of implant-supported restorations in an edentulous jaw

A good option for the lifelike recreation of gingival tissue

By Drs Patrice Margossian & Pierre Andrieu, France

Careful planning is indispensable in the treatment of an edentulous jaw with implant-supported restorations. The axes and positions of the implants must correspond to the given biological, mechanical and aesthetic conditions. In situations in which severe bone recession has occurred, the work of the dental team has to involve the reconstruction of the dental and the gingival tissue. The flawless reconstruction of gingival tissue requires sound teamwork, as well as excellent materials and exceptional skill. Layering with the light-curing laboratory composite SR Nexco (Ivoclar Vivadent) takes this procedure to a new level.

Surgical phase

Owing to the sufficient bone structure in the lower jaw, this part of the mouth could be restored at once with four immediately loadable implants. During the reconstructive phase, the upper jaw had to be treated with a provisional removable denture owing to the atrophied alveolar ridge. The tooth extractions from the upper and lower jaw were performed on one day. At the same time, four mandibular implants were placed and loaded. An immediate denture was seated in the upper jaw.

The determination of the occlusal plane and the ideal incisal line allows the dental arches to be integrated more easily in terms of aesthetics and function. Open-tray impressions were taken with a special plaster (Snow White, Kerr Dental) and unsplinted impression posts. The considerable stiffness of the impression material completely immobilised the impression posts, thereby preventing any errors in the casting of the study models. An articulator allows the kinematics of the jaw to be correctly simulated. The goal of this part of loaded provisional restorations. For this purpose, however, the model has to be mounted in the articulator. In the present case, the maxillary model was positioned in correct relation to the hinge axis-crestal plane. Subsequently, we adjusted the bite patterns in order to record the vertical dimension of occlusion.

The centric relation is regarded as the reference position for adjusting the muscles to the centric and functional jaw relation. The mandibular model was mounted in the articulator with the help of an antagonist jaw record. If the centric relation was marked on the plaster base of the model (vertical and horizontal). The vertical axis represents the midfacial plane. From the front, the horizontal axis is aligned parallel to the interpupillary line and from the side to Camper’s plane. These markings, which should be very close to the working-geo-facial function, are a guide for the dental technician in setting up the teeth. Therefore, the incisal line is an axis parallel with the midfacial plane. The Camper’s plane markings indicate the alignment of the occlusal plane. All these elements provide a sound rationale for the tooth set-up according to aesthetic and functional principles.

The centric relation and the teeth on the basis of the SR Phonares II tooth mould chart (Ivoclar Vivadent). Holding the teeth up against the lips of the patient quickly reveals whether they were in harmony with her facial features. The set-up of the teeth according to the Ditramax markings (Fig. 6) allows the situation to be clinically validated. In this case, attention was given in particular to the aesthetic integration of the dentogingival complex when the patient was smiling. The lip dynamics were shown with video clips. The functional criteria were also checked. The vertical dimensions of occlusion had to be harmonious in order to achieve a balanced lower facial third and proper phonation.

We selected the tooth shade and the teeth on the basis of the SR Phonares II tooth mould chart (Ivoclar Vivadent). Holding the teeth up against the lips of the patient quickly reveals whether they were in harmony with her facial features. The set-up of the teeth according to the Ditramax markings (Fig. 6) allows the situation to be clinically validated. In this case, attention was given in particular to the aesthetic integration of the dentogingival complex when the patient was smiling. The lip dynamics were shown with video clips. The functional criteria were also checked. The vertical dimensions of occlusion had to be harmonious in order to achieve a balanced lower facial third and proper phonation.

We felt that a CAD/CAM-fabricated titanium framework (NobelProcera, Nobel Biocare) would best fulfil this indication. The double-scan technique allowed the implant model to be superimposed on the tooth set-up to construct the framework. In the next step, the framework was machined and then tried on the model and in the patient’s mouth (Fig. 7). The cast impression and the high-performance processing systems significantly contributed to providing the optimal passive (tension-free) fit of the framework, which is decisive for the long-term success of the restoration.

The areas that needed to be built up with gingival materials were blasted with aluminium oxide at 200 to 700 bars pressure. Subsequently, the SR Link bonding agent (Ivoclar Vivadent) was applied, followed by a thin layer of the light-curing SR Nexco Gingiva Opaque to mask the metal framework. The Opaque was polymerised and then a second coating was applied and polymerised. The resulting inhibition layer was removed.
The absolute disinfection for Endodontics!

IRRIGATYS

Efficient root canal cleaning

PATENTED CONCEPT

IRRIGATYS: the new two-in-one handpiece with dual functions

Tip oscillation to allow perfect disinfection.

Two-in-one system provides and activates liquid for the perfect clean.

A removable tank allows the irrigation of the root canal with Hypochlorite and EDTA. The irrigation line leads the solution through the Irriga-Tip®. This patented technology, developed after 6 years of research, optimizes the result of the complex procedure of root canal irrigation.

Class IIa medical device. Homologation in progress. For dental healthcare professional use only. Certifying body SGS United Kingdom LTD. Data of creation 02/02/15
ROOTS SUMMIT
30 NOVEMBER - 3 DECEMBER, 2016

THE MASTERS OF ENDODONTICS

Antonis Chaniotis
David E. Jaramillo
Freddy Belliard
Oscar von Stetten
Rafael Michiels

Enrico DiVito
Sergio Rosler
Imran Cassim
Sijo Jacob
Bojidar Kafelov
Mile Churilov

Roberto Cristian Cristescu
Luis Chávez de Paz
Ronald Ordinola
Carlos Aznar Portela
Ahmed Abdel Rahman Hanem

ARE MEETING IN DUBAI
WITH THE ROOTS COMMUNITY

DATE: 30 NOV - 3 DEC
LOCATION: CROWNE PLAZA, DUBAI

EARLY BIRD 20% OFF
REGISTER AT WWW.ROOTS-SUMMIT.COM
The conventional flask technique with a heat-curing denture base material (ProBase Hot, Ivoclar Vivadent) was used to produce the denture. After the polymerisation process, the denture base was ground and space was made for building up the Gingiva composite. The surface was conditioned by blasting it with aluminium oxide (50 µm) at 200 kPa (Fig. 8). A bonding agent was then applied and left to react for three minutes before it was light cured. In order to achieve very lifelike results in the layering of the gingival tissue, saturated (intensive) materials (SR Nexco Paste Intensive Gingiva) were used first (Fig. 9). Next, translucent, light-curing gingival materials (SR Nexco Paste Gingiva and SR Nexco Paste Basic Gingiva) were used to impart the gingival areas with the desired depth (Fig. 10).

The colours of the Gingiva composites range from pale pink through reddish and orange to purple. A certain amount of time and effort are necessary to master the necessary mixing techniques and achieve a harmonious interplay of the intensive and the translucent materials. Practical experience is essential. With some technical skill, the gingival areas can be naturally reproduced in terms of shape, texture and shade.

All the individual layers were precured (Quick curing light, Ivoclar Vivadent) in segments. A high-performance curing light was used for the final polymerisation. Prior to this step, a coating of glycerine gel (SR Gel, Ivoclar Vivadent) was applied to the surfaces to prevent oxygen inhibition, which could lead to an unattractive result that is difficult to polish. The surfaces of the teeth were characterised with a vertical and horizontal macrostructure. Particular attention was paid to mechanical polishing. Once the glycerine gel had been removed, the restorations were finished with different polishing instruments (various grit sizes, pumice, leather buffering wheels and universal polishing paste; Fig. 11). In the present case, mechanical polishing was preferred to glazing with a light-curing composite in order to prevent premature ageing of the surface.

The dentures were seated manually with the help of multi-unit abutments from Nobel Biocare (Fig. 12). The screw channels were sealed with Tenlin and light-curing composite resin. The position of maximum intercuspation was checked and the occlusal pathways were adjusted to protrusive and lateral movements. In addition, the restorations were checked in terms of the ability to clean them with interdental brushes, and the patient was given special instructions regarding her oral hygiene.

Conclusion
For a long time, ceramics were considered to be the aesthetic benchmark. With the introduction of state-of-the-art industrially fabricated acrylic teeth specially designed for implant applications, the bar for aesthetics has been raised in this category of materials. The teeth used in this case exhibit a true-to-nature morphology, which allows the restoration to be functionally integrated without any problems. Using the laboratory composite SR Nexco to recreate gingival tissue is an effective restorative approach. In contrast to ceramic materials, the composite resin is easy to handle and delivers exceptionally aesthetic results (Fig. 13). The light weight of the material is an added benefit. An all-ceramic restoration (zirconium dioxide framework, layering ceramic, gingival mask) weighs almost twice as much as a titanium and composite resin denture. Another advantage of the type of restoration described here is its long service life. The success of an implant-supported denture depends on the systematic coordination of all the surgical and prosthetic requirements. A strict procedure needs to be followed from the treatment plan to the final outcome. Layering gingival portions with a laboratory composite represents a genuine improvement on previous materials and methods with regard to aesthetics, handling and hygiene (Fig. 14).

Dr Patrice Margossian maintains a private practice specialising in implantology and prosthetics in Marseille in France. He can be contacted at pm@patricemargossian.com.

Dr Andrieu Pierre is a practising prosthodontist in Aix-en-Provence in France. He can be contacted at andrieupi@wanadoo.fr.
Between BOPT and BTA

A case report on shaping the gingival contour around tooth-supported restorations by means of provisional resin crowns

By Dr Feng Liu, China

In consideration of the health of periodontal tissue around natural teeth, the location of the crown margin is preferably placed supragingivally or flush with the gingival margin so that the contour of the restoration will not influence the gingival contour. However, in the case of covering the original colour of the abutment tooth, forming the ferrule, and/or improving retention and resistance form, the crown margin can be placed subgingivally. Because the sulcular depth around a healthy natural tooth is around 1 mm, the cervical margin of the crown is usually located 0.5 mm below the free gingival margin. Thus, unlike an implant-supported crown, a tooth-supported crown can hardly influence the gingival contour. However, when the sulcular depth of the abutment is sufficiently deep, as with a thick gingival biotype, it is possible to sculpt the gingival contour around the abutment teeth using provisional resin crowns. The treatment process will be demonstrated in this article through a typical case with a seven-year retrospective review.

Case report

A 48-year-old female patient whose general health condition was good, was referred to the Peking University Hospital of Stomatology in Beijing, in China in 2008. The patient’s main concern was the restoration of her anterior teeth but also an aesthetic outcome. However, financial limitations meant not all of her dental problems could be addressed.

The dental examination revealed that tooth #12 was missing and tooth #11 had shifted mesially. In addition, there were visible defects on teeth #21, 11 and 22. The roots of teeth #21 and 22 were apparently palatally inclined and so were the crowns. Tooth #11 was slightly inclined to the palatal side and so was the crown.

During examination of the occlusion, a deep overjet and a large overjet of the anterior teeth became evident. In addition, the contour of the patient's gingival line was inharmonious. The angle of her mouth was asymmetrical when she smiled (Figs. 1–4).

Treatment plan

For patients with malocclusion and misalignment of teeth, the restorative procedures should be performed once the primary orthodontic treatment has been completed. However, considering the length of treatment and her financial limitations, the patient refused orthodontic treatment and only accepted the restorative treatment. Since the patient’s inharmonious gingival line may have interfered with the final aesthetic outcome, certain methods to improve the gingival contour were considered before tooth preparation.

Crown lengthening has been widely used for improving the contour of the gingival line. However, even if the contour of the gingival line could be modified through periodontal surgery from the vertical direction, the palatally inclined maxillary anterior teeth would cause the inclination of the teeth's long axes in the sagittal direction. Therefore, the ideal aesthetic outcome would be difficult to achieve (Figs. 5).

In this case, the restoration’s entire labial face needed to be shifted labially so that the height of the gingival contour could be improved (Figs. 6). Therefore, a more suitable treatment option was considered.

During further examination, we found that the patient had a thick gingival biotype with a 3 mm deep gingival sulcus around the maxillary right lateral incisor and 1 mm deep around the maxillary right central incisor (Figs. 7 & 8). In implant dentistry, when the soft tissue around the implant is of a thick biotype, modifying the contour of the soft tissue by shaping the transmucosal soft tissue with a provisional resin crown of a certain shape has been proved to be an effective method for improving the aesthetic outcome. However, for restoring defective natural teeth there is insufficient clinical evidence to prove whether provisional resin crowns are capable of shaping the gingival contour. Such a treatment protocol was deemed worth attempting in the current case.

Fig. 1: Frontal view of the patient's smile before treatment. — Fig. 2: Pre-op photograph showing the occlusal relationship of the anterior teeth. — Fig. 3: Pre-op photograph of the maxillary anterior teeth. — Fig. 4: Pre-op photograph of the maxillary anterior dental arch. — Fig. 5: The incisal edge of the tooth would have resulted in an unfavorable aesthetic outcome. — Fig. 6: The labial side of the restorations would be shifted labially. — Fig. 7: The probing depth of the gingival sulcus around the maxillary right central incisor was 3 mm. — Fig. 8: The probing depth of the gingival sulcus around the maxillary right incisor was 1 mm. — Fig. 9: Frontal view of the pre-op model. — Fig. 10: The gingival contour was marked on the model. — Fig. 11: The gingival contour was modified on the model. — Fig. 12: The diagnostic wax-up showing the upward-shifted gingival contour. — Fig. 13: Occlusal view of the diagnostic model. — Fig. 14: The diagnostic wax-up showing the upward shifted gingival contour. — Fig. 15: The diagnostic wax-up showing the labially shifted restorations. — Fig. 16: The tooth preparation was guided by the silicone index. — Fig. 17: The completed tooth preparation. — Fig. 18: The provisional restorations replicated from the diagnostic wax-up. — Fig. 19: The provisional restorations placed in the mouth. — Figs. 20 & 21: The gingiva was covered by the labial side of the provisional restorations. — Fig. 22: The gingiva was covered by the labial side of provisional restorations. (diagrammatic sketch). — Fig. 23: The provisional restorations appeared just as if they had erupted from the gingival sulcus (diagrammatic sketch). — Fig. 24: Two weeks after placement of the provisional restorations, the gingival contour had begun preliminary remoulding and the margin of the abutment teeth had been exposed.
We’ve got your back.

Not to mention everything else.

The ability to perform your job comfortably is essential. And the new feature-rich A-dec 500 stools have you covered. Based on a unique dynamic seating system design, individual performance zones work in unison to conform and move with your body. With an ultimate ergonomic solution like this, you can focus on what’s really important—your patients.

Discover your ultimate comfort at a-dec.com/500stools

© 2015 A-dec Inc. All rights reserved.
Diagnostic wax-up

In order to preview the expected outcome and guide the treatment, a diagnostic wax-up was prepared. On the model, the incisal edges of both central incisors were located on the palatal side of the red line (wet-dry border) of the lower lip, hence the position of the incisal right central incisor and maxillary left central incisor would be shifted in the apical direction by 2.5 mm, 0.7 mm and 2.5 mm, respectively. The entire restoration would be inclined to the labial side by 1.5 to 2 mm so that the palatally inclined roots would not interfere with the aesthetic outcome (Figs. 9-14).

Tooth preparation and provisional restoration

According to the diagnostic wax-up, two silicone indices were fabricated. One of the indices was cut in the labiolingual direction to guide the preparation of the abutment teeth. The margin of the prosthesis was designed to be placed 0.5 mm subgingivally (Figs. 15-17). The provisional restorations would be fabricated according to the other silicon index, in which the improvement of the aesthetic outcome could be observed clearly. However, the shape of the provisional restorations was not designed to emulate the erupted natural teeth, but for the cervical part of the restorations to cover the labial gingiva. After a long period of remodelling and reshaping that time, the intra-oral examination showed recession of the gingiva and exposure of the shoulders on the labial side of both teeth #21 and tooth #12 (Fig. 24). The margins of tooth #11 could also be observed and the gingiva was healthy. At this appointment, the post and cores were placed and further tooth preparation was carried out to shift the margins in the apical direction. The new provisional restorations were fabricated according to the patient’s wishes.

Following the new provisional crowns had been placed, the patient returned to our clinic for further treatment. At that time, the patient expressed her satisfaction with both the gingival contour and the position of the incisal edges (Fig. 25). Once the provisional crowns had been removed, the gingival contours around the abutment teeth were similar to the soft-tissue collar around dental implants. The final impression was taken in order to fabricate the master model, which would replicate the gingival contour accurately (Figs. 26-29). The final all-ceramic restorations were fabricated according to the master model.

Completing the final restorations

Once the final restorations had been completed, the gingival contours of the crowns could be seen and were consistent with the shape of the gingival collars around the abutment teeth, which was similar to the soft-tissue collar around dental implants. The final impression was taken in order to fabricate the master model, which would represent the gingival contour accurately (Figs. 30-32). During the try-in procedure, the marginal fit, the shape and the contact points, the consistency of the transgingival contours of the restorations and gingival collars around the abutment teeth were examined carefully. The transgingival contours of the restorations should maintain the shape of the gingiva, but not increase the pressure, allowing the gingiva to remain healthy and maintaining the contour in the long term (Figs. 36-39).

Revisits

The one-week follow-up after placement of the final restorations showed that the gingiva was healthy and stable around the crowns. When compared with the preoperative intra-oral photographs, the aesthetic outcome was a significant improvement (Figs. 1, 3, 40-43).

The patient unfortunately did not attend the remainder of the follow-ups until seven years after placement of the final restoration. At this appointment, the examination revealed an undesirable oral health status, with a DeBiers Index (+) and Dental Calculus Index (++) The gingivae were mildly reddened and swollen. However, the health of the gingiva around teeth #21 and 12 was better than around any other teeth. Around tooth #21, the gingiva was healthy and the gingival contour was stable without noticeable gingival recession. Around tooth #11, slight gingival recession was
found with slight reddening and swelling of the gingiva. However, the aesthetic outcome of the modified gingival contour had been maintained (Figs 44–47).

Discussion

The biologically oriented preparation technique (BOPT) and biological tissue adaptation (BTA) have gained gradual acceptance. The BOPT approach suggests finishing the tooth preparation without a defined shoulder so that the gingival margin can be modified freely. In the present case, the marginal ridge was pre-shaped and the gingival contour was reshaped in 3-D to achieve an ideal gingival contour.19

According to the BTA approach, the convexity of the final restorations should be greater than that of the natural teeth and in that manner the current treatment protocol differed from BOPT. The BTA protocol suggests cutting and modifying the gingiva in order to achieve an ideal gingival contour, and thereafter fabricating provisional restorations with a larger cervical convexity to re-model the gingiva. Once the gingival contour is stable and meets the requirement, the final restoration will fit the exact contour of the soft tissue.19 Therefore, the gingiva will only be able to regenerate along the contour of the gingiva in the vertical direction. The gingiva will only be able to regenerate along the contour of the restorations, and thus a gingival sulcus with a sealing function will develop and the gingival contour will be constant with the shape of the restorations.14

In the BTA approach, the gingival–alveolar relationships are defined as 3-D biologic widths and the relationship between the gingival contour and restorations is deemed to be a stable relationship.14 In the present case, the treatment protocol differed from BTA; however, the outcome of the final restorations was similar. Both BOPT and BTA are creative aesthetic gingival treatment concepts that have been established in recent years. The protocol applied in the current study lay somewhere between these two approaches. After seven years of follow-up, the maxillary right lateral incisor and maxillary left central incisor demonstrated better final aesthetic outcomes compared with the maxillary right central incisor, for which the restorative procedure was close to conventional restoration. Such a result encourages some consideration.

Editorial note: A complete list of references is available from the publisher.
Individuals play the game, but teams win championships

What it takes to build the ultimate practice unit

By Lina Craven, UK

It is said that all teams are groups, but not all groups are teams. What separates the two is the interdependence. A true team is focused on a common purpose; team members support one another and enhance each other’s work and contribution. Andrew Carnegie captured this accurately when he said, “Teamwork is the ability to work together toward a common vision. It is the fuel that allows common people to attain uncommon results.”

I know that achieving the ultimate team is possible, because when I was a dental nurse many years ago in America, I was part of an ultimate team. What made us great was our leader, Dr. Derick Tagawa. He and his partner had a very clear vision and they knew exactly what was needed from each one of us to ensure the practice achieved its desired results. In turn, each one of us knew that every challenge we faced was an opportunity for personal, professional and practice growth.

Practices with a motivated, focused and empowered team produce excellent results; consequently, patient satisfaction is high and practitioners realise increased financial rewards. Achieving such a team is not pie in the sky, but it does require complete commitment from the whole team. Based on my own experience of being a part of a high-performing team and my observations as a consultant to practices, here are my key principles for the creation of an ultimate team.

Do not confuse being the boss with being a leader. Leaders set the tone for the practice. They lead by positive example. Successful teamwork starts at the top with leaders who provide strategic vision and establish team goals. Effective leaders clearly define their vision and share it with their team to establish a common purpose.

Any successful relationship can only survive if values are shared, believed and agreed upon, values like honesty, respect, integrity, commitment to each other, commitment to the practice success. Shared values help to build an effective team and to establish its culture, conduct, rules and policies. The key is to ensure the entire team agrees on the same values and is prepared to work by them. According to the world’s finest flight demonstration team (the Blue Angels, US Navy), “without shared values, peak performance isn’t possible” and “a team’s values must align with its purpose, mission, and actions.”

Every team member, from the leader to the cleaner, must learn to communicate clearly and effectively. Successful relationships are built on positive, honest and sincere words of praise. They’re nothing else can quite substitute for a few well-chosen, well-timed, sincere words of praise. They’re absolutely free and worth a fortune.”

It is said that what motivates individuals the most is recognition—a pat on the back or a word of praise here and there for a job well done. Embrace this principle and, although it may feel awkward at first, if it is done often enough it becomes a habit. Sam Walton, founder of Wal-Mart Stores, said: “Appreciate everything your associates do for the business. Nothing else can quite substitute for a few well-chosen, well-timed, sincere words of praise. They’re absolutely free and worth a fortune.”

Building the ultimate team does represent a challenge, but once achieved it is hugely rewarding. There is no point implement- ing one principle in isolation. It is like baking a cake without the eggs.

Lina Craven is founder and Director of Dynamic Perceptions, an orthodontic management consultancy and training firm in the UK, and has many years of practice-based experience. She can be contacted at info@lina craven.com

Successful leaders embrace the power of teamwork by tapping into the innate strengths each person brings to the table.”

Blue Angels, US Navy

“Successful leaders embrace the power of teamwork by tapping into the innate strengths each person brings to the table.”

Blue Angels, US Navy

“Successful leaders embrace the power of teamwork by tapping into the innate strengths each person brings to the table.”

Blue Angels, US Navy

“Successful leaders embrace the power of teamwork by tapping into the innate strengths each person brings to the table.”

Blue Angels, US Navy

“Successful leaders embrace the power of teamwork by tapping into the innate strengths each person brings to the table.”

Blue Angels, US Navy

“Successful leaders embrace the power of teamwork by tapping into the innate strengths each person brings to the table.”

Blue Angels, US Navy

“Successful leaders embrace the power of teamwork by tapping into the innate strengths each person brings to the table.”

Blue Angels, US Navy

“Successful leaders embrace the power of teamwork by tapping into the innate strengths each person brings to the table.”

Blue Angels, US Navy

“Successful leaders embrace the power of teamwork by tapping into the innate strengths each person brings to the table.”

Blue Angels, US Navy

“Successful leaders embrace the power of teamwork by tapping into the innate strengths each person brings to the table.”

Blue Angels, US Navy

“Successful leaders embrace the power of teamwork by tapping into the innate strengths each person brings to the table.”

Blue Angels, US Navy

“Successful leaders embrace the power of teamwork by tapping into the innate strengths each person brings to the table.”

Blue Angels, US Navy

“Successful leaders embrace the power of teamwork by tapping into the innate strengths each person brings to the table.”

Blue Angels, US Navy

“Successful leaders embrace the power of teamwork by tapping into the innate strengths each person brings to the table.”

Blue Angels, US Navy

“Successful leaders embrace the power of teamwork by tapping into the innate strengths each person brings to the table.”

Blue Angels, US Navy

“Successful leaders embrace the power of teamwork by tapping into the innate strengths each person brings to the table.”

Blue Angels, US Navy

“Successful leaders embrace the power of teamwork by tapping into the innate strengths each person brings to the table.”

Blue Angels, US Navy

“Successful leaders embrace the power of teamwork by tapping into the innate strengths each person brings to the table.”

Blue Angels, US Navy

“Successful leaders embrace the power of teamwork by tapping into the innate strengths each person brings to the table.”

Blue Angels, US Navy

“Successful leaders embrace the power of teamwork by tapping into the innate strengths each person brings to the table.”

Blue Angels, US Navy

“Successful leaders embrace the power of teamwork by tapping into the innate strengths each person brings to the table.”

Blue Angels, US Navy

“Successful leaders embrace the power of teamwork by tapping into the innate strengths each person brings to the table.”

Blue Angels, US Navy

“Successful leaders embrace the power of teamwork by tapping into the innate strengths each person brings to the table.”

Blue Angels, US Navy
"Prevention of sex trafficking is our ultimate aim"

An interview with York dentist Dr Andrea Ubhi

Sex trafficking remains a major issue in many parts of Asia, not only in sex tourism hot spots like in Indonesia or Thailand but also in smaller countries like Nepal. UK-based charity Asha Nepal (hope for Nepal) tries to prevent children becoming involved in the sex trade and helps victims of trafficking and sexual abuse in the country to re-establish themselves in society. Dental Tribune spoke about the organisation's work and its impact on the lives of survivors with one of the charity's trustees, Dr Andrea Ubhi from York, who is to take over as chairperson later this year and who runs one of the country's leading private dental practices.

Dental Tribune: Dr Ubhi, you run a successful dental practice in York. How did you first become involved with Asha Nepal?

Andrea Ubhi: I have been involved with a few charities over the years; however, it has been difficult for me to find as much time as I wanted to give to charity work, as I have been busy building up dental businesses, in addition to bringing up three children. Several years ago, I sold one of my practices, an NHS practice and that reduced my workload, finally giving me the time and money to expand my interest in charity. Although I had never really focused on women’s issues before, knowing that men and women are equal in the world, I decided to become involved in Asha Nepal, as I had been becoming increasingly aware of the issue of trafficking and Asha was at a small size where I thought my management skills would be of better use than in a larger organisation and, frankly, I wanted to know exactly where my money was going.

Nepal usually does not make the headlines when it comes to sex trafficking. Tryourownknowledge, how extensive is the problem in the country?

Although its neighbour India has much more children involved in sex trafficking, estimated at one million, about 30,000 girls from Nepal are tricked into going over the border each year and trafficked, and they end up as sex workers in the major cities. When you actually consider the difference in size of population between the two countries, proportionally this is a large number. One of the greatest issues is poverty. Attending a reasonably good school requires school fees. That is why many children in Nepal do not have the opportunity to go to school. The only thing they are often left to do is to work in domestic labour, often from as young as the age of four, and they are at risk of sexual abuse.

Once a child is in domestic labour, there is also a high risk of being trafficked. Sometimes, this happens innocently: someone might say that he or she has a better job in the next town, then someone might offer the child a job in Delhi, which in the end turns out to be captivity in a brothel.

How is your organisation helping victims of sex trafficking in Nepal itself?

Asha Nepal considers the whole picture and tries to prevent children being trafficked by providing funding to very poor families to help give their children an education, which in turn provides the hope of dignified employment at home and be reintegrated into the community. Independence is one of our main aims.

Asha Nepal also works with the mothers of poor families, for example, the father may be unemployed, drink too much or abandon his family altogether. If there are issues with providing for the family, Asha Nepal assists with emergency rent and food so that the mothers can get on their feet. Asha has a job coordinator who helps mothers or trafficking survivors obtain a place in a training programme and then work.

How many of the children you look after find their way back into society?

All of them. In some cases in which children have been trafficked or are victims of sexual abuse by their own family and are in high danger of being re-trafficked, there is no hope of safe reintegration with their own family. Asha assigns such children to foster families. They remain there with Asha until they are old enough to be integrated into society independently when they are adults.

The April earthquake last year had a devastating effect on the country’s infrastructure. Has this affected your work and, if so, to what extent?

When I went over in September, they were still terrified because it was not just only one earthquake, but about 300. There were continual tremors and many people were sleeping outside, even when it was cold and raining. While the destruction in Kathmandu was significant, in the north-eastern
region almost four out of five houses were destroyed or significant-ly damaged. When we spoke with one of the children’s minis-
ters in that area to find out what the need was, she said that there were about 7,000 children dis-
placed through the earthquake. Throughout the Sindhupalchowk border, guards were checking pa-
ers of children going out. There was such an increased risk of trafficking and they were trying to reduce that. All children had to have papers that allowed them to exit the area.

Generally, our work became more complicated and more ex-
pensive, as prices rose throughout the earthquake period. On top of that, there is the recent fuel crisis that Nepal has been facing over the past few months, as no oil or gas has been available from India for political reasons. This has slowed the country down, which is such a shame considering how difficult the year had already been with the earthquake. It has also in-
creased the cost for our work again owing to the increased costs of petrol and transport. Nepal is a landlocked country, so everything has come through India or China. If there is a block-
ade, it poses a significant problem to the entire infrastructure in Nepal.

You are soon to take over the re-
sponsibility of chairperson from re-
tiring Asha founder Peter Bashford. What will the focus of your work be in the years to come? I want to see the team consoli-
date. The organisation has grown dramatically in the last two years, going from eight to 23 employees. Currently, we are looking after 107 children, of whom 51 are in our residential care.

We want to concentrate on re-
integration into the community and more community support, which means fewer children in res-
idential care and more supported by our social welfare team in the community. This way, we keep children more independent and prevent them from being institu-
tionalised.

However, prevention of traffick-
ing is our ultimate aim. We have just started a new Facebook page for teenagers in Nepal, called “Keeping SAFE”, to teach them to avoid traffickers and recognise their tricks. The page has an enor-
mous following, with up to a quar-
ter of a million people viewing each post. We are also planning to go into schools and hold pre-
sentations about the dangers of trafficking, not only for the chil-
dren but also for the teachers so that they can teach their future pupils about the tricks that traf-
fickers use to force children into domestic or sex labour and how to avoid being trafficked.

Dr Ubhi, thank you very much for the interview and good luck for the future.

www.idem-singapore.com

STRIVING FOR CLINICAL EXCELLENCE

Online Registration Now Open!

INTERNATIONAL DENTAL EXHIBITION AND MEETING

APRIL 8 - 10, 2016

Suntec Singapore Convention & Exhibition Centre

Featured Speakers

IDEM Singapore 2016’s conference theme is built upon the common goal of all dentists – both general and specialist: Striving for Clinical Excellence. Look forward to world-class clinicians, researchers and educators discussing contemporary issues in the field of dentistry.

Pre-Register and Meet Over 500 Exhibitors!

Join the IDEM Singapore Trade Fair to meet over 500 internationally recognized manufacturers, distributors and traders. With exhibitors showcasing their latest products and services on levels 4 and 6, your visit will be packed with opportunities to strike new deals and re-enforce existing partnerships.

Dental Tribune Study Club in Cooperation with IDEM Singapore

Visit the Dental Tribune Study Club in the exhibition hall on level 6 to attend free live lectures on the latest in dental technology and procedure. Widen your networking possibilities and assess new products and techniques. Information on Study Club lectures will be available online closer to the event. Sign up as an exhibition visitor online today to guarantee your complimentary entry.

Dr Andrea Ubhi

For further information, please visit www.asha-nepal.org.
While visiting an exhibition stand usually allows customers only to see a product, ADX16 Sydney is introducing a novel way for visitors to experience the latest dental products from Australia and overseas: the Product Showcase.

In two purpose-built theatres in the designated showcase area, visitors can sit down and learn how novel technology is changing the instruments, equipment and materials that leading dentists use. During interactive 45-minute sessions, this innovative component of ADX16 gives dental professionals the unique opportunity to talk to suppliers to obtain in-depth knowledge of their new products and insights into the field of dentistry. Topics of the Product Showcase sessions vary and include business enhancement strategies, product introductions and clinical demonstrations.

For example, dental marketing specialist Jonathan Engle from Software of Excellence will advise on how to attract new patients online, Dr Andreas Kurbad will review the success of Ivoclar Vivadent’s all-ceramic restorations system IPS e.max and Dr Phillip Palmer from Prime Practice will introduce dentists to the concept of outsourcing non-core functions in practices.

Showcase sessions run from 10:30 to 16:30 on Friday and Saturday and from 10:30 to 13:30 on Sunday. The timetable can be accessed at www.adx.org.au/showcase.

Complementing this novel hands-on approach is the ADIA-OHPA Dental Laboratory Pavilion. Also new at Australia’s premier dental event, the pavilion highlights the quality products manufactured by the local laboratory industry. Designed to maximise participation by dental technicians, the pavilion offers information on the commercial framework and changes to regulations and exhibits the latest technology from Australia and overseas.

The free pavilion, which is located in the main exhibition space on the left-hand side directly behind the entry turnstiles, includes working demonstrations of the latest CAD/CAM technology. As a collaborative effort between the Australian Dental Industry Association (ADIA) and the Oral Health Professionals Association (OHPA), the initiative recognises the unique challenges that the country’s laboratories face from international competition and technological changes and reflects both organisations’ advocacy efforts to secure a future for Australia’s dental laboratories.

There is certainly a great deal to see and do at Australia’s largest dental exhibition; its significance is perhaps best captured by ADIA CEO Troy Williams: “Make no mistake about it, ADX16 Sydney is an event that allows dentists and allied oral health care professionals to see more, buy more and learn more.”
“The industry has moved beyond subdued business conditions”

An interview with Troy Williams, CEO of the Australian Dental Industry Association (ADIA)

Jam-packed with a broad range of product innovations, ADX16 Sydney is expected to draw a record number of dentists and allied oral health care professionals. today international had the opportunity to speak with ADIA CEO Troy Williams about awe-inspiring new treatment pathways, the remarkable growth in professional services to enhance dental businesses, as well as the focus of this year’s continuing professional development sessions, which feature some of Asia Pacific’s best speakers.

Troy Williams, CEO of the Australian Dental Industry Association (ADIA)

It is difficult to identify a segment that has not seen change. In the dental laboratory segment, CAD/CAM technology continues to evolve, with milling now augmented by 3D printing. Similarly, the pioneering work being done both within Australia and internationally to bring to market new types of restorative materials offers dental professionals more choices than ever before, and that is what ADX16 Sydney is all about. Similarly, there isn’t an orthodontist in Australia who wouldn’t benefit from attending ADX16 Sydney to look at the awe-inspiring advances that offer different treatment pathways.

However, some of the most interesting trends are not in the clinical area, but have come about by an understanding that dental practices, just like any business, can enhance their profitability through business improvement reform. The growth in professional services, including marketing, finance, insurance and patient management software, is amazing and will all be featured at ADX16 Sydney.

The Sydney Exhibition Centre @ Glebe Island will again host ADX this year. In your opinion, what makes the venue special?

Two words: the view! There isn’t a venue anywhere in the world that seriously challenges the Sydney Exhibition Centre @ Glebe Island as having the best view—and it’s not just that you can see the Sydney Harbour Bridge from the Sydney International Convention and Exhibition Centre @ Glebe Island. Troy Williams: This is an exciting time for the Australian dental industry, as new products, both those manufactured locally and those from overseas, are entering the market, giving dentists and allied oral health care professionals more options for treating patients than ever before. What’s great about ADX16 Sydney is that many of these products are being launched at this event.

The industry has moved beyond the subdued business conditions that existed in recent times and there is a high degree of confidence about the prospects for the year ahead. ADIA collects and publishes a great deal of data on the market in which dental products are sold, this provides us with a unique insight into what’s happening and this data validates the positive sentiment that exists across the dental industry. For example, the ADIA Australian Dental Products Business Conditions Survey published last month shows eight consecutive quarters of growth, with businesses recording increased sales over this period. The great news is this data also shows that businesses expect this growth to continue; however, this is somewhat tempered by the fall in the value of the Australian dollar, which places upward price pressures on imported products.

The same survey also showed a unique factor about ADX16 Sydney, this being that the event in itself drives business confidence. That so many suppliers of dental products see ADX16 Sydney as a strong sales platform is an important point of differentiation.

ADX16 Sydney is expected to draw a record number of dentists and allied oral health care professionals and spaces sold out quicker than ever. What feedback have you received from visitors and exhibitors?

This is an event that just keeps on growing. At ADX12 Sydney, attendance by dentists grew by around 14 per cent compared with the previous event, and at ADX14 Sydney, the number of dentists attending grew by a further 23 per cent. If there was any doubt that the ADX Sydney series is Australia’s premier dental event, then these figures speak for themselves.

It is important to ADIA to understand why dentists and allied oral health care professionals are coming to ADX16 Sydney and our market research has identified three key reasons. The first is that they are coming to see the largest range of dental products available under one roof. The second is that they are coming to buy the products. Finally, dentists and allied oral health care professionals are coming to learn more, through the comprehensive continuing professional development programme—some 39 seminar sessions that feature some of Asia Pacific’s best speakers.

What industry trends stand out this year?

What makes dentistry such a fascinating industry to work in is the continual evolution in treatment pathways, something made possible by the advent of new products.
Two New Dental Mills Designed to Meet Your Needs

New **DWX-51D** Dental Mill

New **DWX-4W** Wet Dental Mill

Whether you’re looking for a dedicated dry or wet dental mill, or to utilise both, Roland DG delivers your ideal solution with two exceptional new devices.

The new DWX-51D dental mill is designed for effortless, precision milling of dental prosthetics from copings, crowns and bridges to inlays, onlays and abutments, and is the perfect solution for labs wanting to increase production or those looking to get into digital milling for the first time. The new DWX-4W allows you to wet mill glass ceramic and composite resins with absolute precision and reliability. Backed by a comprehensive 3 year warranty and drawing on over 30 years of engineering technology, Roland DWX devices are a proven solution with over 3400 Roland dental milling devices in the market today.

of the free ferries to the exhibition centre, you can get up close and personal with this iconic structure.

Feedback from visitors and exhibitors at the last event rated the Sydney Exhibition Centre @ Glebe Island as an ideal venue. The abundance of natural light makes the event something special, it creates a really positive vibe within the exhibition hall.

What is great about ADX16 Sydney is that visitors are spoilt for travel and accommodation choices. Options include free ferries that will get you to the venue by water, free shuttle buses, ample on-site car parking and discounted accommodation.

**What is this year’s focus in the professional development programme? Could you give us an overview of the speakers and topics?**

The ADX16 Sydney continuing professional development programme is exceptionally strong and offered by professional organisations, including the Australian Dental Association (NSW Branch), the Royal Australasian College of Dental Surgeons, the Australian Dental Prosthodontists Association, the Australasian Academy for Dental Sleep Medicine and the Australian Association of Practice Management, in addition to leading local suppliers.

There are 39 individual sessions, which have a strong focus on restorative dentistry, and the presenters are recognised across the region as leaders in the field. A number of sessions focus on orthodontics and implants—which is hardly surprising given the increasing interest of dental professionals in the new products available in these segments.

Reflecting ADIA’s commitment to supporting research, the proceeds from the ADX16 Sydney seminar programme are given to the Australian Dental Research Foundation.

**ADX16 Sydney is an excellent opportunity to meet with clients and professionals in a relaxed atmosphere. What programme features can visitors particularly look forward to?**

In many respects, ADX16 Sydney is more than a dental exhibition; it is an unparalleled opportunity for dentists and allied oral health care professionals to develop new, and cement existing, contacts with their peers. The free welcome reception on the Friday night is typically attended by some 2,000 people and there is no better way to meet colleagues than over a relaxing beer or glass of wine. Throughout ADX16 Sydney, visitors to the event can sit in one of the cafes in the exhibition hall and have lunch while discussing all the products they have seen.

A first for ADX16 Sydney is the product showcase, which will allow people to set back and learn about the latest innovative products from the businesses that are introducing them to the Australian market for the first time. Make no mistake about it, ADX16 Sydney is an event that allows dentists and allied oral health care professionals to see more, buy more and learn more.
Researchers from the University of Sydney have found that tooth decay can be stopped, reversed and prevented without the traditional “drill and fill” approach that has dominated dental care for decades. Acknowledging the outcomes of the seven-year study, the researchers called for a general shift towards preventive measures in early caries treatment.

Developing a set of protocols that they called the Caries Management System (CMS), the researchers compared people who received traditional “drill and fill” treatment with those who received CMS treatment, focusing on prevention. The CMS protocols included the assessment of decay risk, the interpretation of dental X-rays and the specific treatment of early decay.

Among other things, preventive measures included the application of high concentration fluoride varnish to the sites of early decay and, on the patient’s side, restricting sugary snacks and beverages between meals.

In testing the CMS protocols on 1,000 patients from 22 general dental practices in New South Wales and Australian Capital Territory, decay risk was substantially reduced during the seven-year study.

Moreover, the need for fillings was 30 to 50 per cent lower among CMS patients in comparison to the control group. At 80 per cent, the reduction was even greater among those considered at a high-risk, patients who were getting as many as two fillings per year.

“This research signals the need for a major shift in the way tooth decay is managed by dentists,” said Associate Professor Wendell Evans from the University of Sydney. “A tooth should only be drilled and filled where an actual hole-in-the-tooth is already evident,” he said.

According to Evans, tooth decay is not the rapidly progressive phenomenon that dentists long believed it was. Instead, it develops more slowly, leaving plenty of time for the decay to be detected and treated before it becomes a cavity and a filling is required. On average, it takes four to eight years for decay to progress from the tooth’s outer layer (enamel) to the inner layer (dentine), he explained.

The results of the study were presented in the article “The Caries Management System: Are preventive effects sustained post-clinical trial?” which was published online in the Community Dentistry and Oral Epidemiology journal on 7 December 2015.
Seven dental marketing mistakes

By Carolyn S. Dean, Sydney

As a dental professional, you face unfamiliar challenges in running and marketing your practice. You are confronted with increased competition (both locally and abroad), an oversupply of dentists, ever-rising practice operating costs, and more marketing-savvy patients. On top of this, your potential patients are becoming more discerning about where they go for dental treatment, with many heading overseas.

In order to achieve practice success, it is essential to build long-term relationships with patients and prospects. Long-term patients are more likely to feel satisfied. It is they who welcome the opportunity to refer others to you and who will continue to use your services in the future.

Over my years working with hundreds of dentists as a marketing consultant, I have observed the common mistakes that prevent them being able to market their practices successfully.

1. Not knowing your numbers and not tracking them

One of the most common mistakes that I see is that many dentists just don’t know the numbers. There is a saying that “if you fail to plan, you plan to fail”. It is critical that you track all of the metrics in your business, and your marketing spend is no exception.

The significant numbers that you need to know and track are:

- average lifetime value of a patient
- marketing return on investment
- new patients
- patient loss.

2. Not knowing your ideal patient

One of the cornerstones of any marketing campaign is knowing who your ideal patient is. Many practices make the mistake of not identifying this in their eagerness to go ahead with their marketing campaign as soon as possible. You need to stop and think about whom your marketing will be directed to, what this group of patients wants, what problems they have, and what solutions you can offer.

The key to implementing a strategic marketing plan is identifying your practice’s ideal patient or target patient profile. Once you know your market, you need to establish how best to communicate with them.

3. Wanting a silver bullet

Marketing your dental practice to attract the right kind of patients, keep them active and encourage them to refer you to their contacts is no easy task.

Many practices think (and hope) that there is a silver bullet to solve their marketing issues. This leaves them open to unscrupulous salespeople and to disillusionment and frustration when their marketing efforts fail.

The companies trying to sell you the marketing silver bullet that will solve all your marketing worries are constantly calling. Well-meaning friends, colleagues and patients may give you advice on what they think you should do to market your practice. The range of marketing media is evolving, and the rapid changes in online marketing make it almost impossible to keep up.

4. Taking a scatter-gun approach

I speak to many dentists who tell me that they have tried many different approaches, but nearly all of these have been done in a haphazard way and in short bursts. I call this a “scatter-gun approach” to marketing.

It does not work to try one approach for a month or two in home-made brochures and other marketing collateral that use different colours, fonts and even versions of the logo. If you are not consistent, your attempts at establishing a brand will be ineffective.

6. Procrastinating

There are just so many things you need to consider when it comes to successful dental marketing. How can you fix your website that is not up to scratch. It is very common for practices to procrastinate, believing there is no easy task.

In order to achieve practice success, quite simply, it comes down to:

- picking the aspects of marketing that you want to use, with due care and thought
- ensuring that whatever marketing activities you decide to undertake, you perform to the best of your ability and budget
- being consistent
- tracking your results—setting your goals and reviewing or refining them on a regular basis
- getting good advice from trusted experts in the area of marketing you are undertaking.

It takes time, but the effort that you put in will be rewarded by more patients, increased production, better relationships with your team and patients, and a sense of control when it comes to your marketing.

It is now time for you to focus on your marketing. By marketing well, doing it consistently, and avoiding the scatter-gun approach, you can avoid making the common mistakes that many practices make.}

Carolyn S. Dean is a dental marketing and communications specialist and seminar speaker. As Managing Director of My Dental Marketing, she first set up a dental practice in New Zealand and Australia on enhancing websites, improving brand and growing dental practices. Her book fully-focused Dental Marketing Secrets for a Full Appointment Book will be published in March and be on sale at ADX16 Sydney. At the event, Carolyn will be presenting three different lectures on the importance of marketing for dental practices as part of the ADX16 Continuing Professional Development Programme.
Turbines without a dark side

01
Ring LED+:
the only sterilizable
5x ring LED in
the world

02
Shadowfree
illumination at the
treatment site

Visit us at
ADX16 Sydney
Stand 371
Introducing Innovative and High-Quality Restorative Solutions

Glidewell Direct is actively seeking distribution channels throughout the Asia-Pacific region.

www.glidewelldirect.com • mail@glidewelldirect.com

info@PacificSpecialties.com.au
Authorized Distributor of Glidewell Direct Implant Products
Introducing D4W Cloud

Moved to the cloud yet? Centaur Software explains the benefits of using cloud practice management software in dental practice.

1. Freedom of access to your dental software solution wherever you are and whenever you need it.

With D4W Cloud, you now have the freedom to log in with your own password anywhere—home, work or a conference—at any time of the day or night that suits you. That means you can access important information without necessarily being in the practice. That gives you freedom and allows you to be in control of your business even if you’re not in the practice. And if you’re running more than one practice, that’s indispensable. D4W Cloud even runs on iPads and Macs.

2. Automatic data back-up to secure servers located in Australia in real time means no more manual back-ups, owing to automatic back-ups to the cloud. We have installed safeguards and procedures to ensure the security of your data. In fact, our servers are as secure as a bank, since we use a secure, authenticated and encrypted communication protocol widely used by banking and payment systems.

3. Reduced IT costs

No more complicated IT networking is required. As long as you have a good Internet provider with cloud services, it is taken care of over the Internet and should be a fraction of the cost.

4. Free updates and new features

All new upgrades including new standard features are provided free of charge and automatically. That includes new compliance standards added to D4W Cloud which mean you are always up to date. Regular updates and new features will be added automatically with some of the latest including appointment and recall automation. There’s no downtime and no disruption to the business.

5. One fixed monthly fee

One of the great benefits of cloud products is they run on a software as a service model. What is that? Rather than an initial large cost (capital cost) to acquire the product, you pay a fixed monthly fee (operating cost) to use the solution. With D4W Cloud, the only upfront cost is set-up and training. There is one fixed monthly fee and the option to add extra modules for an additional fee.

6. All you’ve come to expect from the classic Dental4Windows

The great thing about D4W Cloud is that it doesn’t sacrifice the abundance of features in the classic Dental4Windows, so if you know Dental4Windows then you’ll know D4W Cloud. Also, you can obtain all the new integrated forms, eforms, all for one fixed monthly fee.

7. Choices

We understand dentists and practices are unique and there is not a “one-size-fits-all” solution. That’s why we now have a range of methods as to how Dental4Windows can be delivered in your practice(s). If you’d rather buy Dental4Windows outright that’s still available, but now you have the option to gain the benefits of Dental4Windows for a fixed monthly fee with D4W Cloud. If Cloud isn’t an option for you, you still can with D4W subscription pay a fixed monthly fee and have Dental4Windows set up in your practice, not online. It’s all about making Australia’s favourite dental practice management solution accessible to as many practices as possible.

Visit Centaur Software at ADX16 at Stand 222 or go to the company’s website centaursoftware.com.au to learn more about D4W Cloud.
A new study evaluating the accuracy of six leading intra-oral scanners in the dental market has found 3Shape’s TRIOS to be both the most accurate and consistent performer of the scanners tested. The study, which was conducted jointly by the University of Maryland in Baltimore and the University of Freiburg in Germany, aimed to compare the ability of intra-oral scanning systems of different brands to accurately scan a single molar abutment tooth in vitro. The analyses included the following six scanners: iTero (Align Technology), 3M True Definition (3M ESPE), PlanScan (Planmeca), CS 3500 (Carestream Dental), TRIOS and CEREC AC Omnicam (Sirona Dental Systems).

In order to compare the accuracy of each system, the investigators used an industrial-grade, highly accurate reference scanner to create a digital reference dataset for an acrylic dental model. A single trained, experienced dentist then scanned the acrylic model on three separate occasions using each of the six intra-oral scanning systems.

Trueness (accuracy) was defined by superimposing the three digital datasets over the reference dataset, with 3-D comparisons then performed. Precision (consistency) was defined by superimposing each dataset over the other two datasets obtained and then evaluating for 3-D deviations.

Of the 18 datasets analysed, the smallest deviations for the trueness measurements (± standard deviation) between the reference dataset and the various intra-oral scanner datasets were obtained from TRIOS (6.9 ± 0.9 µm), followed by CS 3500 (9.8 ± 2.5 µm), iTero (9.8 ± 2.5 µm), 3M True Definition (10.3 ± 0.9 µm), PlanScan (30.9 ± 10.8 µm) and CEREC AC Omnicam (45.2 ± 17.1 µm).

As for precision values, here too TRIOS was identified as the most accurate (4.5 ± 0.9 µm), followed by 3M True Definition (6.1 ± 1.0 µm), iTero (7.0 ± 1.4 µm), CS 3500 (7.2 ± 1.7 µm), CEREC AC Omnicam (16.2 ± 4.0 µm), and PlanScan (26.4 ± 5.0 µm).

“The TRIOS scanning technology, in combination with the wand design, seems to be beneficial for capturing high quality datasets with excellent trueness and precision values,” the investigators said.

However, the results obtained do not provide any information about the quality of a fabricated restoration based on these digital datasets, the researchers stressed. Moreover, in an in vivo design, the outcomes might be different owing to the presence of blood, saliva, and patient movements, they concluded.

The study, titled “Evaluation of the accuracy of six intraoral scanning devices: An in vitro investigation”, was published in Volume 10, Issue 4, of the ADA Professional Product Review.
Software of Excellence has the tools to help take your practice to new levels. We have worked with thousands of practices around the world and developed a best practice approach based on global research from more than 1,500 dental practices in Australia, New Zealand and the UK.

**How does your business compare with top-performing dental practices in the following areas?**

**Recall effectiveness:** An effective patient recall system is the backbone of any successful dental practice, as this ensures that patients remain loyal and regularly return to the practice for treatment. A best practice approach means you can achieve a recall success rate of over 85 per cent.

**New patients:** Acquisition of new patients remains one of the most challenging aspects of running a dental practice. Whatever your practice type, you need the tools to promote your practice, re-engage lapsed patients and make it easy for new patients to book their first appointment.

**Paperless:** Running a paperless practice will streamline your operations, reducing storage requirements and time spent on administration. It is now possible for patients to complete and sign electronic versions of patient details and medical history forms, oral health surveys and treatment cost estimates.

**Clinical excellence:** Successful patient outcomes and a streamlined chair time experience are of vital importance to your practice. You need tools that make life easier for you as a clinician, such as integrating digital imagery with a patient’s record.

**Treatment acceptance:** Research shows that 80 per cent of practice revenues are generated by 12 treatment items from two main categories: (a) high-volume, low-margin items (such as fillings, examinations and radiographs), and (b) low-volume, high-margin items (such as restorative crowns and bridge work). To increase the latter, you need the tools to boost your chairside treatment acceptance.

**Employee empowerment:** Running a successful practice requires a team that is highly skilled and motivated. You need to ensure that your employees are gaining the most from your business systems, receive clear training and development opportunities, and learn the necessary skills to boost practice performance.

**Performance management:** Measuring business performance is the first step towards improving the efficiency of your practice. You need help looking inside your business to see how effectively it is operating using a range of key performance indicators and the ability to make the changes that can have a dramatic impact on your profitability.

Visit Software of Excellence at Stand 454 during ADX16 for a free business consultation and speak with one of our experts to learn more about our best practice approach and how you compare to top performing dental practices in each of these areas.
TWO NEW DENTAL MILLS DESIGNED TO MEET YOUR NEEDS

Designed for the effortless production of dental prostheses, Roland DG dental mills deliver quality, efficiency and value in a compact, user-friendly design. Ideal for labs or office environments, the open architecture of the DWX series allows you to work with the latest materials, CAD/CAM software and scanners, without having to rely on a single source.

Whether you’re looking for a dedicated dry or wet milling machine, or both, Roland DG has the ideal solution. Run the DWX-51D and DWX-4W side by side for the most flexibility and productive dry and wet milling solution, giving you the confidence to take on the maximum amount of glass-ceramics and zirconia restorations without the need for back-and-forth set up and cleaning of a single machine.

The DWX-51D and DWX-4W dental mills have recently been validated by VITA Zahnfabrik (Germany) for use with the company’s dental prosthetic materials, including VITA ENAMIC, VITA SUPRINITY and VITABLOCS Mark II.

**DWX-51D**
- With a host of automated features and precise five-axis milling, the DWX-51D is the perfect solution for labs wanting to increase production or those looking to start with digital milling for the first time. Equipped with a ten-station automatic tool changer (ATC), a new Collet with torque wrench for easier loading of materials, and an expanded Virtual Machine Panel with built-in maintenance routine, the DWX-51D takes dry milling to a whole new level.
- It’s capable of producing copings, crowns, complete bridges, abutments and other prostheses from zirconia, wax, PMMA, composite resin, PEEK and gyptium with unparalleled speed and precision. When equipped with 2DB-100D/50D/30D milling burs, the DWX-51D is certified for milling VITA ENAMIC.
- The DWX-51D is a smooth and steady ball screw-driven machine that operates on the X-, Y- and Z-axes, simultaneously rotating blocks and dies. Tilting on the b-axis, it supports deep undercuts and the complex milling of large-arch restorations and other full-mouth prostheses. For higher quality output, the DWX-51D employs an improved airflow system, which boosts vacuum performance and prevents dust from building up in the milling area. For optimum convenience, a colour-coded light informs the technician of the machine’s operational status.

**DWX-4W**
- The DWX-4W wet mill has been specially designed for milling glass-ceramics and composite resins, which are popular with both dentists and patients for producing aesthetically superior crowns, inlays, onlays and veneers, and is certified to mill VITA ENAMIC, VITA SUPRINITY and VITABLOCS Mark II. In addition to milling on the X-, Y- and Z-axes, the DWX-4W rotates pin-type blocks 360° on a fourth axis (a-axis) to support undercuts. The DWX-4W also features a high-performance Jäger DentalDrive spindle that operates at speeds of up to 60,000 rpm for precision milling and unmatched reliability. A multi-pin clamp allows you to mill up to three different pin-type materials simultaneously, while a four-station ATC changes grinding burs as needed without interrupting production. The DWX-4W is also equipped with a fully integrated pump and coolant system with a slide-out container for easy maintenance.

**SYNEA VISION TURBINE WITH 5X RING LED+**

Complete elimination of shadows during preparation has long been the unfulfilled dream of many a dentist. In 2014, W&H achieved a technological masterpiece: five high-intensity pin-head-sized light-emitting diodes (LEDs) in a ring shape integrated into the small head of the new Synea Vision TK-98 L turbine. With the new sterilisable 5x ring LED+, dentists for the first time have the benefit of completely shadow-free illumination of the preparation site and patients also benefit from the resulting improved treatment safety.

The preparation site is not only illuminated from the mesial aspect, but also from the buccal, distal and lingual/palatal aspects simultaneously with the new light design. Full light intensity is guaranteed even in the most difficult situations.

An integrated spray with five outlet nozzles ensures perfect cooling and cleaning of the treatment site. The innovative W&H turbine is particularly robust with a special scratch-resistant surface coating that extends the life of the instrument. A unique ergonomic design and a small instrument head contribute to comfortable and fatigue-free work.

The Synea Vision TK-98 L turbine with 5x ring LED+ is the result of intensive research and development. Close cooperation with internationally prominent dentists during development of the product lends this innovative turbine the best possible support for use in routine practice.

**Manufacturer:**
W&H, AUSTRIA
www.wh.com

**Distributor:**
A-DEC, AUSTRALIA
www.a-dec.com

**Stand:**
371
What’s on in Sydney from 18 to 20 March

French Film Festival
Dates: 18–20 March
Venue: Palace Cinemas
Times: Films will be screened daily between 13:45 and 21:00
www.affrenchfilmfestival.org

With film classics such as Breathless, a Nouvelle Vague masterpiece, and world-acclaimed hits Amélie and The Intouchables, French cinema is in a league of its own. Returning to Palace Cinemas for its 27th season, the 2016 line-up of the Alliance Française French Film Festival—which is not only Australia’s biggest film festival, but also the largest festival of French films outside of France—includes 42 superb contemporary features, one timeless classic and a fabulous new programme strand that will showcase five of France’s premier television series.

Are you up for a culinary surprise? On Sunday, you can add an element of mystery to your dinner plans by attending Mystery Feasts. All you have to do is pick the time and Merivale will pick the place. The A$75 dinner package will then give you a three-course dining experience in one of the city’s premier restaurants.

Sydney Symphony in Parramatta Park
Date: 19 March
Venue: The Crescent at Parramatta Park
Starting time: 20:00
www.sydney(symphony.com

Be enthralled with a magical night under the stars when the Sydney Symphony performs their annual free concert at Parramatta Park for the tenth time. With conductor Benjamin Northey, the concert promises jazz from Dixieland to Duke Ellington, with roof-raising hits like “Basin Street Blues” and Judy Baby’s “Four Reasons”. Making the event even more special is Australian jazz superstar James Morrison, who will be joining the orchestra on stage.

Food and drinks will be available to purchase on-site or you can bring your own delicious picnic full of tasty treats to take you through the night. If all of the above is not enough to convince you to attend this fabulous concert, consider the venue itself a must-see for visitors to Sydney. First declared a People’s Park in 1858, UNESCO World Heritage-listed Parramatta Park is more than a green retreat and has much to offer, including the Old Government House, Australia’s oldest surviving public building, erected in 1799.

Madonna
Dates: 19 and 20 March
Venue: Allphones Arena
Starting time: 20:00
www.allphonesarena.com.au

Including the new singles “Living for Love” and “Ghosttown”, Rebel Heart is Madonna’s 11th No. 1 album on the Australian charts. As the last stop on her homonymous world tour, the 57-year-old pop icon will perform live Down Under for the first time since 1993 (!). Anyone who has ever attended a Madonna show knows that this will not be just a concert but an event with major costume changes, spectacular dance pieces and of course many (thought-) provoking lines, for which the Queen of Pop is world famous. UK newspaper The Telegraph wrote: "In arguably another fantastic display of showbiz shock and awe from a mistress of the form."
WHAT A DIFFERENCE A YEAR CAN MAKE!
360% MORE PATIENTS SEEN!

BEFORE
38% [107 OUT OF 282]
OF PATIENTS SUCCESSFULLY RECALLED
JANUARY 2015

AFTER
82% [386 OUT OF 472]
OF PATIENTS SUCCESSFULLY RECALLED
JANUARY 2016

Are you missing something?
Visit stand 454 to find out more...

* Figures are based on an actual dental practice in Victoria, Australia.