DENTAL TRIBUNE

The World's Dental Newspaper · Middle East & Africa Edition

PUBLISHED IN DUBAI | November 2010 | NO. 9 VOL. 8

News & Opinions
Opening of the "AG training center Middle East" in Beirut ‣ Page 2

Continuing Dental Education 2 mCME Hours

Media CME
ABB (Alignment, Bleaching, Bonding) ‣ Page 6

Meeting & More
"Endodontics is a rapidly growing speciality in the Arab world" ‣ Page 9

1 in 100 deaths attributed to second hand smoke

World Health Organization (WHO) researchers said that about one in 100 deaths around the world is due to second-hand smoke, which kills an estimated 600,000 people each year.

WHO experts found that children are more heavily exposed to second-hand smoke than any other age-group, and about 165,000 of them die every year because of it.

"Two-thirds of these deaths occur in Africa and south Asia," the researchers, led by Annette Pruss-Ustun of the WHO in Geneva, wrote in their study. WHO researchers looked at data that dated back from 2004 in 192 countries for their study. They used mathematical modeling to estimate deaths and the number of years lost of life in good health.

They found that 40 percent of children, 33 percent of non-smoking men and 35 percent of non-smoking women were exposed to second-hand smoke in 2004 around the world.

This exposure was estimated to have caused 379,000 deaths from heart disease, 165,000 from lower respiratory infections, 36,900 from asthma and 21,400 from lung cancer.

The researchers said that for the full impact of smoking, these deaths should be added to the 5.1 million deaths a year attributed to active tobacco use.

"Policy-makers should bear in mind that enforcing complete smoke-free laws will probably substantially reduce the number of deaths attributable to exposure to second-hand smoke within the first year of its implementation, with accompanying reduction in costs of illness in social and health systems," she wrote.

Only 7.4 percent of the world population currently lives in jurisdictions with comprehensive smoke-free laws, and those laws are not always robustly enforced. DT

30 percent of canned tuna mislabeled

According to a new report based on genetic analysis, 30 percent of cannned tunas tested in a dozen countries were mislabeled or had other irregularities.

Some of the 50 brands sampled contained different species of tuna across the same product, or had two different species in the same can.

The independent report was timed to coincide with the annual meeting of the International Commission for the Conservation of Atlantic Tunas (ICCAT), which is running in Paris through Saturday. ICCAT's 48 member states, including the European Union, ensure the sustainability of fisheries in the Atlantic. Nina Thuellen, Greenpeace International oceans campaigner said:

"Tuna companies are indiscriminately stuffing multiple species of tuna" She said that the mixing of species and inclusion of under-sized tuna from over-fished stocks is mainly due to the use of so-called fish aggregation devices, or FADs which attract the fish in open seas, where they are then caught in huge, curtain-like draw nets. .

Endangered species of turtles and sharks also get trapped and die. Identification and sorting of juveniles is very difficult once the fish are in the freezers. This results in multiple species in the same can. "Retailers must act now to immediately shift their business away from cheap tuna caught using FADs," Thuellen said, adding that the devices should be banned by ICCAT and other regional fisheries management organizations.

The tests analyzed canned tuna products from Austria, Australia, Greece, the Netherlands, New Zealand, Canada, Spain, Italy, the U.S., Britain, Switzerland and Germany. At least five brands were tested in each of those countries, totaling 165 different products. Five main species of tuna make up the annual worldwide catch of 4.0 to 4.5 million tons. DT

AD

PROMEDICA

Highest quality made in Germany

- high quality glass ionomer cements
- first class composites
- innovative compomers
- modern bonding systems
- materials for long-term prophylaxis
- temporary solutions
- bleaching products...

All our products convince by

- excellent physical properties
- perfect aesthetical results

Meet us at several exhibitions – www.promedica.de

Nano-Ceram-Technology

Light-curing nano-ceram composite
- universal for all cavity classes
- comfortable handling, easy modellation
- highly esthetic and biocompatible

- exact match of translucency and shade to the packable Composan bio-esthetic

New: Bleach Shade!

Temporary crown and bridge material
- particular fracture and wear resistance
- now available in 6 attractive shades

Resin-reinforced glass ionomer luting cement
- strong adhesion, very low film thickness
- especially suited for zirconia-based pieces

PROMEDICA

PROMEDICA Dental Material GmbH
Tel. +49 43 21 / 5 41 73 · Fax +49 43 21 / 5 19 08
Internet: http://www.promedica.de · eMail: info@promedica.de

Aesthetic Dentistry MENA Awards 2010.

21 finalists from UAE, Iran, Lebanon, KSA, Kuwait, Pakistan and India were announced!

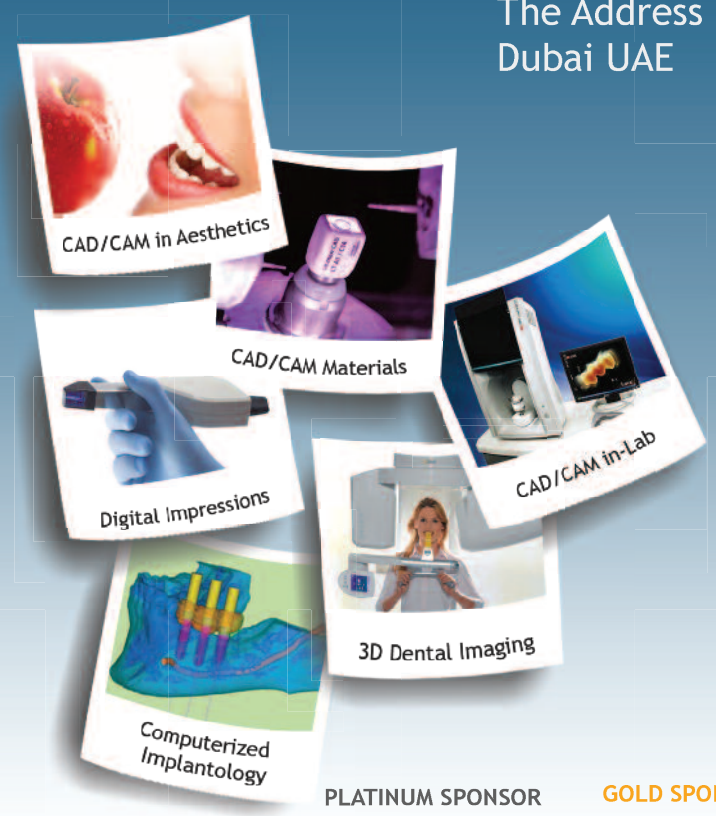
AD

Estimated 14 CME Hours

5th CAD/CAM & Computerized Dentistry International Conference

20 % Discount for the Readers of the Magazine

12-13 May 2011
The Address Hotel Dubai Marina
Dubai UAE



PLATINUM SPONSOR

GOLD SPONSORS

sirona The Dental Company · ivoclar vivadent: · 3M ESPE

CAPP

Tel: +971 4 3616174 | Fax: +971 4 3686883 | Mob: +971 50 4243072
www.cappmea.com/cadcam5 | info@cappmea.com

The finalists in all seven categories are as follows:

Conservative aesthetic best case:

1st Place - Dr. Hafseh Sobatiani, Shokoufeh, Iran;

2nd Place - Dr. Rabih Abi Nader, Dubai Sky Clinic, Dubai UAE;

3rd Place - Dr. Hala Al Sakka, (DT: Nestor Dator), American Dental Clinic, Dubai UAE

Implantology and Red-aesthetic best case:

1st Place - Dr. Rabih Abi Nader, Dubai Sky Clinic, Dubai UAE;

2nd Place - Dr. Souheil Hussaini, Oral Implantology Medical Center, Dubai UAE;

3rd Place - Dr. Anas Aloum, Hikma Medical Center, Abu Dhabi UAE

Orthodontic best case:

1st Place - Dr. Edgard Irany, Lebanon;

2nd Place - Dr. Muhammad Zaman Sherani, Munir Saheed Dental Clinic, Pakistan;

3rd Place - Dr. Thundiparampil Mathew Varghese, (DT: Mr. Nistar), Mafraq Dental Centre, Abu Dhabi UAE

Prosthetic restoration best case:

1st Place - Dr. Ajay Juneja, (DT: Lamberto Villani), The Dental Studio, Dubai UAE;

2nd Place - Dr. Grace Eid, (DT: Nestor Dator), Advanced American Dental Centre, Abu Dhabi UAE;

3rd Place - Dr. Angela Husung, Dubai UAE

Congenital and Maxillo-Facial deformities best case:

1st Place - Dr. Mohammad Zandi, Private office, Iran;

2nd Place - Dr. Mosleh S. Alharbi, National Guard Health Affair, Saudi Arabia;

3rd Place - Dr. Tamer Sabry Ali, Amiri Dental Center, Kuwait

Multidisciplinary best case:

1st Place - Dr. Rabih Abi Nader, (DT: Mr. Samer Sabbagh from Qualident Dental Laboratory), Dubai Sky Clinic, Dubai UAE;

2nd Place - Dr. Tohme Hani, (DT: Roland Noujeim), Tohme Clinic, Lebanon;

3rd Place - Dr. Michael Ziegler DMD/Richard Morris, (DT: Nestor Dator), American Dental Clinic, Dubai UAE

Charity treated patient best case:

1st Place - Dr. Kanchan Dholam, (DT: Gorakh Ahire), Tata Memorial Hospital, India;

2nd Place - Dr. Edgard Irany, Al Zahra Hospital, Sharjah UAE;

3rd Place - Dr. Fadia Mohammed AlHummayani, (DT: Abdulhammed), King Abdulaziz University Dental College Clinics and Private Ideal Clinics, Saudi Arabia;

Special recognition of achievements in Pediatric Dentistry was given to Dr. Dina Debaibo, Drs. Nicolas & Asp, Dubai. DT

Editorial Board

Prof. Abdullah Al-Shammary, Restorative Dentistry, KSA
Prof. Hussain F. Al Huwaizi, Endodontics, Iraq
Prof. Samar Burgan, Oral Medicine, Jordan
Dr. Abdel Salam Al Askary, Implantology, Egypt
Dr. Talal Al-Harbi, Orthodontist, Qatar
Dr. Mohammed H. Al Jishi, Bahrain
Dr. Lara Bakaeen, Prosthodontist , Jordan
Dr. Aisha Sultan, Periodontist, UAE
Dr. Kamal Balaghi Mobin Aesthetics, Iran

DENTAL TRIBUNE
The World's Dental Newspaper · Middle East & Africa Edition

Published by Education Zone
in licence of Dental Tribune International GmbH

© 2010, Dental Tribune International GmbH. All rights reserved.

Dental Tribune makes every effort to report clinical information and manufacturer's product news accurately, but cannot assume responsibility for the validity of product claims, or for typographical errors. The publishers also do not assume responsibility for product names or claims, or statements made by advertisers. Opinions expressed by authors are their own and may not reflect those of Dental Tribune International.

President/CEO — *Yasir Allawi* *y.allawi@dental-tribune.ae*

Director mCME: — *Dr. D. Mollova* *info@cappmea.com*

Marketing manager — *Khawla Najib* *khawla@dental-tribune.ae*

Production manager — *Hussain Alvi* *dentalme@dental-tribune.ae*

PO Box 214592, Dubai, UAE, Tel + 971 4 391 0257
Fax + 971 4 366 4512 *www.dental-tribune.com*

Oral health is very important for denture wearers because of potential impact to their systemic health

Dental Tribune UK Editor, Lisa Townshend, reviews the GSK-Supported Symposium, Impact of Tooth Loss on Oral and Systemic Health, at FDI World Dental Congress

As new evidence emerges about denture plaque and biofilms, the indication of an increased risk to denture wearers in the development of oral and systemic diseases is an issue that needs to be discussed.

At the FDI's Annual World Dental Congress, held recently in Brazil, GSK-supported a timely symposium dedicated to the importance of denture and oral hygiene in denture wearers and its potential impact on their oral and systemic health.

Key messages from this symposium included:

- Unclean dentures are a chronic source of potentially harmful bacteria and fungi that may be associated with oral and systemic diseases
- Dentures need to be cleaned daily with effective antimicrobial and antifungal agents
- Dental professionals play an important role in educating patients and helping them improve their oral and overall health

An international panel of experts was chaired by Professor Claudio Fernandes, Prof of Prosthodontics, Fluminese Federal University at Nova Friburgo, Brazil.

Prof Fernandes highlighted the growing edentulous population globally, the resultant oral health implications, and the role of dental professionals in dealing with associated issues. He commented: 'Dentists must take a look beyond how dentures are fitting and functioning; dentures must integrate into patients' health. If they are fulfilling their function, we are really restoring health for patients'.

The speakers and their key points:

- Dr Zvi Loewy, VP of Dental Care R&D at GSK, and on the faculty of New York Medical College and Drexel University, US, looked at Edentulism: Public Health Impact. Prevalence of denture wearing patients ranges from 12% to 63% globally. Studies show an increased risk of certain systemic diseases in denture wearing patients, which has an impact on the public health system.

- Dr Angus Walls, Professor of Restorative Dentistry and Director of Research, School of Dental Sciences, Newcastle University, UK, discussed Implications of Oral Health and Nutrition on Systemic Health. Dietary changes associated with the loss of teeth can result in an unhealthy diet, low in fruits and vegetables and with increased fats and sugars. Denture stability is key to improving confidence in chewing ability, and is one of the parameters necessary to help patients improve diet and quality of life.
  The use of denture adhesives may help to stabilize the dentures or help improve masticatory efficiency. Evidence shows that as edentulous patients' nutritional intake declines, the function of the immune system and body repair is suppressed; perfect conditions for the development of oral and systemic diseases.

- Dr Wenyuan Shi, Chairman and Professor of Oral Biology, UCLA School of Dentistry, and Professor of Microbiology and Molecular Genetics, UCLA School of Medicine, US, discussed Microbiology of Denture Patients, and reiterated the deep connection between microbiology and dental diseases. Between 65-80% of denture patients have stomatitis caused by Candida albicans and Candida glabrata, and other pathogens present on dentures are implicated in respiratory and GI infections. He advocated the elimination of microbial pathogens on dentures as very important.

- Dr Steven Offenbacher, OraPharma Distinguished Professor of Periodontal Medicine, Chairman of the Department of Periodontology, School of Dentistry, University of North Carolina at Chapel Hill, US, presented on Strategic Approaches for Denture Wearers Based on Periodontal and Prosthodontal Research. He detailed the importance of edentulism in systemic diseases; not as a major cause, but more as a risk factor.

  He reiterated that dentures carry high levels of many infectious organisms. Denture wearing is associated with increased risk of several systemic diseases including COPD, heart diseases, atherosclerosis, hypertension and diabetes. 'Basically research suggests that patients need to do a better job at cleaning dentures on a daily basis and we as clinicians need to be very careful that we are reducing the source of infection in the mouth.'

The symposium was very well attended and well received by the delegates. One delegate commented; 'this symposium was outstanding and made my trip worthwhile'! Another delegate said; ' the symposium was very interesting and it brought together research experts from all over the world to help delegates understand better the importance of good oral health in denture wearers, and the need for healthcare professionals to focus on it'. DT

AD

Transparent teeth: A powerful educational tool

Author_Dr Sergio Rosler, Argentina

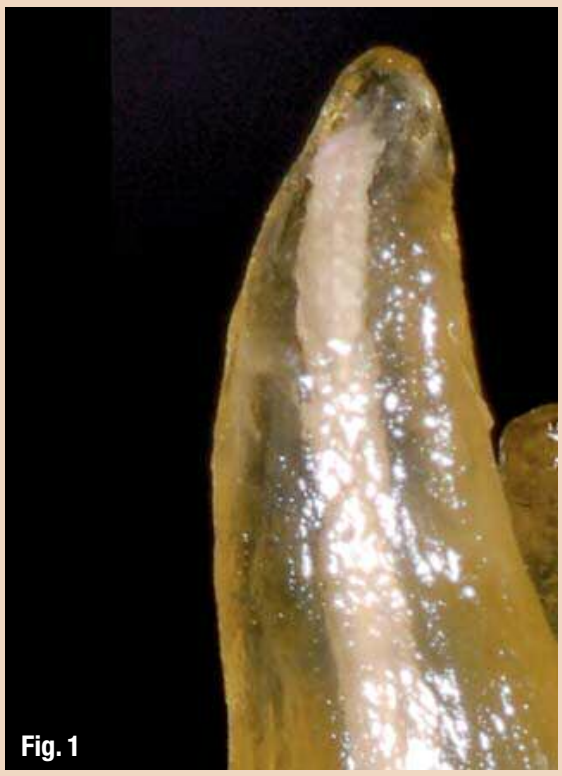


Fig. 1

Fig. 2

Fig. 4

Fig. 5

_Since the early days of dentistry, dentists have explored the morphology of the internal root anatomy. From the pre-X-ray period to the techno logy-driven present, the study and exami nation of the root-canal system has become an obsession for endo dontists. Several methods such as radiographic1 and histolo - gical examinations,2–3 cross-and longitudinal sectioning, 4 and root-clearing techniques, to name a few, were widely used in the past. Today, different computerised tomography studies5 and observations under dental operating microscopes6 are performed to light up the dark confines of the dental pulp.

_The tooth-clearing technique

Over the last 100 years, the tooth-clearing technique was utilised in human dental pulp morphology studies, as it provides a 3-D view of the pulp cavity in relation to the exterior of the teeth and allows a thorough examination of the pulp chambers and root canals.7–9 It was also utilised in the study of apical leakage.10 Today, the clearing technique remains useful only as a teaching and research tool, with little or no clinical applicability.11

In 1913, Hermann Prinz successfully cleared teeth using the protocol proposed by Spaltholz in 1906.12 Okumura performed in-depth studies of the pulp anatomy and classified the canals according to their distribution and prevalence.13 In order to simplify the canal system visually, he injected ink into the pulp cavity.13 Samples can also be stained with Haematoxylin and Eosin, which are largely used to colour histological preparations. Compared with other procedures such as radiographic and histological examinations, the tooth-clearing technique has the following advantages:

_ retains the original form of the root;
_ enables the observation of minute details of the root-canal morphology;
_ is inexpensive;
_ samples can be conserved for a long time; and
_ is easy to perform.

The clearing process consists of three basic steps:

demineralisation, dehydration and clearing of the root structure.14–15

Sample preparation

_Store extracted teeth in 10% formal saline until use.11
_Scale calculus and any remains of periodontal tissue.
_Decoronate samples and negotiate canals with a #10 file (this will enhance acid penetration).
_Store samples in 4.2% NaOCl solution (the organic tissue removal can be enhanced by placing the solution with the samples in the Ultrasonic Cleaner for 20 minutes).
_Wash under running water and dry.
_Indian ink can be drawn through the root-canal system by applying negative pressure to the apical end.Demineralisation
_Store samples in 5% nitric acid (HNO3) for three days.
_Change solution every eight hours.
_Manual or mechanical agitation promotes even demineralisation of the root.
_Wash samples under running water for four hours16 to clean.

Dehydration

_Dehydrate samples by using ascending grades of alcohol: 60% ethanol for eight hours, 80% ethanol for four hours, and 96.6% ethanol for two hours.
_Dry samples with paper towels.

Clearing

_The sample should be placed in xylene for two hours to harden prior to placing the samples in methyl salicylate to render them transparent.16 (This step is essential if samples are going to be used for practising instrumentation or obturation techniques.)
_Store samples in methyl salicylate in order to preserve their transparency.

Please note: Always use proper protection when handling these dangerous solutions. Disposal of the used solutions should be done according to country regulations.

Fig. 3

_Educational tool

Successful root-canal treatment depends on adequate cleaning, shaping and filling of the root-canal system. However, in order to achieve this goal, it is imperative that the operator has a detailed know - ledge of the root-canal morphology of each individual tooth that is treated. Demineralised and cleared teeth may become a very valuable aid in the teaching of endodontic techniques. Hasselgren and Tronstad17 used cleared teeth to teach and practise instrumentation and obturation procedures in a preclinical course at Lund University, Sweden. At the end of the course, the students were asked to give their opinions regarding the use of the transparent teeth in the learning process. The reaction was very favourable and encouraged the head of the department to extend the use of cleared teeth in following courses.17

Dipping the samples in xylene for two hours, as suggested by Robertson in 1980, prior to placing them in methyl salicylate will return dentine hardness to values slightly lower than those found in normal dentine.16 This yields new possibilities for dentists eager to learn, who wish to practise new techniques, procedures and protocols, from rotary instrumen - tation with NiTi files to thermoplastic obturation with warm gutta-percha. Dentists are able to see what is actually happening with much greater detail, which is a significant improvement to working with a simulated canal in plastic blocks. Additionally, the tactile feeling experienced is very similar to the real clinical situation.

In summary, this simple and inexpensive technique will enable dentists to visualise the root-canal morphology in detail while allowing them to practise almost every endodontic procedure desired._

Editorial note: A list of references is available from the publisher. DT

About the author

Dr Sergio Rosler graduated from the University of Buenos Aires, Argentina, in 1996, and had become a specialist in Endodontics by 2005. He has been a specialist in Oral Implantology since 2009 and works in private practice in Buenos Aires. He can be contacted at :
sarosler@hotmail.com.ar

Imparting knowledge, creating knowledge!

Opening of the "AG training center Middle East" in Beirut

"Being a pioneer in innovation" - that's not only the motivation of AmannGirrbach but also of the Antonine University in Beirut as Father Antoine Rajeh, President of the Antonine University, pointed out in his inaugural address at the opening of the "AG training center" on 22 of October in Beirut. The long guest list including ambassadors, agents, presidents of the syndicate, directors, dealers, trade unionists and students left no doubt that this important event was a tremendous step for the Antonine University and moreover for the future of the dental industry in the Middle East.

The University's CAD/CAM chair now functions concurrently as an official training center of AmannGirrbach. True to the motto "imparting knowledge, creating knowledge" and as an absolutely unique aspect the project combines business and science. Students of the Antonine University and participants of AG trainings will take technical and business knowledge, knowledge that they will have experienced live, discovered for themselves and learnt intensively.

Provided with updated products of Amann Girrbach, the training center offers 10 working stations, ideal conditions for training sessions, exchanging knowledge and learning more about dental technology.

AmannGirrbach is one of the leading companies in the dental sector. The company, which arose out of the merger of the companies Amann and Girrbach Dental, is based in Pforzheim, Germany, and Koblach, Austria with an independent company in Tampa, in the USA. DT

AD

كلية نيقولا وآسب الجامعية

NICOLAS & ASP UNIVERSITY COLLEGE

The 1st Accredited Dental Postgraduate Training Programs in the UAE

Register NOW...

Masters Degree in Pediatric Dentistry
- Next Intake - **(5 February 2011)**
- 3 years study in UAE
- Accredited by
  - UAE Ministry of Higher Education & Scientific Research

NEW

Diploma in Advanced Education in General Dentistry (AEGD)
- New Intake
- 2 years Higher Diploma in UAE
- Accredited by
  - UAE Ministry of Higher Education & Scientific Research

Masters Degree in Orthodontics
- 5th Intake **(5 February 2011)**
- 3 years study in UAE
- Recognized by Swedish National Board of Health and Welfare
- In collaboration with Malmo University, Sweden
- Accredited by
  - UAE Ministry of Higher Education & Scientific Research
  - Saudi Commission for Health Specialities

High Diploma in Oral Implantology
- 5th Intake **(12 January 2011)**
- 1 year (modules) for practicing dentists and specialists
- Program is offered in cooperation with Gothenberg University, Sweden
- Accredited By
  - UAE Ministry of Higher Education & Scientific Research

Unique group of European & American faculty

For more information: Tel.: 0097143624788

Abu Dhabi Headquarters

Admission Office:
Al Odaid Office Tower, Airport Road, Abu Dhabi, UAE
10th Floor, Office 1201
Telephone: +971 2 404 7141

Dubai Branch

Dubai Healthcare City
Ibn Sina Building (No. 27)
Block D, 3rd floor, Office 302
Telephone: +971 4 3624787

Fax: +971 4 362 4793
P.O. Box: 53382, Dubai, UAE
Website: www.dubaipostgraduate.com
Email: info@dubaipostgraduate.com

Continuing Dental Education
2
mCME
Hours

ABB (Alignment, Bleaching, Bonding)

The Treatment Sequence that should change Cosmetic Dentistry says Tif Qureshi

(mCME articles in Dental Tribune (always page 6) has been approved by HAAD as having educational content acceptable for (Category 1) CME credit hours. Term of approval covers issues published within one year from the distribution date (September, 2010). This (Volume/Issue) has been approved by HAAD for 2 CME credit hours.

This article will outline how the combined and simultaneous use of the Inman Aligner, tooth whitening followed by edge bonding can redefine the approach taken to smile design. It also highlights how it will help dentists respect a patient's decision as their treatment progresses rather than shortcutting to an end result using ceramics setup with classic smile design principles.

'If the three treatments are combined with some thought, it is possible to massively improve a patient's smile in around three months.'

Discussion.

"Changing cosmetic dentistry" might seem like a pretty big goal, but It's become very clear from lecturing and writing about this particular discipline that it creates a huge amount of excitement and positive reaction. Dentists see the logic in it very quickly and can also see how, with some education, they can employ a safe, low risk technique that they know their patients will want and will massively change their approach to cosmetic and aesthetic dentistry. They also understand that there is a massive market of patients who will accept this kind of non-invasive treatment happily.

Treatment with the Inman Aligner has been further developed in the UK where techniques are used to make it dramatically effective as a solution for certain mild and moderate anterior orthodontic issues. Cases, which traditionally would take six-10 months with clear aligner systems can, with education, be treated in six-16 weeks.

We have all seen how bleaching can affect a smile. We know how much bonding can improve aesthetics and tooth anatomy. Now that alignment is potentially so simple, these three disciplines have been brought together to create results that easily challenge traditional veneer based smile makeovers. And, if the three treatments are combined with some thought, it is possible to massively improve a patient's smile in around three months.

All of a sudden the six-10 unit veneer case used for a smile makeover can look ridiculous and be seriously in danger of becoming over treatment. There are always situations where ceramics are highly appropriate, such as in wear cases or in major reconstructions, but for anyone with good quality intact enamel, I believe this kind of treatment represents a far more ethical, patient centric approach.

This is because I believe the way smile design is approached, and perhaps even taught, is wrong. The final outcome, for what is aesthetic is important. Golden proportion ideals, tooth width length ratio, gingival zeniths etc all together create something we know to me almost mathematically correct. The problem is that most dentists' experience their smile design education attached to a lecture or course based on veneer dentistry. As a result dentists will naturally think this to be the only and perhaps fastest way to achieve a "perfect smile".

If we assess a patient's smile and try to preview an end result at the first consult, using imaging software, a wax up or even a preview try in, we are not really letting the patient see their teeth improve at different stages to see if their expectations are being met along the way.

The smile design rules are there, but how many patients if they see their teeth improving with alignment then bleaching and then bonding, would actually then take another step with porcelain and some tooth destruction to achieve total perfection? In my experience, very few.

Some still do go further, but at least by then their teeth are straight and we can use truly minimal and almost no prep veneers to improve the aesthetics further.

Most of the time, once we are ¾ through alignment and start to bleach it becomes very clear that simple bonding is all that will be needed to create a very aesthetic smile that previously would only have been achieved with aggressive veneer preps.

The case outlined below is a typical case of a patient who once wanted and considered having porcelain veneers. Instead she opted to align her teeth then bleach and bond.

Case and Diagnosis

This 32-year-old patient complained about the "crooked look" of her smile. The patient was aware of what a smile makeover could achieve, but wanted to achieve something without damaging her teeth.

On examination several problems existed. Firstly her teeth were moderately misaligned. This creates aesthetic issues immediately. Large unsightly embrasures were made worse around the canines. The instanding laterals appeared darker and in the shadow of the lips, the left one being in slight cross-bite. With the centrals splayed out and rotated the line angles of the four incisors were all different.

It was clear at the start by examining the incisal edges that there had been differential degrees of wear meaning that even if the teeth were aligned, the incisal outline would still look uneven - this meant we needed to have a conversation about some potential edge build ups after.

All options were discussed. The patient ruled out fixed braces, even with more recent faster techniques because she wanted, something removable and we had also discussed the possibility of simultaneous bleaching during the alignment phase.

We assessed for an Inman Aligner. At the consultation the occlusion was examined and it was clear that the laterals had room to advance labially and the centrals could also be derotated.

We then needed to assess the actual amount of space needed. Inman Aligner cases should be planned carefully to ensure the case is suitable and also to understand how much space needs to be created. This can be done with models using Hanchers technique [1]. The SpaceWize tm crowding calculator was used to assess the patient in the chair.

An occlusal photo was taken with a mirror and the upper central tooth was measured with digital calipers to help calibrate the software.

The occlusal photo is uploaded and the calibration tooth details entered. The mesial distal widths are simply drawn on for the all the teeth to be moved which in Inman Aligner treatment is always the front 6 teeth. The software calculated the total of the mesial distal widths and this is described as the Required space. An ideal curve is then plotted with the software with the proposed final position. This is made with occlusion, aesthetics and function taken into consideration. The curve can be manipulated easily with the software and this gives us the Available space. The difference between these two measurements is calculated automatically and this is the amount of space that needs to be created to achieve the final result.

As can be seen in the Spacewize tracing, 3.1mm of crowding was present. This may seem less than expected when considering the degree of crowding when looking at the occlusal photo, but because the laterals are advancing forward, this will actually create space.

It was decided that an Inman Aligner with incorporated expander would be used to treat the case. Incorporated expanders are a useful tool to create space supplementary to IPR or as an alternative. They must not be expanded beyond 2.5mm and only supply a temporary degree of space to allow the anteriors to align. The small degree of posterior expansion will always relapse and the midline can even be unwound after the anteriors have aligned. Each turn produces 0.25mm of space.

Treatment sequence

The Inman Aligner was fitted at the next appointment. Instructions were given and only a small degree of IPR was performed over the front teeth (0.1 mm per contact).

No IPR was performed initially around the centrals because with the degree of crowding it would be easy to miss the contact point. Instead the teeth are stripped strategically and progressively meaning we release a little room to allow the teeth to align then we re-perform IPR over several visits again only performing a little at a time.

Critically Inman Aligner treatment uses progressive anatomically respectful IPR. Despite calculating the amount of crowding present, the IPR is never carried out in one go. IPRs strips or discs are only used. This gives the opportunity to ensure the stripping is far more anatomically respectful than using burs or heavy discs.

This massively reduces the risks of excess space formation, gouging or poor contact anatomy. The contacts are smoothed and the fluoride gel is applied each time.[2-9]. Composite anchors were also placed on the palatal incisal edge of the instanding lateral teeth to ensure the palatal bow engaged correctly.

The patient was also shown how to turn the midline screw. She was instructed to do this once a week and did this for seven weeks, but was seen every 2-3 weeks to check progress and reperform a little IPR if necessary.

The patient was instructed to wear the Inman Aligner for 16-

18 hours a day. Studies [10,11] show that this is far less likely to cause root-resorption and the Inman Aligner is highly effective even with the Aligner out eight hours a day. This allows better hygiene and patients can also function with day-to-day activities more normally.

After nine weeks the laterals were already getting close to the proposed position and the centrals were de-rotating nicely.

At this point with Inman Aligner treatment we often start to bleach. Impressions are taken even though the result is 25 per cent from finished.

Sealed, rubber trays are made and careful instructions are given to the patient.

While the patient is highly concentrated on using the Inman Aligner, they are always highly receptive to using bleaching trays. It adds greatly to motivation and often means they achieve a far better result. Discus Dental Day White is used so that the patient only needs to wear the bleaching trays for 35-45 minutes a day. The patient was happy with the degree of whitening achieved.

It was becoming highly apparent to the patient at this stage that she would only need some final edge bonding to achieve a very aesthetic result.

The patient whitened for two weeks. At week 11, alignment with the inman aligner was almost complete. A single clear aligner was used to correct some minor spacing and also to help bring the right canine into line. After using the Inman Aligner, canines are far more receptive to movement with clear aligners.

At week 13 the incisal edges from canine to canine were only slightly roughened. No local anaesthetic is required with this simple additive bonding.

Venus from Hereaus Kulzer was used in dentine and enamel shades in B1 was used to build the missing incisal outline. The teeth were then polished with discs, pogo sticks and flexibuff discs. The patient initially was not keen to have centrals that were longer than the laterals so a fairly flat smile line was created. One week later she returned and asked for another 1.5mm of central incisal length. This was again provided by adding more Venus. At the same visit a wire retainer was bonded in place from canine to canine. (12,15)

'This patient achieved a result in just 13 weeks that she had only previously thought possible using ceramic veneers in this approximate time.'

Results

This patient achieved a result in just 13 weeks that she had only previously thought possible using ceramic veneers in this approximate time.

She also achieved it without any damage done to the teeth other than truly minimal and anatomically respectful IPR. Her teeth are far better placed for future ceramic restorations if necessary.

She commented that she was worried that with veneers, she would have lost the natural character of her teeth, but by a using ABB, this was retained and we just made her own teeth more beautiful.

Discussion

Any dentist offering cosmetic and restorative dentistry should be aware of all developing techniques. Many patients in the UK are choosing this approach and are demanding it in their practices. This approach is becoming common with dentists who offer orthodontic solutions, so not offering it and only offering ceramic solutions could result in potential consent issues.

The simple fact is that once a dentist is educated in the advanced use of an Inman Aligner, this kind of treatment is far simpler and less risky than treatments where large amounts of tooth structure are removed and where there is a heavy reliance on porcelain for the final result. Being able to align and bleach simultaneously adds huge value and increases motivation tremendously.

Long-term predictability is far better and the patient doesn't enter a restorative cycle that can easily worsen the long-term prognosis.

Patients are also far happier because the treatment is more affordable, and they understand the benefits of reducing long term risk by aligning, bleaching and bonding. Compared to the traditional methods of providing ideal smile design, ABB represents a radical and arguably revolutionary change in the way cases like this are approached.

A far more truly conservative result that actually respects the opinion of the patient at different stages means that heavy arch form preparations, with aggressive tooth removal just to line teeth up to allow space for veneers, could soon become a thing of the past.

Disclosure.

Dr. Qureshi runs hands on courses with Dr. James Russell and Dr. Tim Bradstock- Smith and lectures on the Inman Aligner worldwide.

Acknowledgements.

The author thanks Donal Inman C.D.T. Inman Orthodontic Laboratory, Florida, Nimrodental Ortho Lab Paddington London (The only STS Certified Inman Aligner Laboratories.) DT

Course Information

Information about course dates and training can be received from www.straight-talks.com or www.inmanaligner.com. Alternatively contact Caroline Cross on +442072552559 email info@straight-talks.com

Tif Qureshi will be speaking at the BACD Conference "Esthetics Meets Aesthetics" on 23 - 25 September 2010 at the Hilton London Metropole". To register, visit www.aacd.org

MEDIA CME Self-Instruction Program

Dental Tribune Middle East & Africa in collaboration with CAPP introduce to the market the new project mCME - Self Instruction Program.
mCME gives you the opportunity to have a quick and easy way to meet your continuing education needs.
mCME offers you the flexibility to work at your own pace through the material from any location at any time. The content is international, drawn from the upper echelon of dental medicine, but also presents a regional outlook in terms of perspective and subject matter.

How can professionals enroll?
They can either sign up for a one-year (10 exercises) by subscription for the magazine for one year ($65) or pay ($20) per article. After the payment, participants will receive their membership number and will be able to attend to the program.

How to earn CME credits?
Once the reader attends the distance-learning program, he/she can earn credits in three easy steps:
1. Read the articles.
2. Take the exercises
3. Fill in the Questionnaire and Submit the answers by Fax (+971 4 36868883) or **Email :info@cappmea.com**

After submission of the answers, (name and membership number must be included for processing) they will receive the Certificate with unique ID Number within 48 to 72hours.
Articles and Questionnaires will be available in the website after the publication.

www.cappmea.com

Accredited by Health Authority - Abu Dhabi

For more information: e-mail: info@dental-tribune.ae,
Tel: + 971 4 391 0257, Fax: + 971 4 366 4512 Mob: + 971 50 6625011

Dentistry of the 21st Century

A one day Continuing Dental Education Program titled "Dentistry of the 21st Century" was conducted by German Dental Oasis, DHCC on 15th October at the Movenpick Hotel in Dubai, UAE. The conference was well attended by 300 dentists from all over UAE. The conference hosted by the GDO brought together 5 international speakers who are specialists in different fields of Dentistry. The experts who took up various sessions on that day were as follows:

- Dr Hans Van Der Elst (Germany)
- Dr Tarun Walia (India)
- Dr Matthieu Gabriele (France)
- Dr Sinan Hamadeh (Germany)
- Dr Souheil Housaini (UAE)

The conference was inaugurated by Dr. Hans van der Elst, Expert in Dental XP one of the biggest Dental Websites in the US and Clinical Director of the German Dental Oasis in Dubai Health Care City. He was the first speaker of the day and dealt with two topics during the course of the day, viz :

- Piezosurgery in Dentistry
- Lazer Treatment in Dentistry

Dr. Tarun Walia, Assistant Professor, College of Dentistry, Ajman University of Science & Technology, delivered the a comprehensive presentation on 'Clinical decision making in Pediatric dentistry – A simplified Approach' as the second lecture of the day. Dr Tarun stressed on the importance of behavior modification in the management of anxious children seeking dental care. He also explained about the various options available to the practicing dental surgeons for restoring grossly carious primary maxillary incisors where majority of the clinical crown is lost due to dental caries. Indications and placement techniques of more durable & esthetically acceptable tooth colored crowns was described in detail to the participants. They were also shown the clinical procedure of placing

esthetic restorations, particularly resin modified glass ionomer restorations in different clinical situations.

Dr. Souheil R. Hussaini, President, Chairman of scientific committee - Continuing Dental Education Implant Dentistry - Study Consortium (ID-SC), sponsored by Temple University- department of periodontology and oral implantology, Philadelphia, USA and an affiliate society of the ICOI, USA. He is also associated with the Study Club of Oral Implantology (SCOI), Emirates Medical Association, UAE and delivered the third lecture of the day on the topic ' Cosmetic Dentistry Clinical Cases'.

The participants were satisfied with the motivating and informative lectures conducted during the day as this was evident from the participants' feedback collected at the end of the day. The sessions were greatly appreciated as an evaluation of the feedback from all participants, showed an average score of 4.1 out of 5 for informative program and Lectures.

The GDO looks forward to the next event on the 14 and 15th of January, 2011.

AD

"Endodontics is a rapidly growing speciality in the Arab world"

An interview with Audrey Stefani, Dr Stephan Gruner & Dr Khaled A. Balto

It all started with a nerve broach in 1907. MICRO-MEGA, whose headquarters are located in Besançon (France), has been manufacturing endodontic tools for over a hundred years and played a decisive role in endodontics through new developments. Internationally, the innovative company has a recognised reputation of being a specialist in dental instruments. At this year's Adviser Group for Endodontics (AGE) meeting, Dental Tribune met with Audrey Stefani, MICRO-MEGA Marketing Manager; Dr Stephan Gruner, Country Manager MICRO-MEGA Germany; and Dr Khaled A. Balto (Saudi Arabia), Associate Professor and moderator of the AGE meeting.

Dental Tribune: Mrs Stefani, for over a century MICRO-MEGA has been operating successfully in the dental market. Could you tell us anything in particular that stands out for you in the company's history?

Audrey Stefani: MICRO-MEGA is proud of having set international milestones with handpieces and contra-angle handpieces, micro-motors, endodontic files and NiTi files.

A fact that perhaps only a few people know is that MICRO-MEGA used to be the sole manufacturer of handpieces and contra-angle handpieces for the large brands in Germany and other countries.

The Citoject, for example, was a MICRO-MEGA product, manufactured under Heraeus' own brand for Heraeus. Today, it is still available as LigaJect from MICRO-MEGA, even after it was phased out of production. To a considerable degree, the company was characterised by being able to launch world-first innovations on the market regularly, and we are able to build on this expertise today.

Which MICRO-MEGA products have set standards on the international dental markets?

MICRO-MEGA inventions have set world standards; for example, in 1957 with the first dismountable handpieces with tungsten-carbide bearings; in 1963, Giromatic, the first contra-angle handpiece able to produce an alternating 90° rotation and specially made root-canal tools; in 1964, micro-motors with 40,000 rotations per minute, on the basis of which micro-motors are built today by all manufacturers; in 1974, the Masserann Kit for the removal of fractured endodontic tools from root canals; in 1996, HERO 642, a clear and simple system of rotary NiTi files; in 2002, HERO Shaper, a rotary NiTi file system. I could go on with this list indefinitely.

All these experiences led to the development of the Revo-S file system, which was launched in 2009. This system enables a root-canal preparation with only three files. Revo-S is currently state-of-the-art technology; however, development is ongoing, which is why we hold the AGE symposium every year.

In autumn 2009, MICRO-MEGA joined a group of companies under the management of SycoTec. In March of this year, the Canadian SciCan joined the European duo. The group is now amongst the top ten manufacturers of dental equipment worldwide. What opportunities does such a strong group offer?

One great asset is that we are able to join forces and learn from one another. Our focus here in Europe naturally lies in Germany and France, but we are also going to enter new markets. If possible, we will use joint marketing, and joint research and development in order to consolidate our position on the market. An important part of the strategy is to maintain and further the SciCan and MICRO-MEGA brands.

Is the name of the group still under debate?

Indeed, we have debated this for a while but have finally agreed on a name. I am proud to announce that MICRO-MEGA, SciCan and SycoTec are members of the Sanavis Group.

MICRO-MEGA sells its products worldwide. Which countries are the most important in terms of turnover? And which regions hold the most potential in your opinion?

Europe has always played an important role in our corporate development. The most important importing countries are Germany and, in our domestic market, France. North and South America are in the process of development, particularly with the introduction of our rotary NiTi systems. We have also recorded good growth figures in the Asia-Pacific region. Moreover, we are keenly observing the Middle Eastern region. As you can see, MICRO-MEGA as an internationally known brand is in the process of exploiting current potential markets.

There is every chance of success, particularly since research and development in the group have now reached global player magnitude and we know how to take advantage of this.

Dr Gruner, are you currently working on the development of new products?

Dr Stephan Gruner: Thanks to the abovementioned synergies, our newly created group is going to get things moving in the dental world. We are constantly trying to maintain our technological lead and thus work hard and intensively. An event like the AGE helps keep MICRO-MEGA's finger on the pulse of world trends.

Audrey Stefani

Dr Khaled A. Balto & Dr Stephan Gruner

Have your expectations of this year's AGE meeting been met?

The AGE meeting has once again helped us progress scientifically thanks to top-notch research results presented by the speakers. During our internal MICRO-MEGA sessions, we were able to discuss international market demands further, which were then tested for feasibility and formed into projects.

Prof Shimon Friedman lectured on The endodontic treatment outcome: The impact of the new technologies. Would you please summarise the most important points for us?

Prof Friedman is world-renowned in the field of endodontics. Together with co-authors Dr Thuan Dao et al., he authored the world famous Toronto Study, a series of articles in the Journal of Endodontics. This is an extensive piece of work that illustrates and analyses the status of endodontics, starting with the publication of the first results in the year 2000 up to and including 2010.

In his excellent lecture, Prof Friedman made clear that differences in the evaluation and success or failure of an endodontic treatment greatly depend on the methods and structure of the evaluating studies themselves. If the correct evaluation criteria are applied, the success rate of endodontic treatments over the last ten years is around 88 to 95%. Amongst the various authors, a high consistency of results is noticeable. These studies are encouraging.

The new product Revo-S was a part of further presentations. Dr Balto, in connection with the innovative Revo-S concept you also spoke about the 'third dimension' of endodontic treatment. Would you please illustrate the main points of the system?

Dr Khaled A. Balto: In general, endodontic rotary systems are evaluated with regard to the parameters of geometric features, taper, tip size, etc. Therefore, the equation for efficiency of a given file has long been considered to be inner core size and symmetric design (which means perfect geometry), which results in stronger files. After 17 years of using Rotary NiTi files, we have learned that the equation for efficiency is rather the asymmetric design and efficient clearing of dentinal debris. This understanding was applied in the conception of the Revo-S system.

Revo-S is the result of 17 years of critical performance analysis, which for the first time addressed the concept of dynamic asymmetry. As a result, we now have files with better penetration and a better clearing effect. Moreover, it is efficient, with only three files for initial treatment and much less likelihood of separation. To perceive the bio-mechanics of the file in the 'third dimension', the canal depth, the kinetics of Revo-S—the way it rotates inside the root canal—are analysed.

What is your view of endodontics in the Arabic region compared to the Western world?

Endodontics is a rapidly growing speciality in the Arab world in general, particularly in Saudi Arabia. Rotary endodontics, micro-training, warm obturation techniques as well as modern retreto-dontics are all an integral part of teaching curricula at many universities. However, as in many other countries in the world, there is a wide range of performance results depending on the experience of the dentists and the difficulty of the cases. Individual variation plays a significant role in the treatment standards. For example, being an associate in a practice limited to micro-endodontics in Jeddah, I treat patients from all over the world as well as locals. I have managed failures for treatments rendered domestically and from other countries. All in all, I do not see substantial differences between the different countries in regards to the standard of treatment however, there might be a difference in the number of well qualified individuals.

Your comprehensive publications illustrate the wide range of your work. What are you working on at the moment?

Being an academic, clinician and researcher at the same time is rather difficult but not impossible. As Deputy Director of the Center of Excellence for Osteoporosis Research in Jeddah, my current research focuses on osteoporosis as it relates to oral health.

Since I returned from Harvard Dental School, where I received my D.M.Sc., the essence of my research interest has remained the same, which is in brief: cellular and molecular mediators of infection-induced bone destruction, evidence-based dentistry and other clinical endodontic research.

Apart from publishing, how do you exchange information with international colleagues?

The world has become a small village thanks to the recent developments in information and communication technology. The Internet is the driving force for today's information exchange. Online publishing, discussion forums, YouTube, etc. make it easy to stay in touch and remain updated on new developments. In my opinion, postgraduate training programmes in endodontics constitute the most important cornerstone.

As Director of the Saudi Board of Endodontics, I have the privilege of reviewing articles and thus am constantly kept up to date on what's new. Additionally, I value the international interaction that is possible through conferences and meetings like the AGE meeting.

We would like to thank you for this interview and wish you continuing success.

Editorial note:

The interview was led by Jeannette Enders and Steffi Goldmann.