COSINETIC dentistry_beauty & science

2011

case report

Inman Aligner

| facical aesthetics

Practical developments

diary

ESCD 2011 - Dubrovník



Which one would your patient prefer?



Opalite or Gold?



Opalite by 3d core centres is a new metal free product offered by Lifelike Dental Ceramics

- For Occlusal reductions as small as 0.7mm
- BiocompatibleIdeal for Bruxers
- Metal Free Zirconia

- No Porcelain layers
 5 year guarentee card
 Posterior Crowns or Bridges
 1000 mpa with less chance of fracture

Introductory Offer - First unit of Opalite only £69.00

Lifelike Dental Laboratory is a small private dental laboratory in Buckinghamshire. We like to think the products we offer are as good as our service, but that's up to you to decide. We work with you in partnership to ensure that you are able to offer your patient the best solution at a competative price







Dear Reader,

_You are holding in your hands a new journal of its kind: *Cosmetic Dentistry*! The special thing about this journal will be the myriad of case presentations related to mimicking nature at its best and enhancing disharmonies, non symmetries and restoring missing tissue to improve appearance.

Professional success and empathy in today's society is mirrored by healthy appearance wherein harmony of the oral environment plays a key role. The dental profession plays key role in regards of facial harmony – (from Orthodontics to Prosthodontics), empathy – harmony and esthetics of red and white tissue (from Restorative to Periodontology). Improving, correcting and maintaining the above mentioned is the result of interdisciplinary collaboration within dental profession. Knowledge, skills and technology compliment this attempt.

It is the purpose of this journal to bring together the different specialties within the profession, to induce communication and collaboration, to offer knowledge and to report news.

Your knowledge is much appreciated, your professional experience is highly welcome to be shown to your collegues via "case presentations" or any other approach you might consider valuable to be published by *Cosmetic Dentistry*. Take over and make this new journal your journal now!

Yours,

Prof. Dr. med. dent. Liviu Steier
Clinical Editor
Qualified Specialist in Prosthetics with Further Education of DGPro
Assoc. Clin. Professor
Specialist in Ednodontics
Course director MSc in Endodontics
Warwick Dentistry - Warwick Medical School



Dr. med. dent. Liviu Steier







editorial

O3 Dear Reader
_Prof Dr Liviu Steier

meetings

O6 Clinical Innovations: Benefitting from knowledge
_Lisa Townshend

case report

O8 Ethical Smile Design with the Inman Aligner - A case study
_Dr Andrew Wallace

16 Reattach and build up of fractured central incisors _Dr Irfan Ahmad

user report

26 Full zirconia crowns: What you need to know about Opalite®
_Andy Foster

30 Venus Diamond: A diamond class of nanocomposites
_Dr Heinrick Middlemann and Dr Marcus Holzmeier

| facial aesthietics

34 Developing a Facial Aesthetic Practice

_Paul Mendlesohn

diary

 $4 \mbox{O}$ — Do something fantastic this autumn! _Philip Lewis

manufacturer news

43

diary dates

48

about the publisher

49 _ Guidelines for submission50 _ Imprint







60,000 Whitening Systems Sold

Over 3.0 Million Smiles Whitened





 Gets teeth whiter, faster and keeps them whiter longer

Advanced

- In clinical studies, patients with A3 or darker achieved an average improvement of 8 shades in just one office visit*
- 50% of patients achieved an end shade of B1 or better*

Call now for a free demo or brochure

UK 0800 032 3005 Ireland +44 1923850 423



Clinical Innovations: Benefitting from knowledge

Author_ Lisa Townshend, Editor Cosmetic Dentistry



_May 6-7, 2011 saw the eighth annual Clinical Innovations Conference held in association with Smile-on, the AOG, Dental Directory, ESCD and FGDP (UK). The event, held at the prestigious Royal College of Physicians in London, saw more than 350 delegates come through its doors to find out the latest thinking in aesthetic and restorative dentistry.

The conference was opened by some welcoming words from Smile-on CEO Noam Tamir, and AOG president Pomi Datta. Then it was the turn of Dr Nasser Barghi, (pictured), to commence the lecture programme, with his presentation titled *All Ceramic Restorations in 2011: different ceramic systems and their clinical indications.*

Dr Barghi discussed various restorative solutions for patients and how technology has progressed to such an extent that there aren't too many bad products to choose from. He was passionate in his 'love' of zirconia, making it his material of choice for his restorations. He was able to show many case studies to show the different solutions clinicians have at their disposal to illustrate many of his points. Themes in his presentation included:

_Adhesion: cement or bonding? Discussing surface treatment when looking at adhesion

_Veneers: his preference for ceramic veneers; indications for no-prep veneers. These include:

- No discoloration
- Presence of diastema
- No rotation
- Presence of proportion

_Learning from failures: Dr Barghi commented that his definition of an expert was a person with failures. Acknowledging that these were not a preferred thing in practice, he thanked the 'luxury' of being in academia which gave him the chance to be experimental with techniques

_Being in control: he was very passionate about dentists remaining in control of their restorations. Commenting that he always looks at the scans which his dental laboratory have taken from his impressions (he's not convinced with digital impression taking, not just yet!) so he can ensure that what is going to be milled is what he is expecting for his patients

My favourite piece of advice Dr Barghi gave in his presentation was this: 'Remember the golden rule of dentistry – if it is your patient, repair it; if it is someone else's patient, replace it!'

After such a start, it was going to take something special to follow. Luckily, next up was Dr Wyman Chan, discussing Latest techniques in teeth whitening processes. Showcasing his new 'Jumpstart' technique, Dr Chan gave a demonstration of the system that he has devised over many years of research and development.

The first thing that struck me was the emphasis on patient safety and the precautions taken to ensure that the process was entirely pain-free for the patient. This was paramount, Dr Chan commented, to ensure that the home regime prescribed by the clinician would be adhered to because the patient knew it wouldn't hurt.

The other thing that struck me, and this is the innovative thing about the Jumpstart system, is that there is no use of whitening trays or bright cumbersome lights; the whitening gel is painted onto the teeth and a small thermal diffuser is attached to the lip retractors to help the gel to permeate the tooth structure. The use of a light is just a gimmick, Dr Chan commented, it is the heat, not light that allows the gel to work.

After doing the Jumpstart whitening (which was only 20 minutes), Dr Chan then had the 'patient' a willing dental therapist volunteer, perform two home whitening sessions using his take home kits. Again not using trays, he asked the patient to put the special retractors which also hold the diffuser on and paint the gel on her own teeth.

I've never been a fan of the concept of tooth whitening, figuring that bleach is not something I want anywhere near my teeth! But after Dr Chan's lecture, and seeing for myself what can be done in a safe manner even by someone like me, I am a total convert.

With there being so many fabulous lecturers to choose from, it was impossible to see and hear them all. Other presenters included:

- _Dr Julian Satterthwaite: Management of failing dentitions
- **_Dr Julian Webber**: Single File Reciprocation, Shaping the Future of Endodontics
- **_Prof Edward Lynch**: Top Tips for Successful and Aesthetic Clinical Dentistry
- **_Dr Peet van der Vyver**: Making Magic with Matrix Systems
- _Dr Wolfgang Richter: Composite Restorations 2011 Facts and Fiction
- **_Drs Tif Qureshi & James Russell**: Pre-align then Design the Simplification of Cosmetic Dentistry for all

A first for the Clinical Innovations Conference, the Friday also saw the London Deanery's annual DCP Conference held alongside its clinician's programme. This event was a vibrant meeting, and was a perfect

complement to CIC's innovative ethos. Attendees were treated to a range of subjects including mentoring, communications, decontamination and medical emergencies. The presenters included:

- **_Dr Sue Morgan**: *Mentoring in the workplace*
- **_Dr Mike Clarke**: 'Now that shouldn't have happened can I phone a friend!' Risk Management in Dentistry a DCP quide
- _Dr Mike Wanless: Effective communication to develop rapport
- **_Dr Sandra Smith**: Getting to grips with the latest dental decontamination guidance known as HTM 01-05
- _Dr Joe Omar: Medical Emergencies: 'How Can I Help?'

The Friday evening was a chance to get together and party the night away with fellow delegates, sponsors and speakers at the annual Charity Ball, organised by Smile-on and the AOG. A night of fine dining and fantastic entertainment at the five-star Millenium Hotel in Mayfair, the event did make for some delicate heads in the morning!

Fortunately, the Saturday line-up was enough to get even the weakest of constitutions out of bed. Saturday's speakers included:

- _Dr Eddie Scher: Failure in implant dentistry
- _Dr Peet van der Vyver: The Benefit of Magnification in Dentistry
- _Dr Jason Smithson: Simplified posterior resins... simple, easy and predictable
- **_Dr Raj Rattan**: The Future Direction of the NHS
- **_Dr Trevor Burke**: A Pragmatic Approach to the treatment of tooth wear
- **_Dr Bob McLelland**: *Preparing for Perfection*
- __Dr Liviu Steier: Advanced Biofilm Management Reality Check From single vs. multiple sessions Root Canal Treatment to full mouth disinfection in Periodontal Treatment
- _Dr Jason Smithson: Direct Composite Resin: Advanced Concepts for the 21st Century Composite restorations which require little occlusal adjustment and have firm proximal contacts
- _Dr Nasser Barghi: Different Ceramics, Different Bonding, a very unique participation course
- _Dr Peet Van Der Vyver: Management of Curved Root Canals using Modern Endodontic Equipment and Techniques

A knowledgeable exhibition was also there to compliment the speaker programme, giving delegates the opportunity to speak with product experts on a one-to-one basis.

An event enjoyed by attendees, speakers and sponsors alike, Clinical Innovations Conference 2011 was considered a fantastic success. Look out for news of next year's Conference, coming soon!

Ethical Smile Design with the Inman Aligner – A Case Study

Author_ Andrew Wallace





Introduction

There has probably never been a better time to practice dentistry, but dentists and patients are being bombarded by images of the beautiful smile and for many years, practitioners have been pressured to into believing that porcelain veneers are the answer.

Although there are many situations where veneers are the ideal treatment, and when well-placed and properly-bonded to enamel, they will last for many years. Layton and Walton showed 73 per cent survival at 16 years for veneers bonded to enamel.

Unfortunately, in my practice these ideal cases rarely come through the door. Most of the patients coming in for cosmetic dentistry do so for more severe problems. Crowding of the upper and lower teeth is a common condition that adult patients would like improved. Porcelain veneers and "instant orthodontics" designed to treat this will often lead to excessive enamel removal, risking pulp vitality and compromising bond strengths; or over-contoured restorations, which can compromise plaque control.

Poor root position will also compromise emergence profile. The patient, who by now has also entered the "restorative cycle" will require the periodic replacement of these veneers with more invasive restorations. Burke and Lucarotti showed the survival rate of veneers in England and Wales to be approximately 10.5 years. The Inman Aligner has proved to be a valuable appliance to help patients with mal-aligned anterior teeth.

The Inman Aligner works by employing dual forces - pushing and pulling simultaneously. The





single, removable device utilises a lingual coil spring that puts pressure on the teeth that need repositioning and a labial bar that reverses the same pressure. These components work together to "squeeze" teeth into place. Compared to traditional orthodontic braces, the Inman Aligner offers a more discreet, faster and less expensive way to achieve excellent results in the 'social six' region of the mouth, with average treatment times of between six-18 weeks. The forces employed by the Aligner mean that it works a lot faster than the retainer-style treatment employed by other clear alignment systems making up for the fact that it is ever so slightly less discreet. However, the fact that the device is removable often makes up for this in the mind of the patient.

Of course, not every case is suitable for treatment in this way, and case selection is critical. The Inman Aligner is only suitable for correcting anterior teeth. Large side shifts, intrusions and extrusions are not possible to treat in this way. However, rotations, tipping, bucco labial bodily movements and diastema closures in protrusive cases are all possible, as long as case selection criteria have been met.

_Patient AT

The patient who attended was a nineteenyear-old girl requesting cosmetic improvement of her upper and lower teeth. Her chief complaint was that she was "unhappy with my smile", and that her "front teeth are out of shape."

The patient was a regular attendee with her General Dental Practitioner and dentally healthy. Other than her aesthetic concerns, she displayed no dental complaints, and had no history of bleed-

ing gums or sensitivity.

On enquiring further, she mentioned she had been considering having treatment to improve her smile for the last year and had a family wedding coming up in just over 12 months. The patient was happy with the shape of her upper and lower teeth - she said would have liked them to be a little whiter and straighter.

On examination, it was ascertained that she had minimally restored dentition with a large silver amalgam filling in her lower left first molar, and some hypoplastic enamel in her upper right first molar.

Her upper left first molar was missing, but with no residual spacing due to mesial movement of the second molar. Her lower third molars were unerupted with mesio-angular impaction. Thin scalloped gingival biotype.

The patient's lower incisor teeth had moderate crowding with good positioning of the canines. The upper incisors displayed mild crowding with the mesial edge of the upper right central incisor overlapping with the upper left central incisor by 2mm.

A full discussion was undertaken about the possible treatment options:

- No Treatment
- _Comprehensive orthodontic treatment
- Fixed short term orthodontic treatment
- _Removable alignment treatment
- _Restorative treatment/"instant orthodontics"

The patient did not want restorative treatment and dismissed the idea of crowns or veneers