

DENTAL TRIBUNE

The World's Dental Newspaper · South African Edition

March 2014 - Volume 2 no. 1

www.dental-tribune.com

DENTISTRY WORKING WITH THE INTERNET AND TECHNOLOGY

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Photo: Delta Dental Blog

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MDM launches new look website

Chris Jenkins

Modern Dentistry Media (MDM) has gone live with an improved and revamped website that is more user friendly, aesthetically pleasing and interactive. With the advent of more platforms to access the internet and better internet connections with faster speeds now the norm across the globe, it was paramount for MDM to update their website.

MDM owner and publisher, Ursula Jenkins, said, "As MDM has evolved over the years, it was important for our website to reflect our international expansion, as well as the high standard of our publications and services." Key changes to the website also include allowing internet users access to

MDM's range of publications, archived issues and articles. Readers can now also participate in the CPD programme online.

Having a website is pertinent to continually growing business in a world that is becoming more and more technologically developed. Jenkins sees that MDM's website is key to keeping the doors open to the rest of the world, "We are continually forming new relationships and partnerships internationally - both with the dental profession and the dental industry. Our journals are read in Africa, Australasia, Asia, Europe, Middle East and the United States. The website is often used as a tool for internationals to interact with us."

The website also offers companies,

institutions and associations the opportunity to advertise their products, services and activities. This is an important new addition to the website. A new feature that will be implemented is one which enables a dental professional who is reading the journal online to click on an advertisement that gets their interest and be automatically re-directed to that company's website. This makes it easier and quicker for the reader to find out more about the product/s and even make online purchases from the specific company.

The upgrading of the website reflects MDM's commitment to a high level of dentistry. To view the website visit: www.moderndentistrymedia.com



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Successful root canal treatment possible with basic equipment

Dental Tribune International

WITTEN, Germany: Researchers from Germany have investigated the effectiveness of basic root canal treatment (BRT) with tactile working length determination compared with BRT with standard radiographic working length control. They found that tactile working length determination achieves comparable treatment outcomes in terms of radiographic and clinical outcome parameters and is an accurate method in BRT.

Researchers from Witten/Herdecke University conducted their study in the course of the university's Gambia dental care programme, which was established in 1995 and provides dental care to people living in isolated parts of the West African country, where modern medical technology is mostly non-existent.

In the study, BRT performed without radiographs was applied to a test group.

For the treatment of the control group, X-rays were taken to facilitate working length determination. In total, 70 patients were followed up over a period of two years.

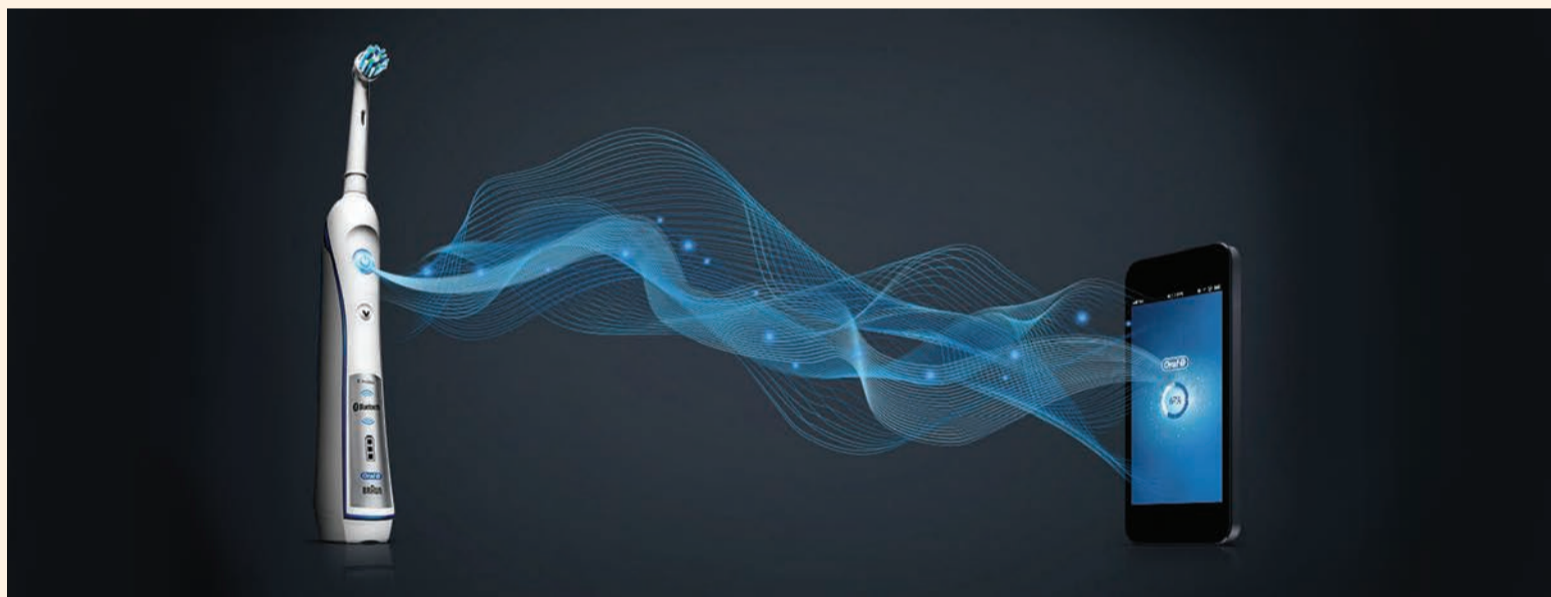
At the end of treatment, participants in both groups were examined using X-rays. Tactile working length determination proved to be as effective as radiographic working length control: 24 months after treatment only one tooth in the test group had been lost. "Basic root canal treatment can help to preserve even teeth with major substance loss. Thus, it can help prevent preterm removal of teeth," said Dr Anna-Louisa Holzner, a dentistry graduate of the university. For her doctorate, Holzner developed a method that enables root canal treatment without electricity and water, and with only minimal materials and tools. The initial results of this so-called BRT were published in the International Dental Journal in 2009.



Several times a year, dental students and academic staff of the university travel to Gambia to continue ongoing research projects in collaboration with the Ministry of Health of the Republic of Gambia and the WHO. (Photo: Witten/Herdecke University)

The current study, titled "Clinical effectiveness of basic root canal treatment after 24 months: A randomised controlled trial", was published online ahead of print in the Journal of Endodontics. [DT](#)

Oral-B launches new Bluetooth toothbrush



The new interactive Oral-B toothbrush was developed together with dental professionals in order to enable personalised brushing routines. (Photo courtesy of Procter & Gamble)

Dental Tribune International

BARCELONA, Spain: Procter & Gamble's Oral-B toothbrush brand has introduced a new electric toothbrush that uses Bluetooth 4.0 technology to connect to a smartphone application. The toothbrush was presented on Monday at the opening

of the 2014 Mobile World Congress in Barcelona, a major event in the mobile industry.

According to P&G, the toothbrush is the first of its kind. Using Bluetooth 4.0, the interactive device connects to the respective Oral-B application, which provides real-time guidance while the user is

brushing. It records and stores brushing activity as data that can be shared with the dentist to achieve more personalised brushing routines.

Dental professionals can program their patients' brushing routines in the application to help them focus on problem zones in their mouth. Users of the toothbrush can use their smartphone as a kind of remote control to customise it to their needs.

As reported by P&G in a press release, preliminary tests of the application have shown that when connected brushing time increases from less than 60 seconds with a manual toothbrush to more than 2 minutes.

The technology will be made available in a variety of Oral-B electric toothbrushes, including the new Oral-B SmartSeries. However, it will be sold initially in limited quantities in Germany from spring. The company announced that it will be distributing the new interactive toothbrush globally from June. The new smartphone application will be available in iOS in May and in Android in August.

The 2014 Mobile World Congress ran until Thursday, 27 February. This year, more than 1,700 exhibitors are showcasing their latest product innovations. In 2013, the congress and its exhibition attracted more than 72,000 visitors. [DT](#)

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The World's Dental Newspaper - South African Edition

LICENSING BY DENTAL TRIBUNE INTERNATIONAL

GROUP EDITOR Daniel Zimmermann
newsroom@dental-tribune.com
+49 341 48 474 107

CLINICAL EDITOR Magda Wojtkiewicz

ONLINE EDITORS Yvonne Bachmann

Claudia Duschek

COPY EDITORS Sabrina Raaff, Hans Motschmann

PUBLISHER/PRESIDENT/CEO Torsten Oemus

DIRECTOR OF FINANCE & CONTROLLING

Dan Wunderlich

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Nicole Andrä

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EXECUTIVE PRODUCER Gernot Meyer

DENTAL TRIBUNE INTERNATIONAL

Holbeinstr. 29, 04229 Leipzig, Germany

Tel.: +49 341 48 474 302 | Fax: +49 341 48 474 173

www.dental-tribune.com

info@dental-tribune.com

REGIONAL OFFICES

ASIA PACIFIC

Dental Tribune Asia Pacific Limited

Room A, 20/F, Harvard Commercial Building,

105-111 Thomson Road, Wanchai, Hong Kong

Tel.: +852 3113 6177 | Fax: +852 3113 6199

THE AMERICAS

Tribune America, LLC

116 West 25rd Street, Ste. 500, New York, N.Y.

10011, USA

Tel.: +1 212 244 7181 | Fax: +1 212 244 7185

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DENTAL TRIBUNE SOUTH AFRICA

Modern Dentistry Media

PO Box 76021 Wendywood 2144 South Africa

Tel: +27 11 702 5195 | Fax: +27 86-568-1116

www.moderndentistrymedia.com

PUBLISHER Ursula Jenkins

ursula@moderndentistrymedia.com

BUSINESS DEVELOPMENT Chris Jenkins

chris@moderndentistrymedia.com

ADMINISTRATION Jane Wilson

DESIGN & LAYOUT C Designz

Interview: Research with the SYSTEM Initiative

Chris Jenkins

DTSA: With your findings challenging the supremacy of silver amalgams in dentistry, how do you see this affecting the dental trade from the dentist's point of view and from the dental manufacturer's point of view?

Dr Mickenautsch: *This is an interesting question and may best be answered by members of the dental industry.*

What is the typical length of time it takes to complete a research project that you and your team commit to?

Our projects may take between 6 months and 2 years until completion.

What other research projects are you currently working on?

We have just completed a systematic review regarding the failure rate of high-viscosity (reinforced) glass-ionomers in comparison to composite resin for load-bearing posterior tooth restorations.

We are further investigating, in collaboration with colleagues in the United States, the accuracy of a novel statistical test for routine detection of selection bias in randomised control trials (RCT) and during the past year, SYSTEM's research work focused on the appraisal of clinical merits for Chlorhexidine in the prevention of infection after tooth extraction; the use of the alcohol-sugar Xylitol in preventing tooth caries and the clinical failure rate of using resin-based glass-ionomer cements (RM-GIC) for orthodontic bracket bonding. The later relates to the lower

incidence of carious decay associated with orthodontic treatment when RM-GICs are used instead of resin-based adhesives. However, common belief considers the use of RM-GIC as less effective for bracket bonding. In contrast, our systematic review found no difference in the failure rate between RM-GICs and resin-based adhesives after up to 14 months. Xylitol products are increasingly presented as being equal to fluoride in their caries preventive effect. Our systematic reviews show that such optimism may be premature. Chlorhexidine as an antibacterial agent may, when used under certain application regimes, prevent infection after tooth extraction.

“We hope that our systematic reviews and their regular updates by us assist health care providers in finding answers to clinical questions in daily dental practice”

Through another systematic search of the dental literature, we found 95 clinical studies that investigated the retention rate of resin-based fissure sealants and subsequent caries occurrence on resin-sealed teeth. Based on the combined data of these trials we compared the caries predictive power of losing resin sealant material in pit and fissures to the predictive power of mere random guesses. To our surprise, no significant difference beyond the play of chance was found, thus sealant retention loss appears not to be a valid



Dr Steffen Mickenautsch, Research programme leader: SYSTEM Initiative/Department of Community Dentistry, Faculty of Health.

predictor for developing tooth caries. While these results do not question sealant retention as a beneficial factor for caries prevention, they shed grave doubts on the justification of its status as ruling quality criterion for pits and fissure sealants. The conclusions of these findings suggest the need for adopting clinical outcomes, such as the caries occurrence rate in formerly sealed teeth as ruling quality criterion for pit and fissure sealants, instead of the commonly used sealant material retention rate.

Having conducted a vast number of reviews, updates and evidence reviews on a number of topics, how influential is SYSTEM in the dental world?

We hope that our systematic reviews and

their regular updates by us assist health care providers in finding answers to clinical questions in daily dental practice.

Do Wits Dental students get to contribute and participate in your research?

Yes, we had the collaboration of post-graduate/master students in the past and are currently preparing aspects of our work for future student input and training.

Have you got any other interesting information about SYSTEM that the dental world might not be party to that you could share with us?

We regularly share news of our research-output online on

<http://www.system-initiative.info/>

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Interview: Dentistry working with the internet and technology

Chris Jenkins and Bridges MC.

Dr Barry Freyberg, is a renowned expert on the internet, cloud technology, and digital dental technology, whose presentations have received critical acclaim at conferences in the United States of America and Europe. He will be presenting a talk on this subject at IDEM Singapore 2014. Dr Freyberg will cover a variety of topics including how to optimise a practice's use of technology and the internet, eliminating paperwork, taking practice management to the Cloud, and using Facebook as a marketing tool

DT SA: How important is the internet and technology to the modern dental practice?

Dr Freyberg: It is critical on so many levels! I do not know where to begin. Our personal office records have been electronic for several years, as are the diagnostic radiographs, charts and so forth. In addition, the internet allows us to share data with specialists and other providers. We also use the internet for marketing and patient communication. When I see practices without electronic records and the use of the internet, I am frustrated for them, as I know what they are missing out on and how their lives would change if they embraced technology.

Which are the three areas in which the internet can make the biggest impact on how a practice operates?

There are really several arenas of internet usage. Today, marketing and communication to existing patients and to prospective patients has become of paramount interest to a practice. This includes the use of Facebook, Websites, Search Engine Optimization, electronic newsletters, patient education and convenience. I'd say the top three are Social Media, a Website which can attract patients, and SEO which leads patients to the Website.

What would be your prediction for the next technology to make a big impact in dentistry?

That's a tough one. 3D imaging affordably and at higher resolutions than we have now will make us much better diagnosticians and clinicians. Also cost effective hard tissue

lasers. The ultimate gains will be in genetic engineering and stem cell research. Let us not forget that 3-D impressions will reduce costs of materials and remakes, which will take over traditional impressions very quickly.

How cost effective is it for a dental practice to implement the latest advances in internet and technology in terms of the equipment required and the related cost to the patient?

Great question. We all think that technology and the internet costs money, when in reality it saves money. So, on the patient side it allows us to be more efficient for them, enabling us to be more competitive with our fees.

“The tough economic climate is a problem for all of us. So, we need to educate the patients how technology reduces costs.”

Have you got a general feeling from patients about the increased use of internet and technology in a dental practice? With regards to whether they feel positive about it or are worried it could increase fees?

I have never had a patient express concerns that fees will increase due to the use of technology or the internet. But we do get compliments from patients on using technology. Everything from reduced radiation to texting appointment reminders are appreciated.

We are currently in a tough economic climate worldwide. Why do you believe that there is a link between dentists using the latest technologies and profit when there is a big chance many patients will not go to the dentists to save money because of perceived higher costs due to the dentist becoming more technical?

The tough economic climate is a problem for



Dr Barry Freyberg.

all of us. So, we need to educate the patients how technology reduces costs.

What is your view on the impact internet and technology is having on dentistry in growing economies such as South Africa? This begs a philosophical answer about technologies being introduced to an area which is just beginning to embrace technology. In a growing economy, technology “leapfrogs” into the latest technologies of today. This occurs faster than in highly technological regions of the world, where technology evolves on top of what already is being used.

An example might be this. In the early 1990's, the USA had analogue phone systems. It slowly evolved into digital phones and communications. In Russia at that time, there were barely any phones in homes. When they began to emerge, they didn't go to analogue and then digital, they “leapfrogged” over the analogue and started at the digital level. This happens with all technologies.

“In a growing economy, technology “leapfrogs” into the latest technologies of today. This occurs faster than in highly technological regions of the world, where technology evolves on top of what already is being used.”

South Africa has roughly 3500 dentists and a total population of nearly 53 million (Census estimate 2013) people. A vast majority of the population live in urban informal settlements or townships with little infrastructure and

those that live in rural areas often live very far away from the nearest healthcare facility. In addition, poverty is prevalent amongst these South Africans which makes it difficult for them to pay for dental care. Do you foresee that in a situation such as ours which is also similar to other African countries that digital dentistry and the use of the internet and new technology can provide dental care for these people with the help of the government?

I have just returned from an amazing trip to SA a couple of weeks ago. I visited those areas with little infrastructure as well as rural areas and of course the big cities. The bottom line seems to be that mobile internet access will probably be the leader (smart phones and tablets) with desktop computers following.

The government will do well to help fund and bring these technologies to the masses. Access to health care and health care education through technology will help the masses with digital clinical capabilities helping to reduce costs.

I truly felt that visiting SA was a highlight of my life. I could feel that economic progress and equality was rapidly progressing but it will take time. □

The ITI expands its educational offering

Specialist implant dentistry continuing education courses launched in Brazil and South Africa

Basel, Switzerland, January 29, 2014 – The International Team for Implantology (ITI) has expanded its educational offering by confirming two more ITI Centers of Excellence in South Africa and Brazil. As part of the ITI University Programs, nine selected academic institutions around the globe are now providing 4- to 7-day continuing education courses in implant dentistry, known as ITI Education Weeks.

The two new Centers are located at the University of Pretoria School of Dentistry (South Africa) and Hospital Moinhos de Vento (Porto Alegre, Brazil). Both institutions have an established track record for high quality continuing education courses, state-of-the-art facilities and draw on an outstanding faculty of experts. The first ITI Education Weeks in South Africa and Brazil will take place in July and November 2014, respectively.

The ITI Education Week in Pretoria will be directed by Prof. Andre van Zyl, Head of the Department of Periodontics and Oral Medicine, and will cover all aspects of tooth loss and factors influencing the replacement of missing teeth as well as the role of CAD/CAM and that of the dental technician.

The ITI Education Week in Porto Alegre will discuss aspects of tooth loss, its effects on the oral cavity and the steps of several clinical situations leading to the rehabilitation of oral health using implant dentistry. The course will be directed by Dr. Waldemar Daudt Polido, an oral and maxillofacial surgeon who has been actively involved in the ITI for many years. While all the ITI's other Education Weeks are held in English, the ITI Education Week in Porto Alegre will be the first to be held in Brazilian-Portuguese and Spanish, addressing the urgent need to offer continuing education courses in the local language in Latin America.

"We are very pleased to have two further highly regarded institutions on board and also to finally be able to offer an ITI Education Week in Africa and South America. The Centers complement our existing course offering very well and I am sure they will be a great success", says Prof. Hans-Peter Weber, Chair of the ITI University Programs Committee.

Also new in 2014 is the ITI Education Week Melbourne. After having finalized the construction of its new dental clinic, the first course at the University of Melbourne is coming up at the end of February. It will be directed by Prof. Ivan Darby and A/Prof. Roy Judge and will focus on current perspectives in implant dentistry.

ITI Education Weeks offer top-class continuing education courses in implant

dentistry aligned to the ITI philosophy of evidence-based treatment approaches. They give practitioners the opportunity to advance their knowledge and skills in

implant-related treatment and learn from experts in the field. Participants benefit from lecture and discussion sessions, participation in treatment planning,

surgical and prosthetic hands-on sessions as well as live surgical and prosthetic sessions. Each ITI Education Week offers continuing education (CE) credits. [\[4\]](#)



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The challenge in the aesthetic area from the surgical aspect

Dr Schneider Gadi - DMD, Specialist in Periodontics
Alpha-Bio Tec Research and Academic Consultant

The ideal placement of a single implant or of several implants in the aesthetic area

O-G
2 mm under the CEJ of the adjacent teeth.



Fig 1

M-O
A minimum space of 1.5 mm should be left from the adjacent teeth.



Fig 2

B-P
A minimum of 1 mm of bone should be left at the circumference of the implant.



Fig 3

Angulation
The implant faces an imaginary line connecting the gingulum of the adjacent teeth. If the implant is placed buccally to this line, angulated abutments should be used in order to correct the angle.



Fig 4

Space between implants
A minimum space of 3 mm should be left between the margins of adjacent implants in order to obtain a papilla.

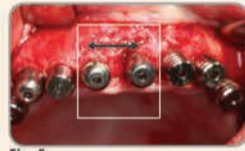


Fig 5

Space between the contact point and the proximal bone (Tarnow law)

A maximum space of 5 mm should be left between the peak of the proximal bone and the contact point of the crown with the adjacent teeth. The distance between the two red points (in the photo) - the greater the distance, the smaller the chances of obtaining a papilla (Tarnow OS).

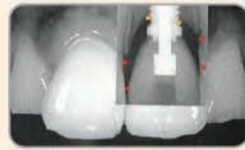


Fig 6

The main aesthetic problem arises from the amount of bone in the buccal region:

1. Crater formation around the tooth
According to the literature, the circumference of the alveolus is a minimum of 1.5 mm, which means that 2-4 mm of bone on the buccal surface of the implant are necessary in order to prevent a buccal-marginal loss of bone (Spray 00).

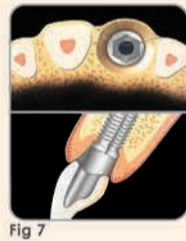


Fig 7

2. Rapid loss of bone in the premaxillary region

- Proclination of the front teeth
- Prominent roots
- A very thin buccal plate



Fig 8

These anatomic conditions cause rapid and extensive bone loss mainly in the anterior buccal region. About one third of the buccal plate is resorbed in the first month following the extraction.

Bone resorption begins in the first week following the extraction and causes extensive thinning of the buccal plate during the first three weeks (Carlsson 67).



Fig 9



Fig 10

3. Implant insertion does not prevent buccal bone resorption

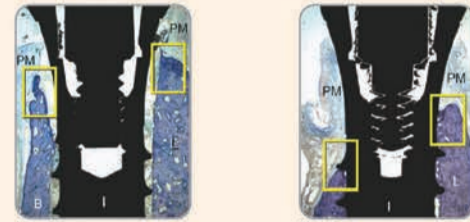


Fig 11
Immediate implantation in the PM region with a thin buccal plate

Fig 12
Significant buccal resorption after 3 months



Fig 13
Immediate implantation in the molar region with a thick buccal plate

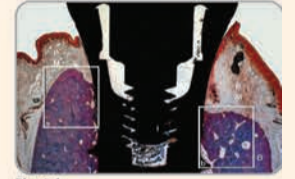


Fig 14
The buccal bone is maintained after 3 months

Buccal bone resorption is affected by ridge anatomy (bone thickness) and not by the placement of an implant (Araujo 06).

Conclusions:

- Critical bone mass (blood supply) is necessary in order to preserve the buccal plate and achieve an esthetic result.
- It is not sufficient to leave about 1 mm of bone on the buccal side of the implant, but rather a minimum of 2 mm of bone should be left.
- Even if the whole implant is within the bone coverage and the buccal plate is thin, bone augmentation should be performed in order to thicken and maintain the buccal plate.
- The bone preservation is dependent mainly upon the surgeon.



Fig 15

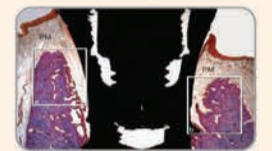


Fig 16

Data on file.

Case 1 - Immediate implantation in the region of tooth 11 - SPI

Dr. Schneider Gadi and Dr. Bruckmayer Yoram

Tooth 11 before extraction



Fig 17

Extraction intact socket



Fig 18

Ideal placement O-G



Fig 19

Ideal placement M-D and B-P



Fig 20

Ideal placement in the socket

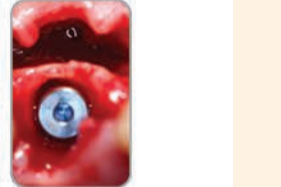


Fig 21

Buccal plate 1 mm



Fig 22

Application of 4 mm bone



Fig 23

Application of membrane



Fig 24

Primary closure



Fig 25

Exposure after 6 month



Fig 26

Case 2 - Complete upper jaw, immediate implantation and immediate loading - SPI implants

Dr. Schneider Gadi and Dr. Bruckmayer Yoram

Preoperative panoramic x-ray

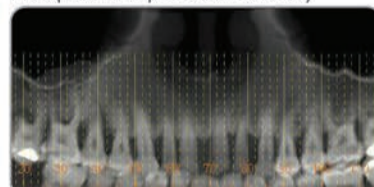


Fig 27

Before extractions



Fig 28

After extractions



Fig 29

Ideal placement - buccal view

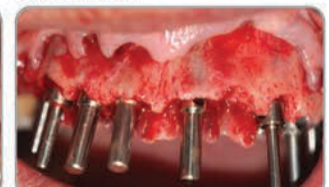


Fig 30

Ideal placement occlusal view



Fig 31

Insertion of SPI implants



Fig 32

Very thin buccal plate in the anterior region



Fig 33

Placement of abutments occlusal view

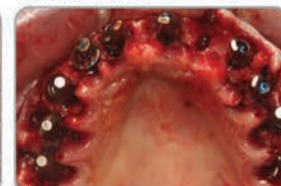


Fig 34

Application of 3-4 mm of bone on the buccal side



Fig 35

Application of membrane



Fig 36

Primary closure around the abutments



Fig 37

Panoramic x-ray after the implantation

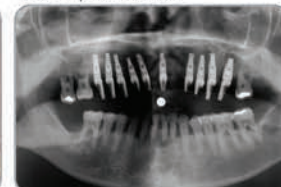


Fig 38

Immediate loading with temporary bridge

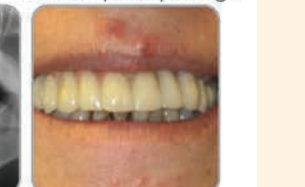


Fig 39

Glass-Ionomer teeth fillings are not inferior to silver amalgam ones – a new study shows

New findings by researchers from the SYSTEM Initiative based in Wits University's Department of Community Dentistry/Faculty of Health Sciences indicate that there is no evidence that high viscosity glass-ionomers are inferior to silver amalgams.

This has challenged the supremacy of silver amalgams in dentistry and the widely held belief that these amalgams make better and more lasting tooth fillings than high viscosity glass-ionomers.

The research was conducted by Dr Steffen Mickenautsch and Professor Veerasamy Yengopal, both from the Systematic Review initiative for Evidence-based Minimum Intervention in Dentistry (SYSTEM Initiative) in the Wits Faculty of Health.

Experts have for decades spoken out against dentists' choice to use of glass-ionomers instead of silver amalgam or composite resin materials for load bearing posterior tooth restorations. But their beliefs have been based on clinical

evidence that, when closely examined, holds little scientific weight.

In an effort to appraise the current clinical evidence regarding the merits of placing glass-ionomers as tooth restorations, the SYSTEM Initiative has conducted a systematic review of randomised control trials and a meta-epidemiological study.

The systematic review included a literature search in 17 global and regional databases, as well as databases for open access journals and 'grey' literature. Besides searching the global databases PubMed/Medline and the Cochrane Library, the additional regional English databases searched comprised of the scientific dental literature from Africa, Europe, India and North America, whilst regional non-English databases comprised of the dental literature from China and Latin-speaking American countries.

In total, 58 trials were accepted as evidence, comprising the investigation of more than 10 000 placed tooth restorations.

The outcome shows that new generation, high-viscosity glass-ionomers cannot be regarded as inferior to amalgam, since no overall statistically significant difference was found in the clinical failure rate between load bearing high viscosity glass-ionomers and amalgam restorations after follow-up periods ranging from one to six years.

Mickenautsch says: "The results of SYSTEM's meta-epidemiological study show that statements concerning glass-ionomers' inferiority to amalgam and other types of materials are based on incorrect statistical comparison methods. Such methods include the still common naïve-indirect comparison of restoration failure rates from uncontrolled clinical longitudinal studies."

"Simply put, the traditional argument against the use of glass-ionomers in modern dentistry is based on the wrong assumption that results from unrelated clinical trials with differing clinical settings and patient groups can be directly compared to one another. Instead, statements concerning the merits of clinical interventions should rest on the direct comparison of competing treatment options via randomised control trials."



High-viscosity glass-ionomer restorations do not require provision of macro-retention by high-speed drilling, thus they offer the dental profession a more patient friendly approach for placing tooth restorations. Placing glass-ionomer restorations also reduces the likelihood of a repeated restoration cycle, because repair of failed restorations does not require the removal of remaining filling material from the tooth cavity.

The new findings suggest that placing high-viscosity glass-ionomer restorations may offer an alternative to placing restorations with silver amalgam in load bearing posterior cavities of permanent teeth. [DT](#)

Sirona announces material partnership with GC

Japanese dental company GC becomes Sirona's latest material partner. The cooperation expands the global range of top-quality CAD/CAM blocks for Sirona systems offered by authorized manufacturers. Bensheim/Salzburg, February 11, 2014. Sirona, the technology leader in the dental industry, has entered into an agreement with a new material partner for the production of CAD/CAM blocks, such as composites and other restorative materials for CEREC and inLab. The Japanese dental company GC Corporation complements the group of selected partners that manufacture high-performance materials for the milling and grinding of CAD/CAM restorations: VITA Zahnfabrik, Ivoclar Vivadent, Merz Dental, DENTSPLY and 3M ESPE.

GC produces consumables, devices and equipment for dental practices and laboratories. The Tokyo-based company is the global market leader for glass-ionomer materials and also the world's largest provider of expertise, advancements,

product quality and top customer service in the fields of composites, ceramic layering and adhesive systems.

"GC is a prestigious dental company that focuses primarily on Japan and other Asian markets. As these markets are becoming increasingly important for our CAD/CAM business, we are happy to have a material partner in the region who meets our high quality standards," says Dr. Joachim Pfeiffer, Vice President of CAD/CAM Systems at Sirona in Bensheim. Sirona expects this partnership to provide sales support in the rapidly expanding Asian markets, while GC profits through established access to Sirona CAD/CAM users worldwide.

Japan is one of the largest growth markets for CAD/CAM restorations and prostheses. The country is already very well prepared for the change to CAD/CAM technology. Therefore, innovative dental technology combined with high-quality materials is increasingly in demand by local dentists. [DT](#)



Perfect complements: The CAD/CAM blocks of Sirona and selected partners are optimized to meet the specific requirements of the MC XL milling centers.

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A-dec celebrates 50 years of “quality through caring”



A-dec is proud to announce its 50th year as a dental equipment manufacturer.

Founded in 1964, A-dec celebrates a half-century of “quality through caring” with gratitude for customers and dealers, suppliers, and the community at-large.

Today, A-dec’s 50-acre Newberg headquarters is home to more than 1,000 employees who manufacture and market equipment to dental professionals worldwide. A-dec also has facilities in the United Kingdom, Australia, and China, which support an extensive network of authorized dealers in more than 100 countries worldwide.


“Although the world has changed over the last five decades, our values have never wavered,” says A-dec President & CEO Scott Parrish. “Quality through caring impacts how we think as a company and also serves as a cornerstone in our pursuit to make the best better.”

Parrish also explains that the company views the anniversary as an opportunity for employees to inspire one another, and to ensure its reputation for quality continues to flourish.

The company pioneered many of the innovations used in dental treatment rooms today, which include the evolution of patient chairs, delivery systems, and dental lights. For clinical handpieces, A-dec partners with global leaders such as Austria-based W&H.

Ken and the late Joan Austin were responsible for producing and patenting dentistry’s first vacuum saliva ejector, which served an important role in the advent of sit-down dentistry. The 1964 innovation would replace the era’s cumbersome belt-drive devices.

A-dec also introduced the first compact delivery system, revolutionizing how doctors are able to treat patients more efficiently and ergonomically.

“A-dec began with a simple idea,” says co-founder Ken Austin, who continues to be involved with portable equipment designed for mobilizing treatment to under-served populations. “Our approach then and today is to create a better solution that’s simple and easy to use, and to treat every customer as if he or she were our last.” 

About A-dec

As the world’s leading manufacturer of dental chairs, delivery systems, and dental lights, A-dec provides reliable dental equipment solutions to better the lives of dentists and their patients around the world.

The A-dec campus in Newberg includes state-of-the-art manufacturing facilities and the A-dec Education Center dedicated to learning and discovery. A-dec facilities in the United Kingdom, Australia, and China help support an extensive network of authorized dealers in more than 100 countries worldwide.



Peter J. Doubell (CEO Sci-Vision Medical)

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- FUN – You spend many hours at work, so best make it fun for all – you, your staff and very importantly your patients!

We congratulate:

- Dr Frits Hoogendijk (Max Fac, Pretoria) on being the first in South Africa with the latest generation Planmeca **Promax 3D Mid CBCT** X-ray unit.
- Dr Nico Verloop (General Practitioner, Pretoria) on being the first in South Africa with the newest generation **Biolase Waterlase iPlus** (Hard & Soft Tissue Laser) and his **Planmeca Compact i Dental Unit** with integrated Digital X-ray System.



Dr Frits Hoogendijk completed his medical degree at the University of Pretoria in 1999 after which he completed his internship and community service in Hammanskraal. He was appointed as registrar in the Department of Maxillo-facial and oral surgery of the University of Pretoria in 2002 to become the first trainee with a degree in medicine as a primary qualification. He completed his dentistry degree in 2005 and was awarded the medal for Maxillo-facial and Oral pathology. During his training he published numerous papers in International journals and also presented at numerous international and local congresses. He completed his Maxillo-facial and Oral surgery degree in 2008 and was awarded the College of Medicine of South Africa’s medal for outstanding performance in the final exam. He was the only registrar to date to receive the Leibinger prize for exceptional research twice during his registrar career and was awarded the Synthes International fellowship during which he visited the Department of Maxillofacial and Oral Surgery of Freiburg in Germany in 2008. He is currently in private practice with a special interest in Head and neck Oncological surgery, facial reconstruction and custom prosthesis. He is also a consultant at the University of Pretoria for head and neck oncological surgery as well as at the Onderstepoort Veterinary Faculty for maxillo-facial and oral surgery.



Dr Nico Verloop is the first dentist in South Africa with the newest generation of dental laser – the **Biolase Waterlase iPlus** (ER,CR:YSGG). He qualified at Pretoria University in 2001 and recently returned from Holland after spending 11 years there in private practice. He has one of the most state-of-the-art dental practices in South Africa that was equipped by Elativision with their impressive range of dental technology – which includes the latest **Planmeca Compact i Plus** dental unit and digital x-ray systems, as well as the E4D CAD/CAM System. Seeing kids and even adults is especially great as in most cases **no drill and no injection** is necessary with the Waterlase iPlus! The Waterlase cuts enamel, dentine, bone and soft tissue with many advantages over the normal dental drill and scalpel blade! *Such as: less to no bleeding; less to no pain; faster healing; minimal invasive; disinfects as it cuts; no heat & no vibration; and many more.* www.biodentsa.co.za

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Stratasys 3D printing added to 3Shape Implant planning and guided surgery solution

Manufacturing pre-settings for Stratasys 3D Printers create seamless digital workflow for more accurate drill guides and improved patient experience

Stratasys Ltd. (NASDAQ: SSYS), a manufacturer of 3D printers and materials for personal use, prototyping and production, has announced that optimised manufacturing pre-settings for its Objet30 OrthoDesk and Objet Eden 3D Printers have been added to the latest release of 3Shape Implant Studio Implant Planning and Surgical Guides Design software.

3Shape Implant Studio implant planning and guided surgery software is designed to bring together implant planning, prosthetics, and drill guide design to provide a cost-efficient solution that saves chair-time and improves patient experience. By combining CBCT scans with 3Shape's TRIOS digital impressions, dentists can achieve accurate implant planning, and can produce aesthetic, high quality prosthetic solutions. The newly added pre-settings for Stratasys Objet-line

3D Printers enable 3Shape users to generate an STL file optimised for Stratasys dental 3D printing systems, aimed at ensuring smooth workflow with excellent results.

"We are very pleased that our dental lab customers now have access to complementary solutions from the 3ShapeImplant Studio Implant Planning and Guided Surgery System," said Avi Cohen, Director of Global Dental, Stratasys. "The two companies have collaborated to produce highly accurate surgical guides while refining additional 3D printing solutions, towards the accelerated implementation of the digital dental highway for dental labs worldwide, bringing mass customisation to small and mid-sized labs."

The Objet-line of Dental 3D Printers has received various awards in recent years, including the Dental Advisor 2013 Top Innovative Equipment Award, and the Dental Labs Products 2011 Readers Choice Award. [D](#)



Stratasys Objet Eden260V



Stratasys Objet30 OrthoDesk



Exciting Changes at Wright Millners



Daniel Millner
Executive Chairman



Marc Perotti
Managing Director

As Wright Millners embraces 2014 with open arms; there have been some changes at the top. **Daniel Millner** has taken on his new role as Executive Chairman while **Marc Perotti** moves into position as the new Managing Director. Dr Ian Matheson remains on the board as a Director.

For other exciting changes, visit the new-look Wright Millners website on www.wright-millners.co.za where you will find dedicated web offers & informative product videos.



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