

roots

international magazine of endodontics

4²⁰¹⁷



research

Photodamage of dental pulpa stem cells during 700 fs laser exposure

case report

Apexification treatment with MTA REPAIR HP

interview

Understanding sonic-powered irrigation



ROOTS

S U M M I T

is coming to

BERLIN

28 June – 1 July 2018

Berlin, Germany

www.ROOTS-SUMMIT.com



ADA CERP® | Continuing Education Recognition Program

dti | Dental Tribune International

DT STUDY CLUB
COURSES | DISCUSSIONS | BLOGS | MENTORING

ROOTS
S U M M I T



Tribune CME



Dr David E. Jaramillo

Dear Reader,

It is my great pleasure to invite you to the ROOTS SUMMIT 2018, which will be held in Berlin from 28 June to 1 July 2018.

ROOTS SUMMITS have always been known for the strength of their scientific programmes and their relevancy to clinical practice. This time will be no exception. Education is best paired with impeccable science, and that is what we will have at ROOTS SUMMIT 2018 in Berlin.

Together with Dental Tribune International, Steve Jones and Freddy Belliard, we have worked tirelessly to continue the tradition of scientifically and clinically relevant endodontic meetings that have been enjoyed around the world for the past 17 years.

Previous conferences have been held in Canada, the US, Mexico (in conjunction with the Asociación Mexicana de Endodoncia), Spain, the Netherlands, Brazil and India. The 2016 ROOTS SUMMIT took place in the UAE and was one of the most important events in endodontics, drawing over 300 dental professionals to Dubai.

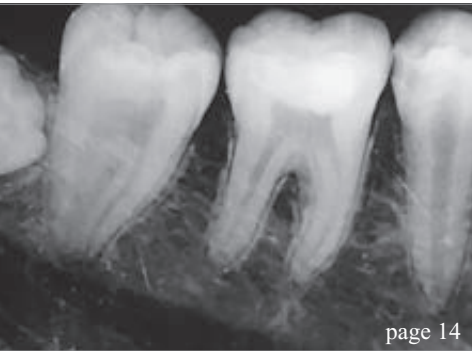
Berlin promises to be one of the best locations yet for a ROOTS SUMMIT, as it will be held in the unparalleled learning environment of the European School of Management and Technology (ESMT).

There is a list of over 10 top-level educators attending with the sole purpose of providing a great learning experience for all. We will continue the tradition of learning from the experts. Each one of our lecturers has unique expertise in their scientific and clinical daily work, willing to share their knowledge with all.

The programme for the next ROOTS SUMMIT, the premier global discussion forum dedicated to endodontic dentistry, has been released and is available online at: www.roots-summit.com and in this issue of **roots** magazine.

Sincerely yours,

Dr David E. Jaramillo (Guest Editor)
Scientific Chairman of ROOTS SUMMIT 2018



page 14



page 32



page 38

| **editorial**

- 03 **Dear Reader**
Dr David E. Jaramillo (Guest Editor)

| **opinion**

- 06 **A future path for** entrepreneurial dentists
Dr Mitesh Badiani

| **research**

- 10 **Photodamage of dental pulp stem cells** during 700 fs laser exposure
Prof. Dr Karsten König & Dr Anton Kasenbacher

| **case report**

- 14 **Diode-laser assisted vital pulp therapy**
Dr Maziar Mir, Prof. Dr Norbert Gutknecht,
Dr Masoud Mojahedi, Dr Jan Tunér &
Dr Masoud Shabani
- 18 **Laser-assisted direct pulp capping**
Pawel Roszkiewicz
- 22 **Apexification treatment with**
MTA REPAIR HP
Dr Fábio Duarte da Costa Aznar

| **study**

- 24 **Dentinal defects after root canal preparation**
Drs. Taha Özyürek, Mustafa Gündoğar,
Gülşah Uslu & Koray Yılmaz

| **feature**

- 32 Understanding **sonic-powered irrigation**
An interview with Dr Vittorio Franco

| **practice management**

- 36 Successful **communication** in your **daily practice**
Part I: Grumbling patients
Dr Anna Maria Yiannikos

| **industry report**

- 34 **Irrigating the root canal: A case report**
Dr Vittorio Franco
- 38 When **an idea** turns into **innovation**
Marc Chalupsky

| **industry news**

- 42 Manufacturer **news**

| **meetings**

- 44 **ESE Biennial Congress**
- 46 **ROOTS SUMMIT**
- 48 International **Events**

| **about the publisher**

- 49 submission guidelines
- 50 imprint



Cover image courtesy of Dentsply Sirona
(www.dentsplysirona.com).



FKG
swiss endo

XP ENDO[®]
shaper

3D agility_

The One to Shape your Success

- ▶ Anatomical root canal preparation
- ▶ Exclusive Adaptive Core™ Technology
- ▶ Superelasticity and expansion capacity
- ▶ Remarkable cyclic fatigue resistance
- ▶ Excellent debris removal



FKG Dentaire SA
www.fkg.ch

A future path for entrepreneurial dentists

Author: Dr Mitesh Badiani, UK

It is easy to generalise, but I think that most people would agree that we live in changing—and challenging—times. While technology is moving on apace, pushing all aspects of work and life forward and changing the way that we do even the most ordinary of things, uncertainty lingers over the future of our government, economy and commerce, not to mention the foot-dragging negotiations of Brexit or the numerous and frightening affairs overseas. It is difficult to predict which way things will go, whether you look at them a micro or a macro level.

Things are no different in dentistry. Disruption is afoot with the old, closed-door approach being slowly replaced by transparency and patient choice. New clinical indicators will increase the pressure to achieve higher quality and outcomes framework scores, and new regulations will ensure that the 'rogue traders' who occasionally blighted the name of the service—as they have so many others—can no longer gain a foothold, let alone a foot. All this change creates fertile ground for the entrepreneur, and yet they still face a perennial problem with financing their ambitions.

It is an unfortunate fact, but at the heart of any business is money. Whatever ethos drives a company, whether in the charitable sector, healthcare, public services, retail, or a brand within the FTSE 100, it can get nowhere without sustainable funding. This is a problem increasingly faced by dental practitioners, especially those looking to expand their business.

Ask around, and few dentists will say that they originally embarked upon their chosen career because they wished to go into business. There are far quicker and easier ways to do that. However, for those with a passion for the science, skills and service of dentistry, private practice offers the opportunity to take control and provides that invaluable commodity time. It might also mean specialising in one niche area, diversifying practice offerings or expansion through the creation of a portfolio of practices. Each of these options requires funding, but while traditional business



loans can be accessible to the single practice owner, the entrepreneurial dentist with an eye on expansion will soon discover the necessity of looking elsewhere in order to finance their plans.

The pitfalls of independent dental practice portfolio growth

Developing a small portfolio of dental practices brings particular challenges when it comes to securing sufficient funding. Despite the fact that they are free from the restraints that often bind practices that are part of corporate chains, independent practices with multiple outlets face their own issues. Not only do they tend to be too big to sell when retirement beckons—because who can secure that kind of funding?—but it can be next to impossible to raise the finance for further growth or investment. If you cannot find the funds to run a practice well, there is no point in running one at all.

register for
FREE

- education everywhere and anytime
- live and interactive webinars
- more than 1,000 archived courses
- a focused discussion forum
- free membership
- no travel costs
- no time away from the practice
- interaction with colleagues and experts across the globe
- a growing database of scientific articles and case reports
- ADA CERP-recognized credit administration

www.DTStudyClub.com

Join the largest educational network in dentistry!

ADA CERP® | Continuing Education
Recognition Program

ADA CERP is a service of the American Dental Association to assist dental professionals in identifying quality providers of continuing dental education. ADA CERP does not approve or endorse individual courses or instructors, nor does it imply acceptance of credit hours by boards of dentistry.

 **DT STUDY CLUB**
COURSES | DISCUSSIONS | BLOGS | MENTORING

dti | Dental
Tribune
International

Finance as an isolated issue needs methodical research, backed up by a comprehensive action plan and supported by a wide-ranging business plan. However, while practice owners and managers may wish to spend significant time looking for and securing funding, the practices bring other demands, including profit and loss (P&L), existing financial management, compliance, and of course, the small matter of delivering outstanding patient care, which will always be first and foremost for any reputable dental practitioner.

That commitment to patient care will also require time spent on hiring a team who share your philosophy, and delivering a training package that ensures that every member of the team shares the same ethos when it comes to the delivery of clinical excellence.

All of this takes time, even before you have moved on to compliance, an area not to be neglected but which is incredibly time-consuming. Compliance is often cited as the number one concern for dentists. Time must be spent ensuring your practice meets the regulations and interpreting the guidelines to ensure your practice is fully compliant.

It should also go without saying that staying on top of both P&L and financial management is imperative to the continued success of any business, dental practice or otherwise. Without a firm grasp on your existing finances, you cannot consider an expansion, no matter how entrepreneurial your spirit. Not only would your search for funding become exponentially more difficult, but in the unlikely event that you did gain financial backing you would simply be throwing good money after bad.

With so many demands on their time and their finances, how can today's generation of entrepreneurial dentists keep moving forward and find the cash that they need to meet existing demands and fund future expansion, without compromising on outstanding patient care? There has not been a sustainable funding model, and it has been stifling those dentists with the vision to take their practices forward.

The difficult balancing act between clinical excellence and corporate expansion

While it might not be the path that they originally expected to follow, for some dentists—including myself—the non-clinical aspects of dentistry can hold as much interest and satisfaction as one-to-one patient care. There is a certain pleasure in seeing a practice flourish and grow, and for those with an entrepreneurial bent it can lead to ideas of expansion

not just for the business opportunity, but for the challenges it brings. But once again, there comes the issue of funding.

After much time following the traditional financing routes, I came across Dentex, a UK partnership group for the dental profession, which allowed me to follow my interests without losing my autonomy. At my practices, we have always taken pride in the fact that we are one of the few dental practitioners outside of the large cities able to deal with the majority of our patient's requirements in-house, with no need for external referrals. My wish was to maintain, and if possible expand, my existing practices into a small portfolio.

Aside from access to real-time financials and the investment I required to facilitate my plans, Dentex's partnership model has enabled me to gain insights from a cross-practice comparison of financials, highlighting where I could make savings, or further investments, without hampering the services we have become known for.

The centralisation of all other elements of running the practices, such as cash flow, advertising, P&L, training, compliance, maintenance, has also liberated funds that would otherwise have been wasted through duplication of administration. And on a personal note, I have been freed to spend time pursuing my charitable interests and mentoring.

Some of my colleagues who are less focused on growing their own portfolio of dental practices have used the partnership model to unshackle themselves from aspects of practice admin in order to return to the clinical focus that originally fuelled their passion for dentistry, while others have taken the opportunity to slip into semi-retirement.

Work-life balance has always been a difficulty for practice owners. As any small business owner will attest, 'switching off' at the end of the day does not come easily when there is always something to be done. Having the safety net of being part of a wider group of dentists and being able to offload the aspects of the business that bring you less satisfaction means that you can wave goodbye to your last patient, confident that everything that should be done has been done. Days off lose their anxiety.

This new way of collaborating has meant that I have the freedom to pursue my own path while gaining support in areas such as financial responsibility and compliance. Dentists do not want to be tied up in red tape, but they do want the autonomy to decide what is best for their patients and their practice. The partnership group model is the ideal compromise.

author

Dr Mitesh Badiani

is a Regional Partner at Dentex, as well as Clinical Lead at Devon Dental Centre of Excellence and Plymouth Dental Centre of Excellence, with over 20 years of dental experience.

A MIRACLE OF FLEXIBILITY AND FRACTURE RESISTANCE

HyFlex™ EDM NiTi Files

- Easy handling for novice as well as ENDO specialists
- Reach success with few files
- Fast and safe outcomes
- Uniquely hardened surface due to spark erosion
- Unmatched flexibility thanks to controlled memory

Visit the COLTENE Stand at the
3. Gemeinschaftstagung der DGZ und
der DGET, 23 – 25 November 2017,
Hotel Palace Berlin

Come and check out our innovative ENDO range and don't miss the chance to join the lecture on traditional and heat-treated nickel-titanium instrumentation with Prof. Dr. Eugenio Pedullà on Saturday 25 November 2017, 1.30 – 2.15 pm.

info.de@coltene.com | www.coltene.com

 **COLTENE**