

roots

international magazine of endodontics

1 2017

case report

Safe way through risky curves

industry report

Laser-activated irrigation with PIPS

technique

Use of operating microscopy,
ultrasound and MTA
in periapical microsurgery



EQ-V

Easy and convenient cordless obturator
with innovative cartridge

Your Choice for Continuous Wave Obturation!

The new EQ-V system by META BIOMED
for the most reliable, convenient and precise
root canal obturation.

IDS 2017
Visit us in Hall 11.1
Booth B060



Meta Biomed Co., Ltd — Head Office
270 Osongsaengmyeong1-ro,
Osong-eup
Heungdeok-gu, Cheongju-si,
Chungbuk, Korea
Phone: +82 43 218 1981
info@meta-biomed.com
www.meta-biomed.com

Meta Biomed Europe GmbH
Haus der Wirtschaft, Raum 3.11
Wiesenstraße 35
45473 Mülheim an der Ruhr, Germany

Phone: +49 208 309 9190
europe@metabiomed-inc.com
www.buymetabiomedonline.com

 **META[®]**
BIOMED

Have we gone too far with rating our health care providers?

Each of us occasionally has a 'bad' day, sometimes it happens that a dentist appointment (or other health care provider) falls exactly that day! Usually you are annoyed and even dissatisfied before you even arrive, not mentioning the very bitter end.

After the appointment you are so filled with negative emotion about this event that you decide to share this horrible experience with the world at large.

You have spewed your revenge over the RateMDs page and felt a moment of relief. Now others who have any common sense and do their homework will know better than to go to Dr X. And that is where the problem starts. Is this rating fair? Does your commentary reflect what truly happened? Was it really a bad experience, worthy of letting others know?

The issue is that there is no rebuttal mechanism. So while common criminals have the luxury of being presumed innocent before being proven guilty, health care providers are sentenced with an inappropriate rating, not even knowing who may have levied the charges against them in the first place.

One might argue that a single negative rating is rather meaningless. If the health care provider is truly stellar at what he or she does, then the weight of the evidence will pull in the individual's favour and the one or two negative statements should bear no impact on the individual, right? Wrong. Even if one single patient decides to look elsewhere because of a 'faux review', then both patient and health care provider suffer.

The age of the internet has brought a level of disrespect to the way we deal with people and people's issues. Virtually everyone knows someone who is far more aggressive on e-mail than they are in person. Add to that, a system designed to provide anonymity such that anyone can say anything about anyone without consequence.

That all said, I do not mean to purport that there are not legitimate concerns or complaints, but how is one to decipher which ones are worthy of reading and which ones are not if the writer is unknown, and also if the supposed perpetrator of 'bad service' does not have an opportunity to respond?

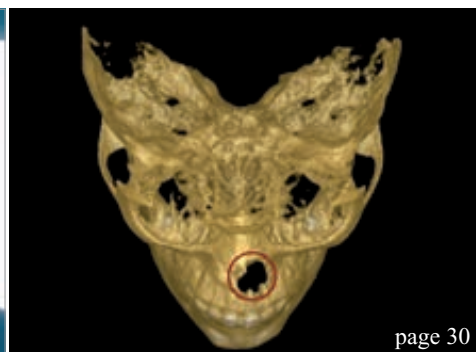
How about a message sent to the health care provider directly from the individual? If the health care provider is worth anything at all, he or she would want to know and perhaps rectify the situation. If they do not know about it, they cannot do anything about it. If someone is unwilling to voice a concern directly, chances are they are not as confident about their position as they appear to be in an anonymous forum.

Perhaps the system Uber has developed should be adopted by the health care world. While I get to rate each driver as I experience a ride, that same driver is rating me as a passenger. The fact that there is mutual evaluation perhaps leads to better mutual respect.

Dr Gary Glassman
Guest Editor



Dr Gary Glassman



| editorial

- 03 **Have we gone** too far with rating our health care providers?
Dr Gary Glassman (Guest Editor)

| practice management

- 06 **Rediscovering** operative dentistry
Aws Alani

| feature

- 10 “The immense **variability of human tooth** anatomy”
Interview with Dr Craig Barrington about his technique for capturing high-definition endodontic images

| case report

- 16 **Safe way through** risky curves
Dr Rafaël Michiels

| industry report

- 20 **Laser-activated irrigation** with PIPS
Dr Ralf Schlichting

| technique

- 26 Use of operating microscopy, ultrasound and **MTA in periapical microsurgery**
Prof. Leandro A.P. Pereira
- 30 **Zero apicectomy** in endodontic microsurgery
Dr Randa Harik, Dr Grace Issa & Prof. Philippe Sleiman

| industry news

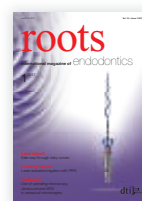
- 38 **XP-endo Shaper**—3-D shaping
- 40 **A commitment** to German quality
- 43 Manufacturer **news**

| meetings

- 46 ROOTS **SUMMIT 2016**
- 48 International **Events**

| about the publisher

- 49 submission guidelines
- 50 imprint



Cover image courtesy of FKG Dentaire (www.fkg.ch)



How to make a great file even better?

Same cutting efficiency and simplicity of use

Increased flexibility and safety

RECIPROC® blue

Simple, but effective: The new RECIPROC® blue file generation combines the ease of the original RECIPROC® one file endo concept with enhanced safety in root canal preparation for patients. An innovative heat treatment makes RECIPROC® blue particularly flexible to ensure a smoother and safer progression in the canal and gives it in addition its characteristic blue color.

A great file. Even better.

ENDO
EASY
EFFICIENT

Rediscovering operative dentistry

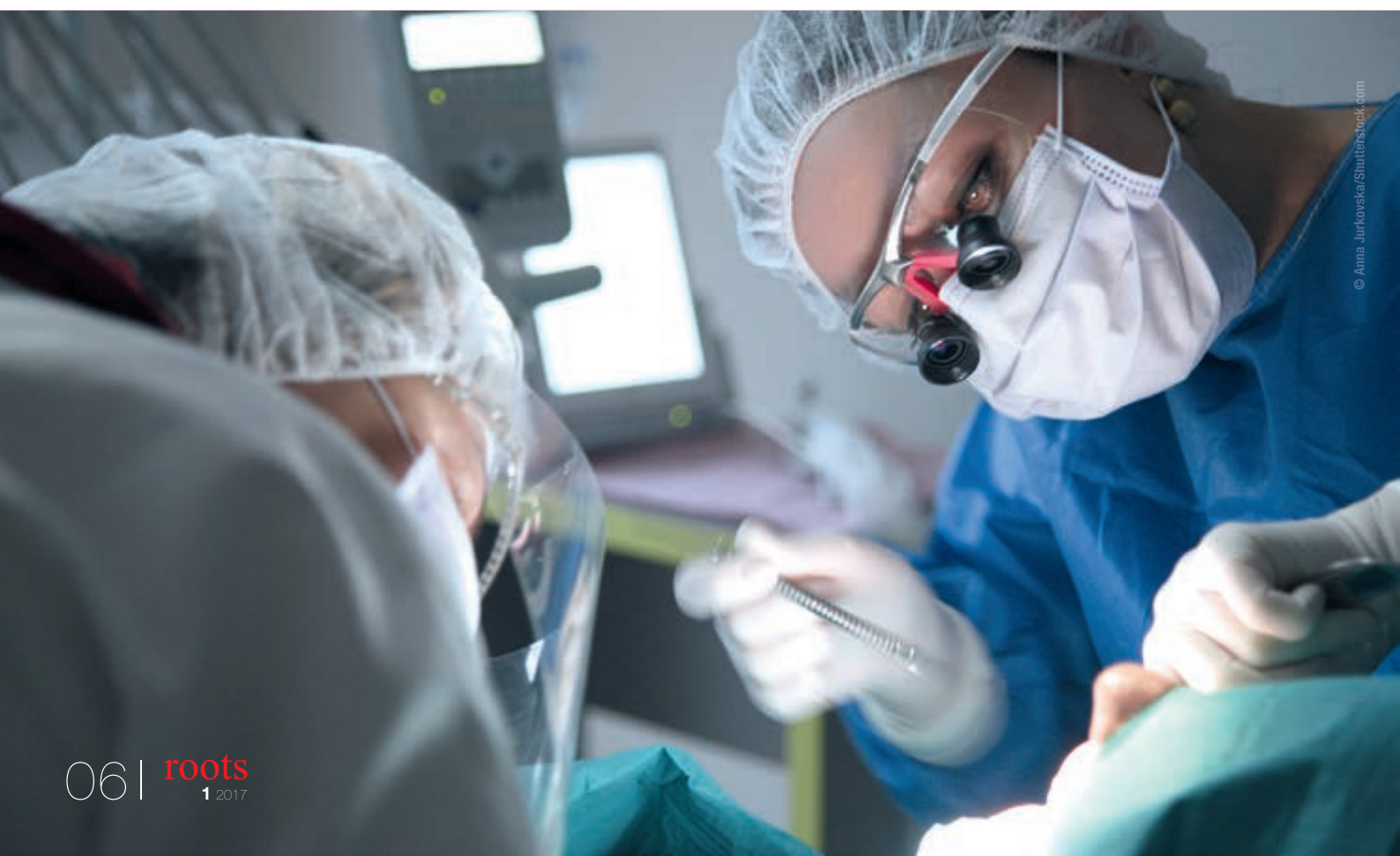
Author: Aws Alani, UK

The first thing to come to mind among the majority of the public when dentistry is mentioned is the delivery of fillings or the need for crowns, the management of the bite or the improvement of colour or shape of teeth. This is our core business and is the basis upon which the public is likely to measure the skill of the clinician. Indeed, many a dentist may cower behind the X-ray machine if he or she overhears a patient complaining in the waiting room that "the filling fell out an hour later". Nothing humbles us more than this sort of dissatisfaction.

Operative dentistry appears to be a lost art among a contract that does not reward and more lucrative cosmetic sidelines outside of dentistry. Indeed, fillings or crowns or methods of achieving maximal benefit from minimal intervention are not marketed

as "sexy" in the same way as Botox or aligners are. Despite what the dental spin-doctors want one to believe, restoring teeth optimally and properly will forever remain our utmost and required skill set. Conserving tooth tissue and protecting the pulp or preserving remaining tooth tissue after root canal treatment is invaluable where implants are less successful than we thought and veneers are more invasive than we would ideally like to provide.

Selling health as opposed to selling a product is the successful business model shared across all professions. Indeed, the value of health is priceless for a patient. The minimally invasive movement is rife in more acute and life-threatening situations than dentistry ever was and could be in the future. How many of us would truly prefer open-heart surgery



© Anna Jurkowska/Shutterstock.com

FREE EXTENDER/ROTATION*



MOUNTING OPTIONS



TABLETOP



FLOOR



HIGH WALL



WALL

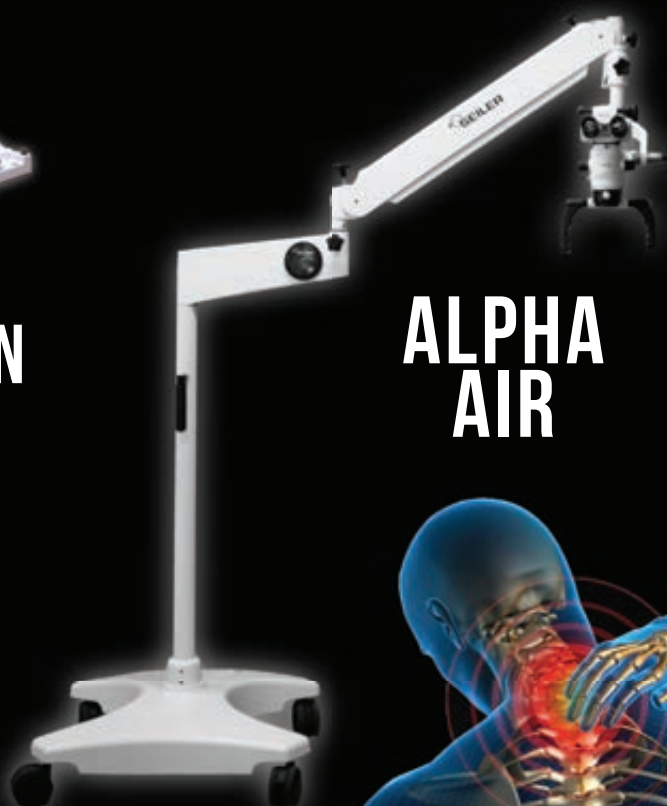


CEILING



EVOLUTION ZOOM

**"YOU CAN'T TREAT
WHAT YOU CAN'T SEE"**



ALPHA AIR

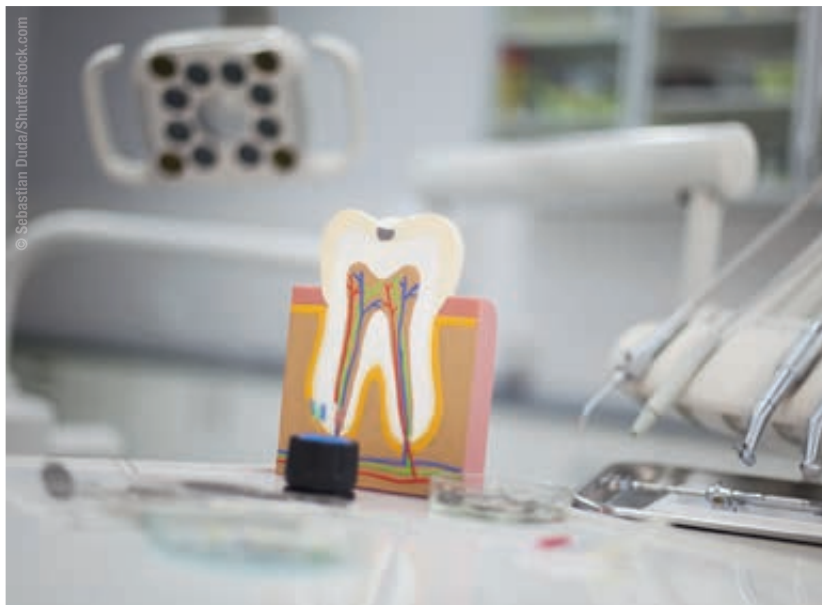


VISIT SEILER AT IDS - Hall 10.2 • Aisle N • No: 057



Contact Seiler for more information
1-800-489-2282 • micro@seilerinst.com • www.seilermicro.com

*EXTENDER/ROTATION IS A \$1495 VALUE



“Ask yourselves what your patients would choose if they **understood the difference between destroying tooth tissue and conserving it and the associated biological costs.**”

through the slow splitting expansion of a ribcage, like a cooking oyster, as opposed to a stent fed through the femoral vein with the wound the size of a plaster? Destructive dentistry sells because there are those among us who prefer to let our technical (or more talented?) colleagues do the creative work while they vaporise teeth to oblivion.

Like many paradoxical things in life, ignorance is bliss. Ask yourselves what your patients would choose if they understood the difference between destroying tooth tissue and conserving it and the associated biological costs. They would gladly pay more for a procedure that will guarantee less pain and likely prolong the longevity of the tooth as opposed to the restoration. We have to be wary of the root canal treatment crisis at the current time. Secondary care units are oversubscribed with referrals, and primary care is remunerated poorly for a procedure that is cost- and technique-prohibitive, but essential. Saving teeth and preventing pulp necrosis is where the profession should be, but not necessarily can be, in the current climate.

In addition to the threat of bacteria, patients are overworking their muscles and destroying their

teeth in the process. Parafunction is rife. From the stressed to the hypomobile, temporomandibular dysfunction is highly prevalent. (Indeed, the Brexit caused me some bruxing recently.) Owing to the intricacies of the joint, patients can present with a multitude of symptoms and its association with mental well-being means there is a high possibility of psychosocial factors to boot. As such, diagnosis is one conundrum, but treatment options can vary, depending on whom the patient sees and the skill set at the clinician's disposal.

From advice and exercises to arthroscopic procedures, the spectrum is wide and vacuous. Personally, I have found the tried-and-tested stabilisation splint (otherwise known as Michigan splint) a sensible option when advice on changing lifestyle and self-administered physiotherapy fails. Those patients who have succeeded at abating their symptoms with these devices cannot live without and swear by them. Once again, the minimally invasive prevails over the “occlusionists” (illusionists?) who aim for the perfect patient occlusion among the potentially most imperfect of mindsets. Take heed and beware of the patient who wants his or her bite fixed so that the jaw does not click.

Patients want to retain their teeth however heavily restored. Root canal treated or not, we are all wired to crown teeth to protect remaining tooth tissue. Against a background of widespread parafunction and ever-increasing cracking teeth, the need for crowns is higher than ever. Preparation of a tooth for a crown takes a great deal of skill and awareness of trajectories and angles while providing a preparation that is retentive to achieve a final shape that is conservative of tooth tissue. Those core skills of cutting are important and need not be abused.

Capturing the preparation in its entirety with the aim of providing technical colleagues with enough physical and written information to deliver an optimal restoration is fairly challenging too. Alas, the best crown preparation is only as good as the crown cemented to it. In a number of cases, many a dentist's head has been scratched when the crown fits the model perfectly, yet looks alien to the patient's mouth. Understanding why things have gone wrong is of as much importance in operative dentistry as knowing how to do things correctly.

When teeth are lost despite our best efforts, tooth replacement can seem a straight choice between an implant and a denture, as any conventional bridge-work will needlessly destroy the abutments. I still feel conventional bridgework has its place in operative dentistry, but it has been eclipsed by the emergence of resin-bonded bridges. These restorations

have had a mixed reception historically, but I can now say that they are the most predictable method of replacing a single tooth. Good longevity without any tooth preparation whatsoever is money for old rope and any solicitor sniffing is tempered by the lack of any harm to teeth or the patient. The recipe as always is being aware of the indications and sticking to the rules.

As we become progressively engrossed in the digital age, patients are increasingly requesting aesthetic improvements. That bad, bad word (starts with a 'v') can still be advocated, but there are easier, kinder and more predictable techniques we can provide for our patients. Whitening and bonding may not always have the same gloss finish as veneers (sorry!), but in the majority of cases, patients are entirely satisfied with a well-planned and executed case. Where residual spacing is closed, the colour is improved and the incisal edges are uniform and straight, the flaws are difficult to find.

The kudos attached to operative dentistry will slowly experience a rebirth as the undoubted need for these skills rises among our patients. One would hope the powers that be have the foresight to realise that an optimally restored and cared for tooth actu-

ally prevents the future need and cost for a crown, molar root canal treatment, molar root canal re-treatment, apicectomy, a complicated surgical extraction or a prosthesis.

Editorial note: Aws Alani is leading a two-year postgraduate diploma in operative dentistry at King's College London Dental Institute www.restoratedentistry.org. More information is available online at www.kcl.ac.uk/study/postgraduate/taught-courses/operative-dentistry-pg-dip.aspx.

contact



Aws Alani is a Consultant in Restorative Dentistry at Kings College Hospital in London, UK, and a lead clinician for the management of congenital abnormalities. He can be contacted at awsalani@hotmail.com.

www.restoratedentistry.org

AD

MAP SYSTEM
MICRO-APICAL PLACEMENT

MAP One

System for the professional placement of endodontic repair materials

Come try for yourself

the **MAP System**
& **PD MTA White**

Free workshops
IDS Cologne, 21-25 March 2017

Hall 11.3 . Booth E018-F019

For all information regarding
PD workshops at IDS,
please contact info@pdsa.ch, Produits Dentaires SA



New! Simplified. Economic



PD MTA White
Endodontic filling material.
4 applications (4x140 mg)
and 1 bottle of 3 ml pure H₂O

www.pdsa.ch



Produits Dentaires

Swiss quality dental products

a Proud Member of the
SWISS DENTAL
INDUSTRY