

roots

international magazine of endodontics

including

ROOTS
S U M M I T

special

ROOTS SUMMIT special

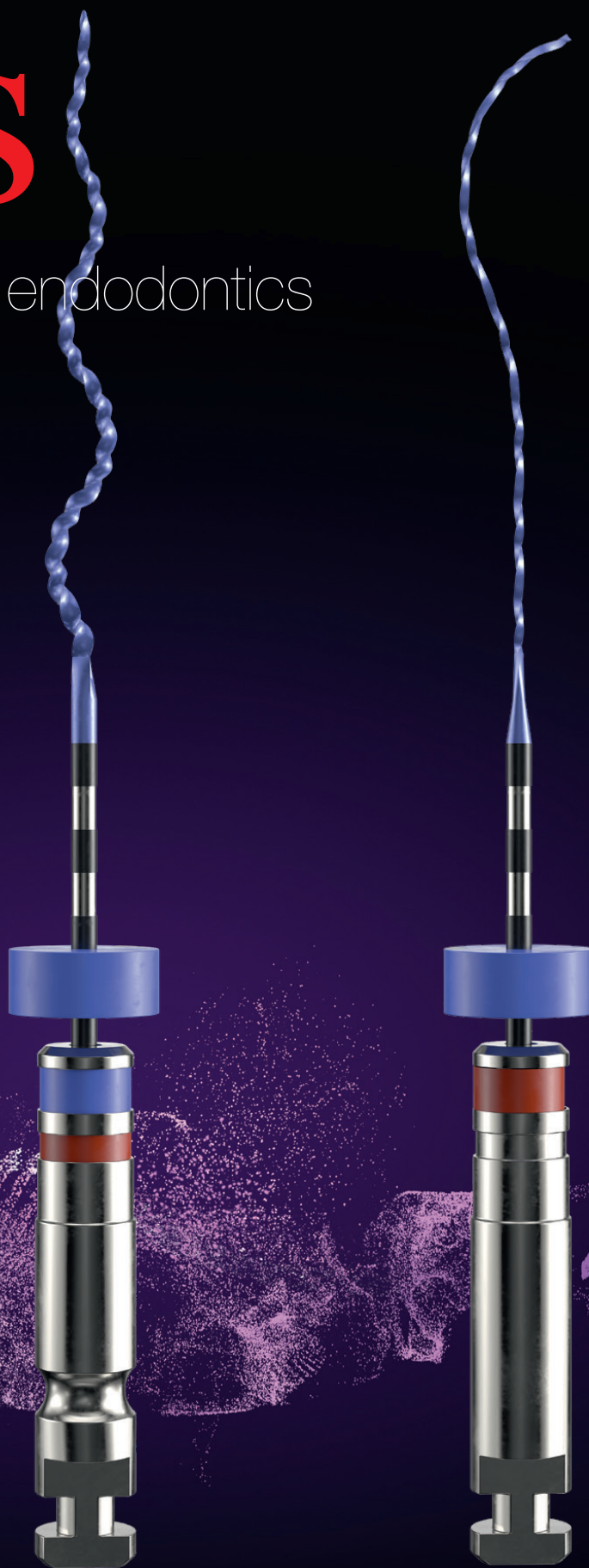
Lecture programme,
abstracts and
speaker information

study

Impact of reciprocal and
OTR motion on mechanical
NiTi files' resistance

case report

Management of intracanal
separated instruments



CanalPro™ Jeni

Digital assistance system for canal preparation

Jeni – ready – go!



NEW

Discover your Jeni moment!
jeni.coltene.com

Autonomous «navigation» in the endo canal owing to revolutionary software

- › Jeni mode continuously adapts to the individual root canal anatomy
- › Control of the file movement at millisecond intervals
- › Irrigation with aplomb
- › Apex locator – measuring length without interruption



<https://jeni.coltene.com> | www.coltene.com

COLTENE

Steve Jones

Co-chairman
ROOTS SUMMIT



Dear readers,

Welcome to this year's second issue of the **roots magazine**. There are many ways that the world has changed during this period as we wage a global battle against SARS-CoV-2. Our hope is that all of you are well and that you are staying safe during this difficult time. We also wish you a safe return to your practices.

The current situation has forced us to reschedule ROOTS SUMMIT to one year later than planned. The location remains the same, Prague in the Czech Republic, and the dates will be 20–23 May 2021. As so many people registered for our terrific programme, we will be hosting an online event for registered participants this Friday, 22 May, and Saturday, 23 May. Please take a look at the programme pages and join us for this valuable programme. There will also be an offer to register for the live event in 2021, and early registration for 2021 will include this exclusive online content.

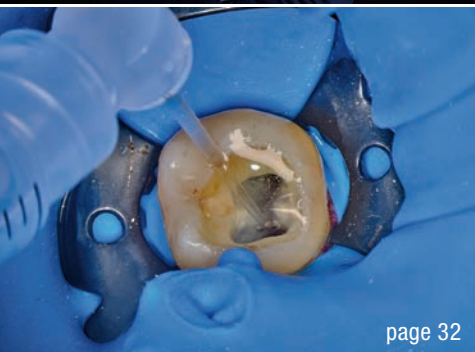
It gives us great pleasure to be able to showcase the work of the members of our Facebook group, ROOTS (www.facebook.com/groups/rootsendo). This month, Dr Sourav Banerjee's case report, "Management of iatrogenic pulpal floor perforation in a mandibular molar with MTA and PRF", provides a terrific example and comprehensive summary of the practical and useful information that is shared multiple times per day on ROOTS. If you have not already joined, please visit www.rootsendoforum.com and do so.

Thank you for picking up this issue, and we wish you continued good health and a safe return to normalcy.

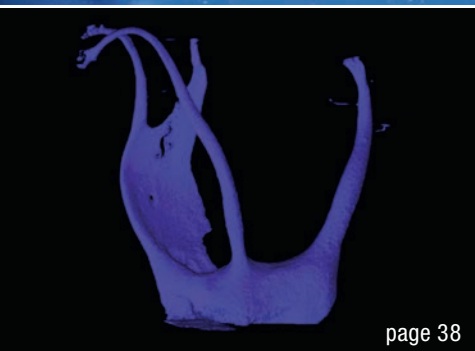
Steve Jones
Co-chairman
ROOTS SUMMIT



page 14



page 32



page 38

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



editorial

Dear **readers** 03
Steve Jones

ROOTS SUMMIT special

Lecture programme, **abstracts and speaker** information 06

education

The new endodontic channel for comprehensive learning 14
An interview with Dr Gianluca Plotino

study

Impact of reciprocal and OTR motion on mechanical
NiTi files' resistance **to fracture in cyclic fatigue testing**
and during canal preparation in resin blocks 16
Dr Sławomir Gabrys

case report

Root canal therapy with modern NiTi files: **Case reports** 22
Dr Ahmed Shawky

Management of intracanal separated instruments:
A clinical case report 26
Dr Hugo Sousa Dias

Effective and safe endodontic treatment of teeth **with curved canals** 32
Dr Grzegorz Witkowski

Clinical management of maxillary second molar root canal therapy
in different anatomical situations 38
Drs Philippe Sleiman & Alexey Volokitin

Management of **iatrogenic pulpal floor perforation in a mandibular molar**
with MTA and PRF: **A case report** 42
Dr Sourav Banerjee

manufacturer news 50

practice management

Successful **communication** in your **daily practice**
Part XI: Attracting prospective patients from abroad 54
Dr Anna Maria Yiannikos

about the publisher

submission guidelines 56

international imprint 58

E3 *Azure*

Enjoy the difference.
Power of Azure.

AZURE HT Technology



www.endostar.eu
www.e3azure.endostar.eu



endo★star

Lecture programme

ROOTS SUMMIT 2020 *online*

Day 1: Friday, 22 May 2020

10:00–11:00 Root to crown:
Advanced adhesive endodontic/
restorative concept
Dr Daniel Černý

13:00–14:00 When size matters:
The management of apical inflammatory
root resorption and how to adequately
seal the altered anatomy in just one visit
Dr Bogdan Moldoveanu

14:00–15:00 Microsurgical management
of the maxillary molar's palatal root
Dr Jaime Silberman

15:00–16:00 New motions and sequences
for NiTi heat-treated rotary instruments
Prof. Gianluca Gambarini

Day 2: Saturday, 23 May 2020

09:00–10:00 Post-endodontic restorative treatment
of severely damaged teeth
Dr Marian Fanica

10:00–11:00 Digital planning in intentional replantation
and autotransplantation
Dr Francesc Abella

11:00–12:00 Prognostic factors in endodontic retreatment
Dr Gianluca Plotino

12:00–13:00 Separated instruments—my approach
Dr Hugo Sousa Dias

13:00–14:00 The new CanalPro Jeni motor:
The instantaneous control for fully automated shaping
and disassembling retreatment procedures
Dr Eugenio Pedullà

14:00–15:00 Endodontic access: What size best
contributes to long-term endodontic success?
Dr Stephen Buchanan

Please visit www.roots-summit.com for the ROOTS SUMMIT 2020 *online* programme.

SkyPulse®

A new generation of compact
Fotona lasers

A compact, easy
to use Er:YAG Laser
tailored for Your
practice!



103696 CE ENG/1

Fotona
choose perfection

Speakers

ROOTS SUMMIT 2020 *online*



Dr Francesc Abella
(Spain)

Dr Francesc Abella graduated in 2005 in dentistry from the Universitat Internacional de Catalunya, Barcelona, Spain. From 2005 to 2014, he completed his master's degree and PhD in endodontics at the same university. He works in a private practice limited to endodontics and restorative dentistry in Barcelona, and in clinical endodontics, his areas of special interest include CBCT in endodontics, microcomputed tomography, dental anatomy, dental traumatology, periapical pathology, adhesive restoration and restoration of endodontically treated teeth. Besides his work in private practice, he is involved in endodontic research projects in the postgraduate endodontic programme of the Universitat Internacional de Catalunya.

Over the years, Abella has given several lectures and hands-on courses worldwide. He is the author of several papers in peer-reviewed journals and part of the expert committee convened by the European Society of Endodontology on the use of CBCT. Abella is also an active member of the Asociacion Española de Endodoncia [Spanish association of endodontics] and the secretary of the Sociedad Española de Odontología Conservadora y Estética [Spanish society of conservative and aesthetic dentistry].



Dr Stephen Buchanan
(USA)

Dr Buchanan received his dental degree in 1978 from the University of the Pacific Arthur A. Dugoni School of Dentistry in San Francisco. In 1980, he completed the endodontic graduate programme at Temple University in Philadelphia. He began pursuing 3D anatomy research early in his career. In 1989, he established Dental Education Laboratories, a state-of-the-art training facility devoted to hands-on instruction where he still teaches endodontic treatment, retreatment and segmented file retrieval. Early in his career, Buchanan identified the power of video and film media in training and produced the award-winning video series, *The art of endodontics*. Buchanan also holds a number of patents for dental instruments and techniques. Most notably, he was the first dentist to introduce variable-tapered instruments in endodontic therapy and pioneered a system-based approach to treating root canals. Buchanan is a diplomate of the American Board of Endodontics and a fellow of the International and American College of Dentists. He currently serves as a clinical guest professor at the Herman Ostrow School of Dentistry of the University of California and the University of California Los Angeles School of Dentistry and as a guest lecturer at Loma Linda University School of Dentistry. He maintains a full-time private practice limited to endodontics and implantology in Santa Barbara, California.



Dr Daniel Černý
(Czech Republic)

Dr Daniel Černý received his dental degree from the Charles University's Faculty of Medicine in Hradec Králové, Czech Republic, in 1998. Between 1998 and 2007, he worked as an assistant professor at the same faculty.

He is currently completing his doctoral degree with a focus on adhesive post-endodontic treatment at Palacký University Olomouc in the Czech Republic. Since 2001, he has maintained a private practice limited to adhesive dentistry and endodontics in Hradec Králové.

Černý has been the President of the Czech Endodontic Society since 2015. He was the co-founder and first President of the Česká akademie dentální estetiky [Czech academy of dental aesthetics] from 2007 to 2009. From 2009 to 2013, he served on the editorial board of LKS—Časopis České stomatologické komory [journal of the Czech Dental Chamber]. He is also the co-founder of the Dental Summit congress in Prague, Czech Republic. He has been the co-owner and director of the HDVI continuing education institute since 2010. Černý has contributed four chapters to dental books and lectures both nationally and internationally.



Dr Hugo Sousa Dias
(Portugal)

Dr Hugo Sousa Dias graduated with a DDS from University Fernando Pessoa, Porto, Portugal, and completed the postgraduate programme in endodontics at the University of Lisbon, Portugal.

Besides running a practice limited to endodontics in Porto, he is Director of the Master in Endodontics clinical residency programme at Foramen Dental Education, Porto. Dias is the founder of the Portuguese Group for Endodontic Study (study club), and a member of the European Society of Endodontology and the Sociedade Portuguesa de Endodontologia [Portuguese endodontic society]. He has given more than 40 lectures around the world and is co-author of a chapter in the book *The Root Canal Anatomy in Permanent Dentition* (Springer, 2018).



Dr Marian Fanica
(Romania)

Dr Marian Fanica graduated from the University of Medicine and Pharmacy Carol Davila in Bucharest, Romania. He received a bachelor's degree in dentistry in 2005 and a master's

degree in endodontics in 2015. His practice has been limited to endodontics since 2015 with a field of interest also in dental adhesives. Dr Fanica is an international lecturer and hands-on dental trainer in Europe and Asia. His professional memberships include the European Association of Osseointegration, the Society of Esthetic Dentistry in Romania and the Dentistry National Organization in Romania.



Prof. Gianluca Gambarini
(Italy)

Prof. Gianluca Gambarini is head of endodontics and restorative dentistry at the Sapienza University of Rome, Italy, and director of the dental school's master of endodontics programme.

He maintains a private practice limited to endodontics in Rome, where his focus is on endodontic materials and clinical endodontics.

As an international lecturer and researcher, Gambarini has held more than 500 presentations at world's most renowned international congresses and universities. He has also received several awards and led research projects funded by national and international grants. In addition to that, Gambarini is an active consultant in the development of new technologies, surgical procedures and materials for root canal therapy. Furthermore, he holds patents concerning endodontic technologies he has developed. Currently, Gambarini serves as Chairman of the Clinical Practice Committee of the European Society of Endodontology.



Dr Bogdan Moldoveanu
(Romania)

Dr Bogdan Moldoveanu graduated from the Faculty of Dental Medicine at the Iuliu Hațieganu University of Medicine and Pharmacy in Cluj-Napoca, Romania, and then pursued

postgraduate studies in endodontics at the dental school of the University of Turin, Italy. There, he graduated with a master's degree in clinical and surgical micro-endodontics. He also holds a certificate in dental implantology from the Carol Davila University of Medicine and Pharmacy in Bucharest, Romania. He is an assistant professor at the University of Turin, where he teaches in the master's programme in clinical and surgical micro-endodontics, and he is an assistant professor at the Iuliu Hațieganu University of Medicine and Pharmacy in the discipline of dentistry, endodontics,