2013 Winter Scientific Meeting

1 December 2013
HKAM Jockey Club Building, Aberdeen

Management of Endodontic and Periodontal Infections – Now and the Future

Programme Outline

TIME		
08:30 – 09:00	Registration	
09:00 – 09:05	Opening remarks *Professor Edward Lo* *President, The College of Dental Surgeons of Hong Kong*	
09:05 – 10:35	Parallel Sessions	
	Root canal disinfection: An update and future directions *(Part 1)* *Dr Anil Kishen*	**Antimicrobial advances in treating periodontal diseases *(Part 1)*** *Professor Andrea Mombelli*
10:35 – 11:15	Coffee break	
11:15 – 12:30	**Root canal disinfection: An update and future directions *(Part 2)*** *Dr Anil Kishen*	**Antimicrobial advances in treating periodontal diseases *(Part 2)*** *Professor Andrea Mombelli*
12:30 – 14:00	Lunch	
14:00 – 15:30	**Root canal disinfection: An update and future directions *(Part 3)*** *Dr Anil Kishen*	
15:30 – 16:00	Coffee break	
16:00 – 17:30	**Antimicrobial advances in treating periodontal diseases *(Part 3)*** *Professor Andrea Mombelli*	

CME Credits	**AM**	**PM**
The College of Dental Surgeons of Hong Kong	3 CME points (CAT A)	3 CME points (CAT A)
The Dental Council of Hong Kong	3 CPD points	3 CPD points

Dr Anil KISHEN
BDS, MDS, PhD
Associate Professor and Head,
Discipline of Endodontics, Faculty of Dentistry,
University of Toronto, Canada

Dr. Anil Kishen graduated with a Bachelor of Dental Surgery from the University of Madras, and a Master of Dental Surgery in Endodontics & Operative Dentistry from the Tamil Nadu Medical University, Madras, India. He subsequently received his PhD in Biomedical Engineering from the Nanyang Technological University, Singapore. In 2003, he joined the National University of Singapore as an Assistant Professor and was later promoted as Tenured Associate Professor in the Department of Restorative Dentistry. In 2009, he moved to the University of Toronto in Canada, where he is currently a Tenured Associate Professor & Head of the Discipline of Endodontics. He has published over 125 peer-reviewed publications, and is a co-inventor in 5 patents and invention disclosures. He has presented over 70 invited lectures world-wide. He is a recipient of many awards and honors including, The *Enterprise Challenge Innovator Award in Singapore*. He has published 11 book chapters, which includes the *6th Edition of Ingles Endodontics*. He has also co-edited two books. He serves as an Associate Editor for the Journal of Endodontics, Endodontic Topics and BMC Microbiology. He also serves in the Research and Scientific Affairs Committee of the American Association of Endodontists and on the editorial boards of many international journals. At the University of Toronto, Dr. Kishen is involved with the undergraduate and graduate teaching, and is the Principle Investigator of a laboratory that focuses on the photo-therapeutics and nanomaterial research. His research is funded by the Canadian Foundation of Innovation and Natural Sciences & Engineering Research Council of Canada.

Synopsis

Microbial-biofilms are surface-adherent consortium formed by microbes in response to environmental factors. From an endodontic perspective, microbial-biofilms are important as there have been several reports of biofilm-mode of bacterial growth in infected root canal systems. Biofilm bacteria are particularly resistant to anti-microbials and are difficult targets to eliminate completely using conventional irrigants/medicaments, especially from the root canal system. The first part of the lecture will discuss the fundamentals of root canal irrigation dynamics and the current status of endodontic irrigation. The second part of the lecture will cover different advanced anti-biofilm strategies in root canal disinfection. The third part of the lecture will address some of the issues pertaining to post-treatment endodontic environment from both mechanical and microbiological perspectives, and present a nanotechnology-based innovation to enhance endodontic disinfection and mechanical integrity of dentin in root-filled teeth.

Professor Andrea MOMBELLI
DDS, Dr. med. dent.
Professor and Chair,
Division of Periodontology and Oral Physiopathology,
University of Geneva, Switzerland

Professor Andrea Mombelli is Professor and Chair, Division of Periodontology and Oral Physiopathology and director of the post-graduate program in periodontology at the University of Geneva, Switzerland. He was president of the Dental Section of the Faculty of Medicine at the University of Geneva (2001-2005) and associate vice-dean of the Faculty of Medicine (2005-2011), and is former president of the Swiss S ociety of Periodontology (1992-1996 and 2004-2008).

Professor Mombelli graduated from the University of Bern, School of Dental Medicine and completed his post-graduate studies reaching the status of Private Docent in 1992. He has a Swiss Federal diploma in dentistry (D.D.S.), a Doctorate in dentistry (Dr. med. dent.) and is a Swiss board certified periodontist. He is member of the senate of the Swiss Academy of Medical Sciences, fellow of the International Team for Oral Implantology (ITI) and member of several review boards and editorial committees, including those of the Journal of Clinical Periodontology and Clinical Oral Implants Research. He and his colleagues have been pioneers in the study of diagnosis, etiology and therapy of peri-implantitis. Currently they are involved in clinical trials evaluating new anti-microbial protocols to optimize the treatment of periodontal and peri-implant infections.

Professor Mombelli has received several awards and honorary memberships of societies of periodontology and implantology in different countries including honorary membership and the H.R. Mühlemann Research Prize of the Swiss Society of Periodontology.

Synopsis

The beneficial effects of anti-microbials for patients with periodontal diseases have been demonstrated multiple times. Although these advantages are clear in general, the specific relationship of benefit and risk in various clinical situations remains a subject of debate. Uncertainties persist regarding the individual prescription and combination with other procedures. It has been pointed out that systemic antibiotics given in the context of non-surgical subgingival debridement may reduce the need for periodontal surgery. Recent studies confirm these findings especially with regards to the combination of amoxicillin and metronidazole.

The morning session will address various paradigms and questions in the context of anti-microbial treatment of periodontal diseases and present the latest results of our recent clinical trials focusing on these subjects. A treatment protocol implementing the newest evidence will be shown. Clinical cases will be discussed to demonstrate the practical application of our concept. This will include patients with advanced periodontal disease and complex periodontal and prosthodontic problems. It is noteworthy to realize that most cases of chronic and aggressive periodontitis today can be treated successfully with simple and cost-effective means.

While the morning session will focus on initial therapy, the afternoon lecture will focus on the long-term maintenance of patients previously treated for periodontal disease. Persistence of a limited number of residual pockets after therapy is a reality. Repeated conventional instrumentation with metal instruments however removes a substantial amount tooth substance over time, may cause gingival recession and may induce hypersensitivity of teeth to thermal and physical stimuli. Various antimicrobial regimens, including photodynamic therapy and subgingival air-polishing, have been proposed for better suppression of periodontopathic microorganisms. We will present the latest data of our recent studies on this topic, explain our treatment protocol and show clinical cases with long-term follow-up.