

CENTRE FOR ADVANCED DENTAL EDUCATION

3rd Faculty of Dentistry Symposium

ENDODONTICS
&
MANAGEMENT OF DENTAL EMERGENCIES

12 to 13 January 2008
Orchard Hotel
Orchard Ballroom 1 & 2

CDE Points: 14

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SPEAKERS' PROFILES

Dr Stanley F. Malamed, DDS



Dr Malamed was born and raised in the Bronx, New York, graduating from the New York University College of Dentistry in 1969. He then completed a dental internship and residency in anesthesiology at Montefiore Hospital and Medical Center in the Bronx, New York before serving for 2 years in the U.S. Army Dental Corps at Ft. Knox, Kentucky.

In 1973, Dr Malamed joined the faculty of the University of Southern California School of Dentistry, in Los Angeles, where today he is Professor of Anesthesia & Medicine.

Dr Malamed is a Diplomat of the American Dental Board of Anesthesiology, as well as a recipient of the Heidebrink Award (1996) from the American Dental Society of Anesthesiology and the Horace Wells Award from the International Federation of Dental Anesthesia Societies, 1997 (IFDAS).

Dr Malamed has authored more than 135 scientific papers and 17 chapters in various medical and dental journals and textbooks in the areas of physical evaluation, emergency medicine, local anesthesia, sedation and general anesthesia. In addition, Dr Malamed is the author of three widely used textbooks, published by CV Mosby: Handbook of Medical Emergencies in the Dental Office (6th edition 2006); Handbook of Local Anesthesia (5th edition 2004); and Sedation – A Guide to Patient Management (4th edition 2003) and two interactive DVDs: Emergency Medicine (2004) and Malamed's Local Anesthetic Technique DVD (2004).

Dr Arnaldo Castellucci, MD, DDS



Dr Arnaldo Castellucci graduated in Medicine at the University of Florence in 1973 and specialized in Dentistry at the same University in 1977.

From 1978 to 1980, he attended continuing education courses on Endodontics at Boston University School of Graduate Dentistry with Professor Herbert Schilder.

Besides running a practice limited to Endodontics in Florence, Dr Castellucci is Past President of the Italian Endodontic Society, Past President of the International Federation of Endodontic Associations, an Active Member of the European Society of Endodontology and the American Association of Endodontists. He is Visiting Professor of Endodontics at the University of Florence Dental School, Italy.

He is the editor of The Italian Journal of Endodontics and The Endodontic Informer. He is also the Founder and President of The Warm Gutta Percha Study Club and The Micro-Endodontic Training Center.

He is a very well-known international lecturer and is the author of the text books (2 volumes) Endodontics, which is now available in English.

Dr Cheng Sim Kim, BDS, MSc (TCM)



Dr Cheng graduated with a Bachelor of Dentistry in 1972 from University of Singapore. He had completed the study of Chinese Traditional Medicine in Singapore College of TCM and graduated with Diploma of TCM in 1999. He has been practicing TCM at the Singapore Chong Hua Medical Institution since then.

He subsequently went on to pursue his interest in TCM at Nanjin, China and obtained a degree in Master of Science (TCM) from Nanjin University of TCM in 2004.

Dr Cheng is currently a lecturer and clinical tutor at the Singapore College of TCM and also a dental practitioner.

PROGRAMME AT A GLANCE

3RD FACULTY OF DENTISTRY SYMPOSIUM LECTURE SCHEDULE

DAY 1 (SATURDAY 12 JANUARY 2008)

<u>TIME</u>	<u>TOPIC</u>	<u>SPEAKER</u>
7.00am to 8.00am	REGISTRATION	
8.00am to 8.05am	Opening Address by Chairman	
8.05am to 8.15am	Opening Speech by Dean	
8.15am to 9.45am	The Use of MTA in Clinical and Surgical Endodontics	Dr Arnaldo Castellucci
9.45am to 10.15am	TEA & TRADE EXHIBITION	
10.15am to 12.00 noon	The Use of MTA in Clinical and Surgical Endodontics (cont)	Dr Arnaldo Castellucci
12.00pm to 1.30pm	LUNCH & TRADE EXHIBITION	
1.30pm to 3.00pm	Local Anesthetics: Dentistry's Most Important Drugs	Dr Stanley F. Malamed
3.00pm to 3.30pm	TEA & TRADE EXHIBITION	
3.30pm to 5.00pm	Local Anesthetics: Dentistry's Most Important Drugs (cont)	Dr Stanley F. Malamed

DAY 2 (SUNDAY 13 JANUARY 2008)

<u>TIME</u>	<u>TOPIC</u>	<u>SPEAKER</u>
7.15am to 8.00am	REGISTRATION	
8.00am to 9..30am	Emergency Medicine: Sudden Cardiac Arrest and Automated External Defibrillators (AEDs)	Dr Stanley F. Malamed
9.30am to 10.00am	TEA & TRADE EXHIBITION	
10.00am to 11.30pm	Emergency Medicine: Sudden Cardiac Arrest and Automated External Defibrillators (AEDs) (cont)	Dr Stanley F. Malamed
11.30am to 12.10am	Traditional Chinese Medicine & Dentistry	Dr Cheng Sim Kim
12.10pm to 1.30pm	LUNCH & TRADE EXHIBITION	
1.30pm to 3.00pm	Access Cavity Preparation and Modern Concepts for Shaping the Root Canal System	Dr Arnaldo Castellucci
3.00pm to 3.30pm	TEA & TRADE EXHIBITION	
3.30pm to 5.00pm	Access Cavity Preparation and Modern Concepts for Shaping the Root Canal System (cont)	Dr Arnaldo Castellucci

LECTURE SYNOPSIS

LOCAL ANESTHETICS: Dentistry's Most Important Drugs

Dr Stanley F Malamed, DDS

Synopsis:

Local anesthetics (LA) form the backbone of pain control techniques in dentistry. Prof. Malamed will discuss the development of these drugs, the clinical differences in current LA formulations, allergy, epinephrine, safety and use of LA in children and the prevention and management of LA overdose.

Learning objectives:

- (1) Distinguish between ester- and amide- local anesthetics
- (2) Name 5 amide LAs currently used in dentistry and their expected durations of action
- (3) Discuss the relative risk of allergy to injectable ester- and amide- local anesthetics
- (4) Discuss the use of epinephrine in cardiovascular risk patients
- (5) Determine the appropriate LA dosage for each LA in the pediatric dental patient
- (6) Describe the signs & symptoms of LA overdose
- (7) Describe the management of LA overdose

EMERGENCY MEDICINE: Sudden Cardiac Arrest and Automated External Defibrillators (AEDs)

Dr Stanley F Malamed, DDS

This lecture is designed for ALL members of the dental office staff.

Synopsis:

Approximately 1200 persons die each day in the United States from sudden cardiac arrest that occurs 'not in a hospital'. 95% die.

Approximately 70% of these SCA occur in the victim's home. Since the introduction of the AED into the public domain (Public Access Defibrillation – PAD), survival rates from out-of-hospital SCA have been significantly increased.

Medical emergencies can, and do happen in the practice of dentistry. Indeed, we might consider the dental office to be the doctors' 'second home'. Health-care professionals MUST be prepared to manage these unforeseen and potentially catastrophic events. In this lecture Dr Malamed will review the preparation of the staff and office to quickly and effectively manage medical emergencies.

Cardiovascular problems: acute myocardial infarction (AMI) and SCA will be discussed in depth, as the AED has been called the most significant addition to life-saving since the introduction of cardiopulmonary resuscitation in 1960.

Recognition of the signs and symptoms of AMI and the management of AMI and SCA will be stressed, along with the need for every doctor to give very serious consideration to the purchase of this potentially life-saving device.

Learning objectives:

- (1) List the signs and symptoms associated with ischemic heart disease
- (2) Discuss the emergency management of: (a) anginas pectoris, (b) myocardial infarction, and (c) sudden cardiac arrest
- (3) Describe the use of the automated external defibrillator

The Use of MTA in Clinical and Surgical Endodontics

Dr Arnaldo Castellucci, MD, DDS

Synopsis:

Recently, Dr Mahmoud Torabinejad of Loma Linda University, California, has developed a new cement named Mineral Trioxide Aggregate (MTA) which appears to have all of the characteristics requested of the ideal cement to seal pathways of communications between the pulp and the oral cavity (mechanical and carious pulp exposures), and between the root canal system and the periodontium (iatrogenic perforations, open apices, resorbed apices, root-end preparations).

MTA is an endodontic cement that is extremely biocompatible, capable of stimulating healing and osteogenesis, and is hydrophilic. MTA is a powder that consists of fine trioxides (Tricalcium oxide, Silicate oxide, Bismute oxide) and other hydrophilic particles (Tricalcium silicate, Tricalcium aluminate, responsible for the chemical and physical properties of this aggregate), which set in the presence of moisture. Hydration of the powder results in formation of a colloidal gel with a pH of 12.5 that solidifies to a hard solid structure in approximately three to four hours. This cement is different from other materials currently in use because of its biocompatibility, antibacterial properties, marginal adaptation and sealing properties, and its hydrophilic nature.

The characteristic that distinguishes MTA from other materials used to date in endodontics is its hydrophilic properties. Materials used to repair perforations, to seal the retro-preparation in surgical endodontics, to close open apices, or to protect the pulp in direct pulp capping, are inevitably in contact with blood and other tissue fluids. MTA is the only material that is not affected by moisture or blood contamination; the presence or absence of blood do not seems to affect the sealing ability of the mineral trioxide aggregation.

Access Cavity Preparation and Modern Concepts for Shaping the Root Canal System

Dr Arnaldo Castellucci, MD, DDS

Synopsis:

It is universally accepted that a successful outcome in endodontic therapy depends on three factors: cleaning and shaping, disinfection and three-dimensional obturation of the root canal system. However, there is another step that precedes and affects all three. This is the preparation of the access cavity.

As far as the shaping procedure is concerned, in recent years there have been significant advancements in Endodontics. This evolution is driven by market demand and the continuous improvement in the manufacturing process. Dentists have increasingly identified the features they deem essential on the endless journey towards a more perfect file. These features include flexibility, efficiency, safety and simplicity.

The rotary NiTi instruments and systems represent a revolutionary generation of instruments for shaping root canals.

Non cutting instruments systems with radial land (fixed taper), cutting instruments with fixed tapers and a new generation of multi-tapered instruments with cutting edges will be described.

Concepts, techniques and finishing criteria that may be utilized to fulfill the mechanical and biological objectives for shaping and cleaning canals will also be described and explained.

Learning this new concept of instruments will lead to the discovery of the new way of shaping root canals, giving them the adequate funnel shape and allowing the 3D obturation that Prof Schilder taught us long time ago.

Traditional Chinese Medicine (TCM) & Dentistry

Dr Cheng Sim Kim, BDS, M.Sc. (TCM)

Synopsis:

The Chinese had identified dental diseases in around 3000 B.C. Since then, methods have been developed to treat various types of dental diseases and are well documented in many TCM classics. The understanding and treatments of dental disease differ from the western medicine in terms of philosophy and methodology.

Concepts of TCM

- (1) TCM view human body as an open system which is not only closely interlinked internally, but also an integrated part of nature. Unlike reductionism in western medicine, TCM employs system approach as its methodology.
- (2) The taxonomy of the body in TCM is based on complex structure rather than anatomical structure. The body itself is a large complex structure composed of various intertwined functional systems (complex structure) that interact harmoniously to produce the various emergent properties and behaviors, i.e. the various life activities.
- (3) These functional systems can be broadly categorized according to their functional characteristic into Yin & Yang type of processes. It is the dynamic balance of these two opposing and yet complimentary processes that maintain the normal activities of life. Any disturbance of this balance will lead to disease.
- (4) Classification of diseases is based on the patterns of functional deviations from the normal behavior rather than changes in anatomical structure.

Holistic view of Dentistry in TCM

- (1) TCM holds that the oral cavity together with the surrounding tissue (including the TMJ) are closely linked to the various functional systems through the meridians.
- (2) Dental diseases are manifestations of functional deviations of these systems or the perturbed relationships among them.
- (3) Saliva serves as one of the important medium through which the body exerts influence on tissues in the oral cavity.

Therapeutic principle of TCM treatment of dental diseases

- (1) Treatment is directed at local lesion as well as correction of the functional deviations of the whole system.
- (2) Restoring of functions basically involves resynchronization of the synergistic interactions among the various processes.
- (3) Principles or strategies are also categorized according the pattern of deviations.

Learning objectives:

- (1) Understand the basic concepts of TCM
- (2) Look at dental diseases in a holistic view
- (3) Understand the basic therapeutic principle of TCM in treating dental diseases
- (4) To explore the complimentary dental treatments available in TCM

REGISTRATION DETAILS

Registration Fees

Your registration fee includes admission to all the lectures at the symposium, trade exhibition, a welcome pack as well as lunch and tea for both days. Entry to the symposium is by registration only.

On-site registration is subject to availability of seats. The fee quoted below are inclusive of 7% GST.

Register before 9 November 2007 to enjoy the early bird discount.
Registration closes on 21 December 2007.

For enquiries, please contact Mrs Doris Wong (Tel: 6772 4965; Email:denwlc@nus.edu.sg) or Ms Joanne Goh (Tel: 6772 4196; Email:dengohsl@nus.edu.sg)

	<u>Dentists</u>	<u>Dental Students/Auxiliary</u>
Early Bird Registration	S \$ 320.00	S \$ 210.00
Registration	S \$ 380.00	S \$ 240.00

How to Register

Complete the registration form, including payment of the full registration fees, and mail/fax to:

Third Faculty of Dentistry Symposium Secretariat
Dean's Office, Faculty of Dentistry
Level 3 National University Hospital
5 Lower Kent Ridge Road
Singapore 119074
Fax: 65 6779 6520

For payment of fees, please provide either credit card information or cheque made payable to "National University of Singapore" (please write your name & DCR number at the back of the cheque).

All registrations must reach the secretariat latest by 21 December 2007.
A confirmation letter will be sent upon receipt of the full fee payment.

Cancellation/ Refund Policy

Cancellations have to be made in writing. A cancellation fee of S\$50 will be charged for all cancellations requested on or before 21 December 2007. There will be no refunds after closing date.

Accommodation

Below is a list of recommended accommodations that are in the vicinity of the symposium venue. Please contact the hotel's reservation office directly to make the necessary arrangements.

Hotel	Contact for reservations	Estimated room rates per night
Orchard Hotel (442 Orchard Road Singapore 238879)	6739 6795 (Ms Xiaowei) xiaowei.chong@orchardhotel.com.sg	S\$235+++
Hilton International Singapore (581 Orchard Road Singapore 238883)	6730 3208 (Mr Anasri Onn) singapore@hilton.com	S\$320+++
Orchard Parade Hotel (1 Tanglin Road Singapore 247905)	6737 1133 info@orchardparade.com.sg	S\$210+++
Regent Singapore (1 Cuscaden Road S249715)	6725 3088 theregent.rsn@fourseasons.com	S\$350+++

Room rates are correct at time of printing.

Location Map of Conference Venue:



Third Faculty of Dentistry Symposium Secretariat
Dean's Office, Faculty of Dentistry,
Level 3 National University Hospital, 5 Lower Kent Ridge Road, Singapore 119074
Email: fodsymposium@nus.edu.sg
Website: <http://www.dentistry.nus.edu.sg/symposium/symposium.htm>