2017 Endodontic Board Review and Scientific Update
Schedule
Virginia Commonwealth University

DAY 1: Friday, February 10, 2017

7 a.m. Registration and Breakfast

7:45 a.m. Welcome
David C. Sarett, D.M.D., M.S., Dean, VCU School of Dentistry; Clara Spatafore, D.D.S., M.S., Chair, VCUSOD Department of Endodontics; Garry Myers, D.D.S., AAE President-Elect; and Raphael Garofalo, D.D.S., B.Sc., College of Diplomates Director

8 a.m. Top 20 Questions on the Top 20 Prescribed Drugs
B. Ellen Byrne, D.D.S., Ph.D.
Our patients are living longer and taking more medications. This clinical relevant presentation will review to top 20 drugs prescribed, including indications, contraindications, oral side effects and drug interactions. Familiarity with these drugs will provide the practitioner with a better appreciation for over health of the patient and implications for prescribing additional medications.

Learning Objectives:
• Name the top 20 drugs prescribed.
• Identify clinically relevant drug interactions involving the top 20 drugs.
• Identify side effects.
Disclosure: Dr. Byrne has no past or present proprietary or relevant financial relationship or receive gifts in kind (including soft intangible remuneration), consulting position or affiliation, or other personal interest of any nature or kind in any product, service, course and/or company, or in any firm beneficially associated therewith.

9:30 a.m. Break

10 a.m. Radiology in Endodontics
Sonali A. Rathore, D.D.S., M.S.
Disclosure: Dr. Rathore has no past or present proprietary or relevant financial relationship or receive gifts in kind (including soft intangible remuneration), consulting position or affiliation, or other personal interest of any nature or kind in any product, service, course and/or company, or in any firm beneficially associated therewith.
11 a.m.  
*Pathology and Endodontics*

John Svirsky, D.D.S., M.Ed.

Learning Objectives:
- Demonstrate a logical approach to the diagnosis and treatment of common radiolucent lesions found on radiographs.
- Recognize the common radiographic lesion found in endodontic practices.
- Recognize the histologic appearance of the lesions commonly found in endodontic practices.

**Disclosure:** Dr. Svirsky has no past or present proprietary or relevant financial relationship or receive gifts in kind (including soft intangible remuneration), consulting position or affiliation, or other personal interest of any nature or kind in any product, service, course and/or company, or in any firm beneficially associated therewith.

12:30 p.m.  
Lunch

1:30 p.m.  
*Risk Assessment and Management of the Medically Complex Endodontic Patient*

Bradford Johnson, D.D.S.

The goal of this presentation is to serve as a brief overview of common medical conditions that may require modification of the standard treatment protocol to ensure safe endodontic treatment. The intended audience is candidates preparing for the written and oral parts of the American Board of Endodontics certification exam and other endodontists.

Learning Objectives:
- Describe a risk assessment strategy for medically complex patients and know when to modify your standard treatment protocol and/or seek medical consultation prior to treatment.
- Discuss common drug:drug interactions and allergies relevant to endodontic practice.
- Explain appropriate treatment modifications for patients with cardiovascular disease, diabetes, pulmonary diseases, kidney and liver disease, immunosuppression, history of bisphosphonate therapy and prosthetic joint replacement.

**Disclosure:** Dr. Johnson has a past or present consulting position or affiliation with DENTSPLY Sirona and has received honorarium from the College of Diplomates and the Chicago Dental Society.

3 p.m.  
Break

3:15 p.m.  
*Microbiology of Endodontic Disease*

Christine M. Sedgley, D.D.S., M.D.Sc., M.D.S.

This presentation is aimed at endodontists who would like to both review the relevant literature and update their knowledge about endodontic microbiology.

Learning Objectives:
- The major developments in endodontic microbiology and how they have influenced the practice of endodontics.
- Current concepts in endodontic microbiology and the significance of biofilm communities in endodontic infections.
• The effects of endodontic treatment procedures on the microflora and clinical indications for antibiotics.

Disclosure: Dr. Sedgley has no past or present proprietary or relevant financial relationship or receive gifts in kind (including soft intangible remuneration), consulting position or affiliation, or other personal interest of any nature or kind in any product, service, course and/or company, or in any firm beneficially associated therewith.

4:45 p.m.  Break

5 p.m.  ABE Boardwalk
Clara M. Spatafore, D.D.S., M.S.
The Boardwalk presentation is intended to provide valuable information regarding the certification process. A detailed explanation of the examination sequence will be provided. Helpful hints for preparation of the Written, Case History Portfolio and Oral Examinations will be outlined. The current timeline for progression through the certification process will be detailed along with current recertification guidelines. At the conclusion of the presentation, questions will be fielded from the audience regarding topics pertaining to endodontic Board certification.

Learning Objectives:
• Describe the different levels of candidate status for Board certification.
• Describe the sequence and timelines for examinations required for endodontic Board certification.
• List the requirements for recertification.

6 – 8 p.m.  Wine and Cheese Reception

DAY 2: Saturday, February 11, 2017

7 a.m.  Breakfast

8 a.m.  The Current Best Evidence for Endodontic Treatment Outcomes
Shimon Friedman, D.M.D.
The outcome of endodontic treatment modalities has been challenged because of inconsistent reports on prognosis, especially for teeth requiring treatment of persistent endodontic disease. This inconsistency is confusing to dentists and endodontists and it may act to skew their treatment planning decisions. The definitive outcomes of treatment need to be determined for specific endodontic treatment modalities (initial treatment, retreatment, apical microsurgery, intentional replantation, autogenous transplantation, vital pulp therapy, revascularization, apexification, etc.) and in relation to specific outcome goals (healing, functional retention, survival). To do so, studies consistent with the CURRENT BEST EVIDENCE should be identified as reference, and the definitive outcomes effectively communicated to provide dentists better insight into endodontic prognosis. This lecture will define the outcomes of endodontic therapy in regards to healing, functional retention and survival based on the current best evidence for the major endodontic treatment modalities. Clinical factors will be highlighted that may influence the outcomes.

Learning Objectives:
• Describe the methodological considerations for clinical research aimed at studying prognosis.
• Identify the current best evidence for different endodontic treatment modalities.
• Summarize the prognosis, functional retention and survival after endodontic treatment.
• List the clinical factors that influence the prognosis after endodontic treatment.
• Debate the impact of treatment techniques on prognosis after endodontic treatment.

**Disclosure:** Dr. Friedman has received a past or present honorarium from DENTSPLY Maillefer and DENTSPLY Sirona.

9:30 a.m.  
**Break**

9:45 a.m.  
**Inflammation and Immunology**  
Ashraf Fouad, B.D.S., D.D.S., M.S.  
Learning Objectives:  
• Discuss the major systems that mediate the host response in pulpal and periapical inflammation.  
• Identify the differences between innate and specific immune responses to endodontic pathogens.  
• Describe the mechanism of bone resorption and deposition as it relates to pathogenesis and healing of periapical lesions.

**Disclosure:** Dr. Fouad has no past or present proprietary or relevant financial relationship or receive gifts in kind (including soft intangible remuneration), consulting position or affiliation, or other personal interest of any nature or kind in any product, service, course and/or company, or in any firm beneficially associated therewith.

11:15 a.m.  
**Break**

11:30 a.m.  
**Diagnosis and Management of Cracked Teeth and Vertical Root Fractures and Restoration of Endodontically Treated Teeth**  
Keith V. Krell, D.D.S., M.S., M.A.  
Learning Objectives:  
• The new definitions for crack and fractured teeth from 2015.  
• The diagnostic tests used for identifying cracks and fractures.  
• The known etiologies for cracks and fractures in teeth.  
• Recommended treatments for cracks and fractured teeth.  
• Possible outcomes after diagnosis and treatment.  
• What are the survival differences between vital versus endodontically treated teeth.  
• What makes endodontically treated teeth different from vital teeth.  
• When should dowel and cores be used in endodontically treated teeth.  
• What are restorative options for endodontically teeth.  
• Current recommendations.

**Disclosure:** Dr. Krell has no past or present proprietary or relevant financial relationship or receive gifts in kind (including soft intangible remuneration), consulting position or affiliation, or other personal interest of any nature or kind in any product, service, course and/or company, or in any firm beneficially associated therewith.
1 p.m.  

Lunch

1:45 p.m.  

**Regenerative Endodontics, Analgesics, Anesthetic Review on Regenerative Endodontics and Stem Cells**  
Anibal Diogenes, D.D.S., M.S., Ph.D.

Clinicians are often faced with the challenge of treating underdeveloped, immature teeth with pulpal necrosis. These cases have been traditionally treated with apexification procedures. In the last decade, regenerative endodontic procedures have emerged as an alternative for treating immature teeth. Although both procedures have the primary goal of resolving the disease process, REPs aim to achieve additional goals related to the restoration of a vital pulp-like tissue and the functional regeneration of normal homeostatic functions. Therefore, these procedures share one goal but are fundamentally different. In order to better understand and compare both procedures, clinicians must understand patient-centered, clinician-centered and scientist-centered outcomes. This three-level outcome assessment provides the framework for understanding the current status of regenerative endodontic procedures, and in turn, provides the benchmark for comparison with apexification procedures. This lecture focuses on discussing the current evidence that supports both procedures, while providing the biological basis for clinical decisionmaking. In addition, case selection, expected outcomes and technical pitfalls will be presented and discussed.

Learning Objectives:

- Identify the different types of stem cells and the major oral stem cells likely involved in regenerative endodontic procedures.
- Understand the biologic foundation regenerative endodontic procedures.
- Identify different levels of clinical outcomes.
- How to overcome some technical pitfalls of currently employed regenerative procedures.

**Disclosure:** Dr. Diogenes has no past or present proprietary or relevant financial relationship or receive gifts in kind (including soft intangible remuneration), consulting position or affiliation, or other personal interest of any nature or kind in any product, service, course and/or company, or in any firm beneficially associated therewith.

3:15 p.m.  

Break

3:30 p.m.  

**Pain Management: Anesthetics and Analgesics**  
Anibal Diogenes, D.D.S., M.S., Ph.D.

The dental pulp is one of the most densely innervated tissues in the body. The pulpal innervation is not only unique in quantity but there are several qualitative patterns that make dental pain particularly challenging to treat. An astute clinician must understand the peripheral and central neuronal changes that often follow inflammation. These plastic changes in the neuronal system pose several challenges for intra- and post-operative pain management. Local anesthesia is a prerequisite for adequate treatment. However, inflammation modulates both the bioavailability and the efficacy of currently used local anesthetics. Likewise, analgesics must be carefully selected to maximize therapeutic efficacy while minimizing side effects. In this lecture the trigeminal nociceptive system and its modulation will be reviewed. In addition, the pharmacology and therapeutics of local anesthetics and most commonly used analgesics will be discussed.
Learning Objectives:
- Describe the major components of the trigeminal nociceptive pathway.
- Understand the mechanism of action of local anesthetics and major reasons for anesthesia failure.
- Describe how NSAIDS work, their indication and contraindication.
- Evaluate the therapeutic value of opioid in treating endodontic pain.

**Disclosure:** Dr. Diogenes has no past or present proprietary or relevant financial relationship or receive gifts in kind (including soft intangible remuneration), consulting position or affiliation, or other personal interest of any nature or kind in any product, service, course and/or company, or in any firm beneficially associated therewith.

5 – 6 p.m. 

*Oral Board Exam: Strategies in Preparation and Execution*
Donna J. Mattscheck, D.M.D.

Utilizing the Oral Examination developed by the ABE, this presentation will discuss some strategies for preparation and propose potential techniques to aid Board Candidates.

Learning Objectives:
- Become aware of how daily involvement in the specialty of endodontics is already helping you prepare for the Oral Exam.
- Develop the ability to better understand questions posed during the exam.
- Discover ways to answer questions that will best convey your clinical decisionmaking and thought processes to the examiners.

**Disclosure:** Dr. Mattscheck has received past honorarium from DENTSPLY, and past and present other financial or material support from the AAE, ABE and COD for travel.

**DAY 3: Sunday, February 12, 2017**

7 a.m. 

*Breakfast*

8 a.m. 

*Periradicular Surgery and Repair*
George Bruder, D.M.D.

In this lecture, review surgical endodontic literature and techniques with special focus on diagnosing endodontically treated teeth that may be candidates for nonsurgical/surgical retreatment or implant therapy will be reviewed.

Learning Objectives:
- Describe the metamorphoses that exist between classic and contemporary surgical techniques.
- Identify biologic aspects of surgical endodontics and spatial features.
- Discuss the prognosis of surgical endodontics and future endodontic treatment modalities.

**Disclosure:** Dr. Bruder has a past or present consulting position or affiliation with DENTSPLY Sirona.

9:30 a.m. 

*Break*

9:45 a.m. 

*Traumatic Dental Injuries & Root Resorption—An Endodontic Perspective*
Garry Myers, D.D.S.
This presentation will provide an overview of traumatic dental injuries that may have an impact on pulpal, dentinal and cemental tissues requiring the expertise of quality endodontic care. Since there is a lack of prospective human studies on traumatic dental injuries, many treatment principles have evolved from retrospective studies, animal studies and case reports that have led to treatment guidelines that are continually being modified. While some types of root resorption are a common sequelae to traumatic injuries, over time several variations of root resorption have been identified and each necessitate their own recommended treatment principles due to the nuances associated with each type of resorption. These various types of root resorption will be discussed to include clinical and radiographic presentations as well as strategies for treatment of these conditions.

Learning Objectives:
- To provide a brief overview of a variety of traumatic dental injuries with corresponding pulpal effects and treatment principles.
- To develop an understanding of the similarities and differences between external, internal and cervical root resorption.
- To understand what needs to take place before root resorption can occur.
- To develop concepts and strategies in managing the various types of root resorption that an endodontist may encounter.

Disclosure: Dr. Myers has no past or present proprietary or relevant financial relationship or receive gifts in kind (including soft intangible remuneration), consulting position or affiliation, or other personal interest of any nature or kind in any product, service, course and/or company, or in any firm beneficially associated therewith.

11:30 a.m.  Closing Remarks
11:45 a.m.  Program Conclusion