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Helpful Hints

Eager to share their success and excitement, every new group of Diplomates offers their tips and insights to help those who have yet to get through the difficult, yet rewarding Board Certification process. New Diplomates routinely referred to the various examinations as “fair” and “rewarding.” Their specific observations and helpful hints regarding the Oral Examination are listed below.

General

Reading Materials New Diplomates Recommended
- *Inflammation: A Review of the Process* by Henry O. Trowbridge and Robert C. Emling
- *Pathways of the Pulp* by Stephen Cohen and Kenneth M. Hargreaves
- *Seltzer and Bender’s Dental Pulp* by Kenneth M. Hargreaves, Harold E. Goodis and Samuel Seltzer
- *Dental Management of the Medically Compromised Patient* by Donald A. Falace and James W. Little
- *Journal of Endodontics*, especially the last two to three years
- *Essentials of the Traumatic Injuries to the Teeth* by J.O. and F.M. Andreasen
- ABE web site
- College of Diplomates web site, particularly the abstracts
- AAE web site

Suggested Study Methods
- Flashcards
- In a quiet and secluded study location
- Review courses
- Utilize a mentor and/or study partner
- Set aside time for study and reflection on a regular basis
- Listen to CD-ROM’s of CE courses while commuting

Suggested Study Resources
- ABE web site
- Abstracts published on the College of Diplomates web site
- PubMed search
- ABE Boardwalk held annually at the AAE’s annual session
- Local study groups – organize or join one

Mentors
- A common thread among the Candidates is the importance of having at least one mentor.
- I encourage all Candidates to seek out mentors, a most valuable tool that is available to you. If you do not know anyone that can help you, place a quick call to the College of Diplomates.
- I cannot emphasize enough how much help it was to study with another person.
- It is strongly advised to seek out one or more mentors for each phase of the process. Different opinions will develop insight into topics and expose areas needing more investigation.
- It was extremely beneficial for me to utilize the experiences of current Diplomates to guide, suggest and motivate. They served as role models, sounding boards and examples through the process.
Seek out mentors throughout the process. I found all of the Diplomates that I approached to be extremely helpful with advice and guidance throughout the entire process.

Review Courses
- The value of attending review courses throughout the Board Certification process is mentioned over and over.
- Take all the endodontic review programs that you can.
- The Board review courses are great for the Written and Oral Examination.
- A Board review course is indispensable in helping to put it all together.

Oral Examination
Relax
- Relax. Take a review course to focus on current topics and review classic literature as your foundation.
- The Examiners are very fair and helpful. Relax and be confident (though it is hard to do). Know dental management of medically compromised patients, and review oral pathology and oral radiology.
- Don’t stress. There are great preparation materials online. Do a few mock Boards with your mentor.
- I am not sure that there is enough that you can do to prepare. The key is to try to stay as calm as you can. If you have studied the material, you know the stuff well enough, but recalling in this type of situation can be difficult, being anxious doesn’t help. I guess the most important thing to remember is to be prepared.
- If you are preparing for the Oral Exam, you have already spent many hours reading and re-reading material. You are prepared! Try reading out loud; get used to your voice talking endodontics. One month before your Exam, take a mock oral exam with a mentor. You cannot spend enough time verbalizing your thoughts. Then talk to anyone who will listen: patients, spouse, kids. Lastly, get a good night’s sleep before your Exam. RELAX and enjoy the moment.
- Try to relax. Being nervous will only work against you! The Examiners are all there to help you. Give as much information as you can for each question and don’t forget to quote the authors if you can. Get a good night’s sleep before the exam!
- This was actually a pleasant experience for me. The Examiners were all extremely kind and grateful to the people taking the test, and you knew they appreciated your efforts and wanted you to pass. It is always nice to know that the organization you may become a part of has people that you would want to associate with.
- Be relaxed. You won’t know everything. Use the Board Review notes online. Take it again if you don’t pass at first.
- Don’t panic. Get it all together and be confident. Reaching this stage means you’re capable of passing. You just have to organize your thoughts. The Examiners are really nice and there to help you. R E L A X.

Be Prepared
- Study for 3 - 4 months before the exam. It is difficult to retain the information for a longer period. Use the summary of information the Board provides as a guideline. While the exam is only 1 1/2 hours long, the Board does an excellent job of covering all aspects of treatment in each of the three 30 minute sessions. There is enough time to answer all of the questions but be succinct with your answers. The Board members want you to pass and they try to make you as comfortable as possible.
- Start out by getting all of your study materials organized and then set a timeline for yourself. You need to feel comfortable discussing all aspects of treatment. Take time to think about different scenarios and tying various concepts together.
- Obtain recordings of lectures given by Board examiners and other speakers on pertinent
topics from the AAE meetings to listen to during commutes to work, etc. Practice well ahead of time verbalizing answers to potential questions rather than just thinking them through.

- Studying the material is an important part of the process, but so is communicating the material in a clear manner that you can articulate. Of the entire process, the Oral Exam preparation required the most time and energy, as it required the greatest familiarity with the material involved.

- Study a little bit every day so that it does not become overwhelming. Going to an endo review session is helpful. Use the “Boardwalk” suggestions, the AAE website, and practice speaking the answers.

- You can’t possibly know everything, so be confident with what you know when you sit before the Board of Directors. In addition to reading and understanding the traditional texts (Pathways of the Pulp, Dental Management of the Medically Compromised Patient, Trowbridge’s Inflammation…), I recommend listening to lectures from past AAE Annual sessions. The lectures provide the latest information on a given topic and help you understand the level at which you should know the topic.

- You must know about medically complex patients. Organize the literature by themes and categories before you study. You want the supporting literature to pop in your head the minute you hear a topic. Leading up to the Exam, keep a running list of current literature and add to it each month any time you find a solid article in the journals.

- 1) Try not to just read a book and memorize it, such as Inflammation. Try to put the pieces together and connect the science to the clinical art. Understand the biological mechanisms and be able to explain or rationalize the procedure or specific technique involved in treating the patient’s condition. For example, irrigation questions to be considered: why are you irrigating with NaOCl, EDTA or CHX? What is the irrigant doing? Which microorganisms does it affect and how? Why is it important? Then support it with literature (try for at least two authors for each topic). This type of thought process will thoroughly prepare you for the Oral Exam. 2) Review the references at the end of each journal article. This will help to ingrain the more frequently used references and allow easier recall and familiarity with the literature. 3) Partner with someone and develop case scenarios and questions and test each other. The process of testing each other and writing out questions and answers for cases, though time consuming, pays off dividends in helping to prepare for the Orals.

- The review material provided by the Board was extremely helpful. Reading the major textbooks and paying attention to important cited authors gives a good foundation. The reviews really help you cement that information. Identify several topics that are coming up a lot in recent literature and know several articles on them. Try to stay current all along in reading the JOE and other periodicals. I would give at least 3 months of studying depending on how much time you can put in. During the Exam, don’t lose your cool. They know and appreciate that you are well prepared and will give you a chance to answer the questions you should know. They will, however, ask some things that you will not know. When that happens, just shake it off and move on.

- Use the study aids provided at the College of Diplomates website. Attend an ABE/College of Diplomates Board Review Course. Get at least one mentor. Be able to verbalize your justification for every step and every procedure that you do in your clinical practice.

- Review everything you can get your hands on. Personally, I found the Endodontic Topics journals helpful, as well as the review material on the ABE website. “Practice” the information while you are treating cases – run through the author’s research in your head while treating patients. Find a partner and practice mock exams as much as possible. Practice verbalizing your answers and the Examination day will be more comfortable.

- First, you have to study everything that you can possibly think of and you will still feel unprepared. During the Oral Examination, request additional information about each case scenario as if you are examining a new patient in your practice. Do it systematically, so
that you don’t miss anything. Know how to manage medically compromised patients and their medical conditions. Be prepared to answer questions about possible endodontic complications and management of those complications. It is always helpful to get advice from mentors.

- Know medically compromised care like you’ve never known it. Know your pathology like you’ve never known it. The endodontic lit will come back to you with time but your brain will act like a sieve with medically compromised care and pathology
- Study medical conditions that affect our clinical practice. Do your best to quote as much literature as possible. Be confident, but if you do not know the answer, move on!
- This can be the most daunting part of the process, as many different didactic elements must be studied. Plan to study for a few months and try to dedicate some time at least a few days per week. A very thorough review of the medical history is just as important as the endodontic literature review.
- Start studying and preparing no less than 3 months out. Study whatever you are weak on and apply it to clinical situations. Attend a Board Review course. Keep your composure. The Exam is fair and the Examiners make the Exam as comfortable for you as they can.

Practice
- First, I would suggest reading textbooks, such as The Dental Pulp and Pathways of the Pulp. It is a good beginning as far as getting your thoughts organized and developing references. Then, a month or two before the exam find someone to study with. I had a partner and we would practice scenarios with each other. Forcing yourself to say an answer with references, to someone who knows the answer, turned out to be extremely helpful. It really boosted our confidence.
- Verbally express what you are studying to familiarize yourself with references and information. The ability to coherently relay the information is as important as learning it.
- A mentor is crucial for mock orals. You should be able to have a conversation about the patient's medical condition rather than just providing a solution. Pick yourself up and move to the next question if you can’t answer the previous one—the examiners already respect you for coming this far, and would hate to see you give up now.
- Verbalize your justification for every step and every procedure you do in your practice.
- It is critical that you can site literature sources to support all decision making during treatment, from the sealer you use to the diagnostic testing performed to your choice of anesthesia. The ABE handbook was helpful as well, listing the possible topics for discussion during the Oral Exam and Pet Peeves. One technique I found beneficial as the big day approached was to quiz myself during patient treatment. This was a great way to practice explaining my reasoning for all treatment decisions in a logical manner.

Pet Peeves

These Pet Peeves concentrate on the most stressful part of the exam, the Orals.

The entire Board was surveyed. Each Director was asked to list at least three of their most egregious peeves during the Orals. It is one thing to list all the “do’s” when answering questions, but what about the little things that could be done better to negotiate your way through your three thirty minute sessions without raising the eyebrows of the directors. Hence, the Pet Peeves. These are not fatal errors, but enough of them and the interviewing Director(s) will have a tendency to view your Oral Examination less favorably.

The two greatest areas of peevishness deal with literature citations and the pace of the examination process, mentioned by no less than four Directors. The remaining peeves were mentioned by only one or two. So please read on and consider the comments from the Directors.
References!
- Use references when indicated or asked for.
- References are to be used to justify your comments.
- Unlike the Written Exam, during the Orals there are almost no instances where we ask for a specific author.
- Failure to use any literature citations to support an answer or using too many references from the 60’s and 70’s when more relevant and current literature is available.
- A Candidate should be able to quote the classic literature from our specialty, at a minimum, to support a position. Don’t quote “sponsored” speakers as a justification on clinical issues and treatment procedures. Especially if those issues are controversial and not backed up by the literature.

Trying to Control the Pace of the Examination
- The second most popular peeve - the Candidate that tries to control the pace of the questions.
- Keep in mind that the Directors must complete all ten sections of their scripted scenario.
- A Candidate that can’t completely answer a question should say so and then move on. Do not dwell on the question and then try and answer the question later on. Let it go. On the other hand, do not filibuster.
- Be concise with your answers. Brevity is a virtue.

Radiographs
- When asked to describe what is seen on the radiograph, leave nothing out!
- Do not fall prey to tunnel vision and describe only the tooth involved.

Pharmacology
- Candidates who have a limited or outdated knowledge of pharmacology. Be prepared to discuss current pharmacology as it relates to patient care.

Incorrect Diagnostic Terminology
- The candidate who uses outdated or wrong diagnostic terminology. Use the current diagnostic terminology when asked to make a diagnosis.

Medical History
- A candidate who fails to ask for the medical history and vital signs.

Biologic Basis
- Overall, not having a biologic basis for what they purport to do with a similar case in their office.

Advice
- A few Directors felt compelled to throw in a few words of advice along with their favorite peeve. This advice includes such hints as:
  - Don’t be nervous,
  - The Board is there to test you knowledge and help you through the examination process.
  - Have a positive attitude.
  - Demonstrate confidence that you are well prepared for the exam.

One of the Directors expressed the thoughts of all of us on the Board when he said, “I wish they weren’t so nervous. I have great admiration and respect for their effort.”

We look forward to congratulating each and every successful Candidate and awarding them their pin at the Louis Grossman luncheon every year at the AAE Annual Session.
Oral Examination

Description
Examination questions cover the scope of endodontics as described in the American Dental Association Accreditation Standards for Dental Education Programs. Questions are developed from a clinical case history that is presented to the Candidate. The questions are standardized, weighted and based on competencies that define the level of knowledge expected of Board Certified endodontists. A broad foundation of literature is essential for successful completion of the Oral Examination.

Sessions
♦ There are three sessions in the examination.
♦ During each session, the Candidate spends thirty minutes with two Directors/Examiners.
♦ Each Examiner independently completes a confidential evaluation immediately after every examination session.

Process
The Oral Examination requires the Candidate to demonstrate his/her ability to:
♦ Apply basic and dental sciences to diagnostic and treatment decisions.
♦ Justify diagnostic and treatment decisions.
♦ Formulate primary and secondary treatment plans.
♦ Assess short and long term outcomes.
♦ Alter patient management because of local or systemic pathologic conditions, psychological status and ethical considerations.

Case Based Format
♦ Questions are designed to assess the Candidate’s higher level cognitive skills including problem solving, decision-making, and the abilities to analyze, create and evaluate.
♦ The questions are based on competencies that define the knowledge base of a Diplomate of the American Board of Endodontics.

Topics
A Candidate will be expected to quote literature references to support his/her statements on the following topics during the examination:
♦ Radiographic Examination
♦ Subjective and Objective Examination
♦ Medical History
♦ Diagnosis/Differential Diagnosis
♦ Etiology
♦ Pathogenesis
♦ Treatment
♦ Application of Biological Implications
♦ Complications of Treatment
♦ Prognosis
Examination Confidentiality
Candidates sign the following confidentiality statement and examination policy on transcribing examination data prior to the examination:

“I understand that the content of the certification examination is proprietary and strictly confidential information. I hereby agree that I will not disclose, either directly or indirectly, any questions or any part of any questions from the examination to any person or entity. I understand that the unauthorized receipt, retention, possession, copying or disclosure of any examination materials, including but not limited to the content of any examination questions, before, during, or after the examination, may subject me to legal action. Such legal action may result in monetary damages and/or disciplinary action including denial or revocation of certification.”

Examination Scoring
The results of the Oral Examination are presented to the Directors of the Board by the Oral Examination Committee with a recommendation that those Candidates passing the Oral Examination be certified as Diplomates of the Board. The Secretary of the Board will notify the Candidates by letter whether they passed or failed the examination.

Appeal Policy
The Appeal Process for Adverse Decisions Affecting Certification or Diplomate Status document is available upon written request to the Central Office of the ABE.

- Appeals must be received within 30 calendar days after receipt of the failing grade.

- If an appeal is received for a failing grade on the Oral Examination, the Oral Examination Review Committee will conduct a review in conjunction with Measurement Incorporated to assure that all grades were accurately reported.
A twenty-five year old female is referred for evaluation and treatment of her mandibular first molar, tooth #19. She gives a medical history of malignant hyperthermia and history of allergy to penicillin. She relates canal treatment and placement of a crown by her general dentist in 1996. She notes swelling in the area that began last evening and has progressively gotten worse.
Radiographic Examination

- Approximately how large is this lesion in relation to what is seen on this radiograph?

- What film do you use and why do you choose to use that film?

- What evidence is there in the literature to support the use of direct digital radiography in diagnosis of apical pathosis?
Subjective and Objective Examination

Information regarding the patient’s subjective and objective examination will be provided orally. A portion of this information will also be provided in a written format for convenience e.g. a list of medications and a table of testing results. Some pertinent information to diagnose, manage, treatment plan or prognosticate will be purposefully omitted. Please see a likely first question below.

- Specifically, what additional information do you require before you treat this patient?
- Based on the literature what are the anatomic and morphologic variations of this tooth group?
- Discuss the pros and cons of culturing this case. What would you do in your practice?
Medical History

- This patient has a history of malignant hyperthermia. Would you alter your treatment in any way?

- What anesthetic / analgesic / antibiotic would you prescribe?
What is your diagnosis for this patient?

Trace the sensory fibers that innervate the mandibular first molar as they progress toward the central nervous system.

If this patient has referred pain from this tooth, where might it occur?
Etiology

- What is the probable source of infection?
- Compare and contrast the literature on the microbiology (etiology) of odontogenic infections from the sixties to today.
- Based on the literature, describe the organisms that might be present in this case.
Pathogenesis

- What facial spaces are involved? What are the anatomic boundaries of these spaces?

- Is it more difficult to obtain anesthesia in the presence of infection?

- The patient indicates that she has a temperature of 101°F. What role does fever play in the host’s response to infection?
Treatment

- How should this case be treated?

- What evidence is there in the literature regarding the use of Ca(OH)₂ as an intracanal medication?

- Is chloroform safe for use in retreatment procedures? Justify your answer using the literature.
What are the considerations regarding the choice of local anesthetic? What route of administration would you use?

Describe the technique for administration of the Gow-Gates block and the nerves anesthetized.

The general dentist treating this patient indicates that a Sargenti paste was used as a sealer. What evidence is there to refute the use of this material?
Complications of Treatment

- During treatment the patient loses consciousness. What are possible etiologies? How would you manage this situation?

- The patient calls the next day and reports that her lip is still numb. What would you do?

- During retreatment a nickel-titanium file separates in the mesial lingual canal. What methods are advocated to retrieve the instrument
Prognosis

- What recall schedule would you recommend for this patient? Why?

- Based on the literature discuss the success rates for retreatment procedures and compare these to the success rates for initial root canal treatment.