ANESTHESIA ORAL BOARD REVIEW: Knocking Out the Boards

The accreditation process for anesthesia in the United States is considered one of the most difficult in all medical specialties, with residents required to pass both an oral and a written exam to gain certification. This book is specially designed for the American Board of Anesthesiology Oral Examination. The evidence-based approach is presented in a concise outline-oriented format, with an emphasis on the knowledge necessary to pass the anesthesia oral boards. The Knockout Treatment Plan demonstrates the correct method of managing the case to the satisfaction of the examiners, whereas the Technical Knockout sections give additional tips for successfully passing the examination. The straightforward format of this book makes it suitable not only as an oral board review book but also as an introduction to anesthesia rotations for medical students, anesthesiologist assistant students, and nurse anesthetist students; furthermore, the book can be used as a technical study guide for anesthesia residents. More than 100 topics in this book have already been board-review tested by residents.

Dr. Jessica A. Lovich-Sapola is Assistant Clinical Professor of Anesthesiology at Case Western Reserve School of Medicine and Director of Pre-Surgical Testing in the Department of Anesthesiology at MetroHealth Medical Center, Cleveland, Ohio.
Anesthesia Oral Board Review

KNOCKING OUT THE BOARDS

Edited by
Jessica A. Lovich-Sapola
MetroHealth Medical Center, Cleveland, Ohio
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I want to especially thank my wonderful husband, Brian, and my two great kids, Rachel and Jeremy, for allowing me the time to work on this project. They understand how important it is for me to help my colleagues to not only pass this exam and become board certified but also become amazing anesthesiologists.

To all of the authors and consulting editors, I appreciate all of your time and hard work, more than you could imagine. This book would not have been possible without all of your help. Thank you!

I want to send a special thanks to my father, James Lovich, who put in hours of his time to draw many of the book’s illustrations.

I also want to thank the anesthesia department at MetroHealth Medical Center in Cleveland, Ohio, for helping me to become the anesthesiologist I am today.
I would like to make a few comments about Dr. Lovich-Sapola – about the person, the physician, and the professional – to give you, the reader, some insight into how this book has come about, my role as assistant editor, and our intended purpose for this book.

First, let me introduce you to “Jessica,” as I call her. Of course, I could tell you about how we met, got married, had two beautiful children, and so on, but what is important to you is this: I have never met a more ambitious learner than Jessica. That is how this book came about. She was so intent on mastering the ABA oral examination that when she was studying she took meticulous notes on every possible question the examiners could ask. She became infatuated with that test. Of course, she passed and became board certified. But then she had a bunch of notes, and she formulated these into case studies and reviews that she shared with her residents and candidates for the test. The residents said, “This could be a book, Dr. Lovich.” And that’s how this book happened.

If you have read the list of editors and contributors, you might be wondering why I’m the associate editor for the book. You might be saying, “This guy is not a board-certified anesthesiologist. He’s not even a doctor!” I do teach anatomy and physiology to nursing students, but I’ve only been in an operating room as a patient. So, why did she ask me, other than for the sake of convenience?

Well, I have something in common with you. We’re both not board certified anesthesiologists! I have edited every line of this book to make each chapter independently readable, understandable, and free of jargon. I wanted this book to introduce the science, the physiology, the acronyms, and the materials and methods in a way that makes sense. Therefore, not only is this book intended to be the must-have anesthesia oral board review book for the ABA candidate, but it should be an invaluable reference for the anesthesia resident as well as preparation for medical students or anesthetist students on an anesthesiology rotation at a hospital. I was the medical knowledge litmus test for my wife. I made sure that this book didn’t intimidate you or confuse you by assuming you know all of the anesthesia acronyms. She made sure that it didn’t insult your anesthesia knowledge. Both of us want you to become a competent, board-certified anesthesiologist.

If you are a medical student and you are going into an anesthesia rotation, you can look up cases and read the clinical issues so that you know what’s going on in the operating room. If you are a PGY-1 intern, this book will give you some background knowledge that you can use from CA-1 anesthesia residency day one. If you are an anesthesia resident, you can read the Knockout Treatment Plan to be knowledgeable for when the attending starts grilling you. And, of course, to the ABA candidates, you want to read this entire book, including the TKO technical knockout sections that tell you how to approach the answer on the day of your oral exam in order to satisfy the examiners and pass. In fact, you’re going to do more than pass – you’re going to KNOCK IT OUT!

Brian M. Sapola
How to Use This Book

This book is an anesthesia oral board review book. I have tried to cover all of the essential topics required to pass the anesthesia oral boards. It does not have every question that you could be asked, nor is it exhaustively complete. This book should be used as a guide to understand and memorize facts so that you can easily discuss the topics as an anesthesia consultant. For a more in-depth understanding of the topics, the major textbooks or journals should be referenced. However, you should know all of the information presented in this book like the back of your hand. The more prepared you are, the easier it will be for you to think on your feet during the actual exam. Memorizing this book will not guarantee a passing score. You must take this knowledge and practice, practice, practice. The key to passing the oral boards is oral preparation. You must take this basic knowledge and then practice answering questions out loud. Study hard. Good luck!

Format

Each chapter starts with a sample case. This is an example of how the topic may be presented on the real exam. The clinical issues section covers specific details that require your time to understand, learn, and memorize. The final section is the KO treatment plan. This section usually references the sample case. It gives you a written dialogue demonstrating how you could answer the sample case questions on the actual exam. Prior to reading this section, try to talk out loud about what you would say and do in the sample scenario. Then read this section. At times, there will be technical TKO sections that stress the points that you need to memorize in order to pass the exam.
Oral Boards Tips for Success

Criteria for Becoming a Board-Certified Anesthesiologist

1. Complete an approved anesthesia residency accredited by the ACGME.
2. Pass the ABA Written Board Exam.
3. Pass the ABA Oral Board Exam.
4. Have adequate physical and sensory faculties.
5. Be free from the influence of or dependency on chemical substances.
6. Have no felony on record.

Oral Exam

Starting Note
1. You walk in the door PASSING.
2. You have 70 minutes to NOT prove otherwise to the examiners.
3. Statistically, your best chance for passing the exam is the first time you take it.
4. The ABA’s general recommendations are these:
   a. Study, especially the topics you are the least comfortable with.
   b. Practice daily.
   c. Use your daily cases as a chance to talk through your plan.
   d. Read journal articles.

Location of the Oral Board Exam

1. The hotel location is chosen almost 5 years in advance.
2. It must be in a city with a big airport.
3. The hotel must not be prohibitively expensive.
4. The hotel must be large enough to accommodate the exam.
5. The location must be in an area where the weather is generally good.

Dress Code

1. Men: coat and tie.
2. Women: office attire.

Photo.1. Picture of a hotel in which the oral boards have been given. Photo credit: J. Lovich-Sapola, MD.

3. I recommend a black suit for men.
4. Most women also wear a black pants suit.

Behavior

1. Maintain good eye contact.
2. Speak up.
3. Maintain good posture.
4. Act professional.
5. Do not argue with the examiners.
6. Give the examiners a firm handshake at the beginning and the end of the exam, even if you feel that you did poorly.
7. Avoid slang and informality.
8. Don’t play with your pen or jewelry.
9. Talk with the examiners like you are a colleague.
10. Do not talk down to the examiners or be overly cocky or smug.

What to Bring to the Exam

1. Basically nothing.
2. You can’t bring anything into the room except a pen and your identification.
Exam
1. The exam is based on general knowledge of all anesthesia-related fields.
2. The examiners follow a strict script.
3. The scripted format started 10 years ago, with strict enforcement of the scripting within the last 5 years.
4. The scripts are based solely on rescue scenarios.

Who Writes the Exam?
1. Practicing anesthesiologists who serve as examiners submit the cases.
2. The ABA takes care to ensure reasonable content sampling.

What Facts Do They Expect the Examinee to Know?
1. In-depth knowledge of all drugs used and their effects on normal and abnormal body functions.
2. Pathogenesis.
3. Alternate methods of management.
5. Methods of measurement including routine lab studies and normal measurements.
6. Ability to anticipate, diagnose, and provide rational therapy for any complications that are likely to arise.

Format
1. Briefing session.
2. Two parts, 35 minutes each.

Part A
1. 10 minutes to look at the information. Take notes.
2. Intra-operative: 10 minutes (senior examiner).
4. Three extra topics: 10 minutes (senior examiner).

Part B
1. 10 minutes outside the exam room to look at the case. Take notes.
2. Pre-operative: 10 minutes (senior examiner).
3. Intra-operative: 15 minutes (junior examiner).
4. Three extra cases: 10 minutes (senior examiner).

Cases and Examiners
1. The same case is being presented in all of the exam rooms on all of the hotel floors at the same time.
2. No case is reused during the week.
3. You have two examiners at each session, four for your entire exam.
4. The examiners also change rooms during each set of exams.
Oral Boards Tips for Success

Audits of the Exam
1. The actual exam questions are graded by the examiner for content and difficulty prior to giving the exam.
   a. Content: excellent, good, acceptable, marginal.
   b. Difficulty: too difficult, appropriate level of difficulty, or too easy.
2. This score is also used in the final grading.

Examiners Are Briefed on Their Roles
1. They get the exam the night before.
2. They are able to look up the general topics.
3. They are told to limit their preparatory research.

What the Examiners Know About You
1. Your name.
2. That is it!!!

A Day in the Life of an Examiner
1. The examiners are in a single room for only part A and B of a single exam. They trade rooms. Rarely is the same team of examiners used throughout the week.
2. They finish their grading within 1–2 minutes of the completion of the exam. They do not discuss the examinee until they turn in the score sheet.

Audits of the Examiners
1. The examiners are audited a few times during the week.
2. The ABA maintains strict quality control.
3. If the ABA has a problem with an examiner, he or she is not asked to serve as an examiner again.
4. Each examiner is ranked yearly as being an easy, moderate, or hard examiner.

What Are Examiners Audited For?
1. Questioning
   a. Asking vague questions.
   b. Asking confusing questions.
   c. Asking for facts instead of judgment (giving a superficial exam).
   d. Being unprepared to ask another question.
   e. Giving inappropriate positive or negative reinforcement.
   f. Asking rhetorical questions.
   g. Acting in an aggressive or threatening manner.
   h. Asking multiple questions without waiting for a response.
   i. Pursuing factual minutiae.
   j. Staying on schedule.
   k. Covering all of the script.
   l. Knowing when to change topics.
   m. Being well prepared and informed.

Scoring
1. You are not scored on one question. You are scored overall.
2. In the past, a person may have failed over one missed critical question. This is not true of the current exam.
3. The score is related to the difficulty of the test.
4. The score is also related to the difficulty of the examiner.
5. The score is scaled.
6. The score is based on the exam and the examiner.
7. The analysis is multifaceted.
8. The failure rate is consistently about 20%.
9. One examiner can’t fail you!!!!

Be Able to Answer
1. Why?
2. Why not?
3. Why not something else?
Oral Boards Tips for Success

**Tips for Answering the Question**

1. At times, there is NO right or wrong answer!
2. Don’t be too regimented.
3. It is OK to say you are not comfortable with a certain technique, but you must know that it is possible.

**Questions?**

1. Just answer the question.
2. Do not ask questions. Examiners don’t have any more information than they have told you.
3. You can ask for a clarification if you really don’t know what they are asking.
4. Assume ...
5. Always assume that your patient is healthy. The examiner will let you know if this is not the case.

**You Are Asked a Question …**

1. Listen to the question and answer it.
2. Then immediately justify why that was your answer.
3. Say I am doing “X” and this is why.
4. Examiners don’t want to hear all the things you could do.
5. They will interrupt when you have said enough.
6. Explain things to the examiners assuming they do not understand anesthesia.
7. The explanation is more important than the answer.

**More Tips**

1. Imagine yourself in the OR. Only do things that you would normally do.
2. Don’t be afraid to “consult” another service or physician. This shows that you know when to ask for help as opposed to compromising the patient’s safety.
3. Write down any numbers or labs the examiners give you.
4. If you do not know the answer, say “I don’t remember at this time.” Don’t ever make up answers.
5. Don’t quote a book or article unless you are prepared to have a detailed discussion.
6. Always keep the patient safe!!!!!!

**Bad Things Happen**

1. Bad things are going to happen, no matter how good you are.
2. They are written into the script.
3. Treat the problem and don’t stress over whether it was your fault.

**So You Realize You Made a Mistake …**

1. They don’t want you to be wishy-washy, so stick to your guns.
2. But don’t go down with the sinking ship.
3. If you realize that you made a big, killing mistake, say, “I am sorry, but I …”

**Problem Candidates …**

1. Have superficial knowledge.
2. Have good knowledge, but …
   a. They can’t apply it or adapt to clinical conditions.
   b. They can’t express or defend why they do something.
   c. They don’t realize that “we do it every day at my hospital” does not count.
3. Try to control the exam by ...
   a. Asking too many questions.
   b. Giving deliberately slow responses.
4. Talk a lot, but say little.
5. Can’t express ideas or defend a point of view in a convincing manner.
6. Are indecisive.
7. Show faulty judgment.
8. Do not take the test seriously and are not prepared.

**Failure**

1. In case you have to retake the exam ...
   a. You will never be re-examined by the same people.
   b. The examiners have no way of knowing if this is your 1st or 20th time taking the exam.

**BIBLIOGRAPHY**

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