

Surgery

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Surgery

A Case Based Clinical Review

Second Edition

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To my wonderful wife and fellow surgeon, Kelly, who has always supported me; to my five children, Nick, Michael, Emma, Sophia, and Andrew, who have always made coming home a pleasure; and to all the students over the last two decades who have inspired me to teach.

Christian de Virgilio

To my two biggest mentors – Dr. Christian de Virgilio and Dr. Jeffry Nahmias – thank you both for your instrumental roles in shaping my career and allowing me to truly enjoy waking up everyday to come to the hospital. To my amazing wife, Rebecca, and my future little surgeon, Ella Sophia, thank you for being my biggest supporters.

Areg Grigorian

Foreword

I am delighted to write the foreword for the second edition of *Surgery: A Case Based Clinical Review* edited by Christian de Virgilio and Areg Grigorian.

I was honored to write the first one, and the book has had such impact since its publication in 2015 – it has been adopted by several medical schools, and it is in the top five of Springer’s medical books and among the top seven on Amazon! The book is meant for short chapter reads organized into sections with shelf questions at the end of each section to quickly assess one’s understanding of the important content.

Dr. de Virgilio was a third-year medical student on a pediatric surgical rotation when I was the senior resident. He was a fabulous student and went on to be a vascular surgeon – just like I did! He is a fabulous teacher and role model. Now, he is professor of Surgery, UCLA School of Medicine, chair of the Department of Surgery at Harbor-UCLA Medical Center, as well as co-chair of the College of Applied Anatomy.

This medical school textbook is such a treasure for medical students. The chapters begin with a patient

story followed by the pertinent facts needed on the history and physical examination – and, then, the student can learn to design the work-up, make the diagnosis, and manage the surgical problem. The preparation is essential to be able to answer the shelf examination questions which follow – all of this getting the medical student ready to master the information and do well on their examination in surgery.

As a dean of a medical school and a vascular surgeon, I am delighted that this book has served the medical students so well. I still see patients, perform surgery, and teach medical students, and, therefore, a book like this one is perfect! Someone taught us – therefore, we should teach as well!

» Life is an opportunity for us to contribute something that outlasts us and makes the world a better place.

–Apoorve Dubey

Teaching makes the world a better place. Go do that!

Julie Ann Freischlag, MD
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Preface

We are grateful to have heard from students around the country that our first edition was valuable for their surgery clerkship. As we are always striving to improve, we thank students for their valuable comments and have incorporated their feedback into the second edition to make it even better. At the same time, we've been sensitive to maintaining our goal of making the entire book "readable" over the course of a relatively brief third-year surgery clerkship. Thus, for this second addition, we've added several key chapters while condensing and combining others. As with the first edition, we've assembled a team of collaborators that include numerous surgery program directors, surgery clerkship directors, and various award-winning surgical educators. We've also included several medical students who were handpicked for their outstanding performance.

The goal of our book is to help you learn the essentials of surgery in the most efficient way possible. We feel our book will help you excel on the shelf exam, shine on the wards, think through the most commonly tested clinical vignettes, and develop your own deductive reasoning so that you make a great impression on your surgery clerkship. Additionally, each section is now followed by a series of questions that are intended to mimic the style of questions you will find on the actual NBME shelf exam.

The start of the third year of medical school is terrifying. You're suddenly thrust into a hospital, where you meet a new team of residents and faculty, meet patients, learn a new language (medical abbreviations), learn an electronic health system, and are expected to somehow shine even though you're the least experienced and least knowledgeable. Once you finally get acclimated, you might get moved to another rotation in another specialty (sometimes even to another hospital), forced to start the orientation once again. At the same time, you're required to attend lectures and prepare for a final examination that may influence your ability to get a future residency. It's no doubt an extremely stressful time, but, at the end of the year, you will marvel at your professional growth and realize that being in the hospital with real patients is far better than being in a classroom all day. Also, you can

take solace in the fact that all your evaluators (e.g., residents and attendings) were at one point in their careers medical students like you. We hope our book gives you all the high-yield, test-relevant facts in an efficient and easy-to-understand manner so you can focus on what is important – how to be a great doctor!

Before discussing how to use our book, we want to share a few pearls about the surgery clerkship. First the "dos." Surgery is a team-based discipline. Always look for ways to help your team. Take an active role. Strive to make yourself irreplaceable, but do so with humility. Treat others like you would your family (assuming you get along with them). Be an effective communicator. Ask a lot of questions (but make it clear from your questions that you've been reading). Ask how you can help. Now the "don'ts." Don't be arrogant. Don't try to upstage your co-student or intern. And finally, don't worry! If you work hard, display enthusiasm, and take an active role, people will notice! You'll also be surprised to discover that most surgeons enjoy teaching (and aren't as mean as portrayed on TV). And you may even get bit by the surgery bug (we hope)!

Now let's move on to how to use this book. The book is case-based and is in a short question-and-answer format. A risk of a case-based book is that you only learn that one specific case. To prevent falling into such a pitfall, we've also included pertinent differential diagnoses for each case and discuss how to distinguish them. We've tried to limit anatomy and pathophysiology to those that are clinically relevant. We've tried to exclude most cancer staging systems, as these constantly change, are hard to memorize, and are infrequently tested. We've tried to arrange the management in a "what's the next step" format, as such questions are frequently asked. We've purposely avoided too many details about specific aspects of surgical procedures as those are beyond the scope of a student. For those that want a bit more, we've added "areas where you can get in trouble," which are pitfalls in the diagnosis or management, and "areas of controversy." At the end of each chapter, there is a Summary of Essentials that permits a quick review. Finally, we've created questions and answers to follow

each section (with an emphasis on why the wrong answers are wrong). It's important to realize that the questions are *not* intended to test your understanding of the reading. Rather, many of the questions are meant to supplement the reading by testing important topics that couldn't be covered (so don't be discouraged if you miss a lot of them!).

Our advice is to strive to read the whole book during your rotation. Read all the chapters in one section, and then do the supplement questions for that section. We've purposely made each chapter relatively short, so that you should be able to read

each one in 20–30 min (or less). And, you should be able to read four to five chapters per week.

We're confident our book will help you during your surgery clerkship as well as for the shelf exam. We also realize that no single resource can do it all (including this book).

We hope you enjoy our book as much as we enjoyed writing it! We'd love to get your feedback. Feel free to email us on cdevirgilio@lundquist.org and agrigori@uci.edu or follow on Twitter @[drdevirgilio](#). Best of luck on your rotation and in your (surgical) career!

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