
Clinical Decisions in Nephrology, Hypertension and Kidney Transplantation

Edgar V. Lerma • Mitchell Rosner
Editors

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 Springer

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Edgar V. Lerma, MD
Section of Nephrology
University of Illinois at Chicago College
of Medicine
Chicago, IL USA

Mitchell Rosner, MD
Division of Nephrology
University of Virginia Health System
Charlottesville, Virginia USA

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To my mentors, colleagues, and friends at the University of Santo Tomas Faculty of Medicine and Surgery in Manila, Philippines, and Northwestern University Feinberg School of Medicine, who have guided me to where I am right now.

To all the medical students, interns, and residents at Advocate Christ Medical Center whom I have taught or learned from.

To my parents and my brothers, without whose unwavering love and support through thick and thin I would not have persevered and reached my goals in life.

Most especially, to my two lovely daughters Anastasia Zofia and Isabella Ann, whose smiles and laughter constantly provide me unparalleled joy and happiness; and my very loving and understanding wife Michelle, who has always been supportive of my endeavors and who sacrificed a lot of time and exhibited patience as I devoted a significant amount of time and effort to this project. Truly, they are my inspiration.

Edgar V. Lerma

To my wife Michelle who is my greatest inspiration and strength. Her support and smiles through the years has been my greatest asset.

To my children Max, Sam, and Anna who provide me with joy and inspiration. Perhaps, they will be the next generation of great teachers.

Finally, to my mentors in Nephrology, Mark Okusa and Kline Bolton. They have set a high benchmark for excellence, and their professionalism, high standards, and outstanding teaching serve as constant examples of the very best.

Mitchell Rosner

Preface

According to Merriam-Webster's Dictionary, "the Socratic approach" is a method of inquiry and instruction employed by Socrates especially as represented in the dialogues of Plato and consisting of a series of questionings, the object of which is to elicit a clear and consistent expression of something supposed to be implicitly known by all rational beings.

As a medical student trying to navigate the intricacies and complexities of internal medicine and various subspecialties, I was constantly intrigued and fascinated by the challenges of clinical problem solving. With the influence of my parents and my mentors, somehow this attitude was further cultivated in me.

As I went through my residency and fellowship years, I found two publications particularly appealing and stimulating. They were the following: Robert Schrier's "The Internal Medicine Casebook: Real Patients, Real Answers" and David Levine's "Caring for the Renal Patient." These were unique in the sense that unlike conventional textbooks, the chapters started off by presenting various clinical vignettes. A comprehensive discussion followed as the case continued to evolve. Salient features of diseases and conditions in question were highlighted. This method of instruction was truly appealing and kept me reading and wanting more.

A similar format was utilized by New England Journal of Medicine's Case Records of the Massachusetts General Hospital, which was originally developed and inspired by the works of Dr. Walter Cannon (ca. 1800) and Dr. Richard Cabot (ca. 1900).

As I became a teacher myself, I started employing these techniques of teaching to my junior medical students, interns, and residents.

In this book, I had the honor and privilege of collaborating with Dr. Mitchell Rosner who is well known in the realm of medical education. Prior to this collaboration, he has written numerous texts, including the "NMS Review for USMLE III," and is involved with medical education at the University of Virginia School of Medicine. We were fortunate that Richard Lansing of Springer provided encouragement and support for this collaboration.

The book is divided into several parts that highlight the typical content areas that are encountered in a typical clinical nephrology practice. Each chapter is started with a clinical case presentation centered on an important topic. The didactic discussion that follows draws on evidence-based literature—from diagnosis to the practicalities of management. The first part focuses on "Patient Assessment," which deals with nephrology-centered

history and physical examination, as well as basic laboratory and ancillary diagnostic procedures. The next five parts focus on common problems/disease entities, namely glomerular diseases, fluid and electrolytes and acid–base disorders, acute kidney injury, and chronic kidney disease. Parts 7 and 8 deal with renal replacement therapies, namely dialysis (hemodialysis, peritoneal dialysis) and kidney transplantation. Parts 9–11 deal with hypertension and other systemic diseases involving the kidneys, namely diabetes, lupus nephritis, systemic viral illnesses, myeloma, and nephrolithiasis. There is also a chapter on kidney diseases with genetic predispositions.

We trust that this will be of great utility to all learners from all walks of life, especially those with an interest in the study of kidney disease, hypertension, and kidney transplantation—from medical students, interns, and residents to busy clinicians. For all allied health professionals, this would also be valuable as it is patient oriented, problem oriented, and it brings the reader to the latest updates in patient management.

Chicago, IL, USA
Charlottesville, VA, USA

Edgar V. Lerma
Mitchell Rosner

Acknowledgement

This book would not have been possible were it not for so many people. First, we would like to thank all of our contributing authors, who have spent countless hours in producing high-quality, up-to-the-last-minute information. We spent a significant amount of time communicating via telephone and e-mail as we reviewed the chapters and discussed recommendations, most of which were agreed upon, but, on occasion, disputed. We express our sincere gratitude for their openness to this very collegial collaboration, which has been a truly rewarding learning experience for us.

We appreciate the help and support of all the staff of Springer, most especially Joni Fraser, our Developmental Editor, and Richard Lansing, Editorial Director for Clinical Medicine, both of whom have been very patient with our procrastinations and stubbornness at times.

We thank all our teachers and mentors, who devoted their own time to educate and train us to become who we are. We thank all the medical students, residents, and fellows who in one way or another have given us inspiration to persevere in the teaching profession. Mostly, we thank all of our patients, who have been truly instrumental in our learning and devotion to medicine. On behalf of all the contributors to this book, we fervently hope that all our efforts will contribute to relieving your suffering and perhaps lead to your recovery.

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Contributors

Maaz A. Abbasi Nephrology Private Practice, DeSoto, TX, USA

Maryam Afkarian Department of Medicine, Kidney Research Institute, Seattle, WA, USA

Hatem Amer Division of Nephrology and Hypertension, Department of Medicine, The William J. von Liebig Transplant Center, Mayo Clinic, Rochester, MN, USA

A. Eric Anderson Department of Medicine, University of Washington Medical Center, Seattle, WA, USA

Adriana Arcila Department of Pulmonary and Critical Care, University of Miami, Miami, FL, USA

James L. Bailey Medicine, Renal Division, Emory University, Atlanta, GA, USA

Scott D. Bieber Division of Nephrology, University of Washington, Seattle, WA, USA

Ian H. de Boer Department of Medicine/Nephrology, University of Washington, Seattle, WA, USA

William Burnett Nephrology, University of Louisville, Louisville, KY, USA

Dawn J. Caster Division of Nephrology, Department of Internal Medicine, University of Louisville, Louisville, KY, USA

Harini A. Chakkera Nephrology and Hypertension, Mayo Clinic Arizona, Phoenix, AZ, USA

Kerry C. Cho Division of Nephrology, Department of Medicine, University of California San Francisco, San Francisco, CA, USA

Jorge Cerda Division of Nephrology, Department of Medicine, Albany Medical College, Capital District Renal Physicians, Albany, NY, USA

Jason Cobb Renal Division, Emory University School of Medicine, Atlanta, GA, USA

Shaun D. Conlon Nephrology, Emory University, Atlanta, GA, USA

Cynthia M. Cooper Inpatient Clinician Educator Unit,
Department of Medicine, Massachusetts General Hospital, Boston, MA, USA

Fionnuala C. Cormack Division of Nephrology, Department of Medicine,
University of Washington, Seattle, WA, USA

Lynn D. Cornell Department of Laboratory Medicine and Pathology,
Mayo Clinic, Rochester, MN, USA

Miguel F. Palma Diaz Laboratory Medicine, Department of Pathology,
David Geffen School of Medicine at UCLA, Los Angeles, CA, USA

Ziad M. El-Zoghby Division of Nephrology,
Department of Internal Medicine, Mayo Clinic, Rochester, MN, USA

Jennifer A. Fillaus Internal Medicine, Nephrology, University of Nebraska
Medical Center, Omaha, NE, USA

Marius C. Florescu Internal Medicine, Nephrology,
University of Nebraska Medical Center, Omaha, NE, USA

Harold A. Franch Renal Division, Atlanta Veterans Affairs Medical Center
and Emory University School of Medicine, Decatur, GA, USA

Hussain A. Gilani Nephrology, Emory University, Atlanta, GA, USA

Joni H. Hansson Section of Nephrology, Department of Medicine,
Hospital of Saint Raphael, New Haven, CT, USA

Leah A. Haseley Department of Medicine, University of Washington
Medical Center, Harborview Hospital, Seattle, WA, USA

German T. Hernandez Division of Nephrology and Hypertension,
Department of Internal Medicine, Paul L. Foster School of Medicine, Texas
Tech University Health Center at El Paso, El Paso, TX, USA

LaTonya J. Hickson Division of Nephrology and Hypertension,
Department of Internal Medicine, Mayo Clinic, Rochester, Olmstead County,
MN, USA

M. Rashid Ishaque Department of Nephrology, Harbin Clinic, Marietta,
GA, USA

J. Ashley Jefferson Division of Nephrology, University of Washington,
Seattle, WA, USA

Eric K. Judd Department of Nephrology, University of Alabama
at Birmingham, Birmingham, AL, USA

Luis A. Juncos Division of Nephrology, Department of Medicine,
University of Mississippi Medical Center, Jackson, MS, USA

Luis I. Juncos Department of Medicine, J. Robert Cade Foundation,
Cordoba, Argentina

Claire M. Kennedy Department of Nephrology, Beaumont Hospital,
Dublin, Ireland

Warren L. Kupin Division of Nephrology and hypertension,
Department of Medicine, University of Miami, Miami, FL, USA

Sophia M. Rothberger Lannon Department of Obstetrics and
Gynecology, University of Washington, Seattle, WA, USA

Janice P. Lea Division of Nephrology, Department of Medicine,
Emory University of Medicine, Atlanta, GA, USA

Eleanor D. Lederer Medicine/Nephrology, University of Louisville,
Louisville, KY, USA
Robley Rex VA Medical Centre, Louisville, KY, USA

Oliver Lenz Division of Nephrology and Hypertension,
University of Miami, Miller School of Medicine, Miami, FL, USA

Edgar V. Lerma Section of Nephrology, Department of Medicine,
University of Illinois at Chicago College of Medicine, Chicago, IL, USA

Kelly V. Liang Renal-Electrolyte Division, Department of Medicine,
University of Pittsburgh, Pittsburgh, PA, USA

Kimberly P. Liang Rheumatology Division, Department of Medicine,
University of Pittsburgh, Pittsburgh, PA, USA

Andrew Lin Nephrology, University of California San Francisco,
San Francisco, CA, USA

Elizabeth C. Lorenz Department of Nephrology and Hypertension,
Mayo Clinic, Rochester, MN, USA

Lowell J. Lo Department of Medicine, University of California-San Francisco,
San Francisco, CA, USA

Lina Mackelaite Division of Nephrology, University of Louisville,
Louisville, KY, USA

Colm C. Magee Consultant Nephrologist, Beaumont Hospital,
Dublin 9, Ireland

Tahsin Masud Renal Division, Emory University School of Medicine,
Atlanta, GA, USA

Shikha Mehta Department of Nephrology, University of Alabama at
Birmingham, Birmingham, AL, USA

Clifford D. Miles Internal Medicine, Nephrology,
University of Nebraska Medical Center, Omaha, NE, USA

Vibha S. Nayak Department of Medicine, Nephrology,
University of Louisville, Louisville, KY, USA

Grace J. No Department of Nephrology, University of California,
San Francisco, CA, USA

Suzanne M. Norby Division of Nephrology, Department of Medicine,
College of Medicine, Mayo Clinic, Rochester, MN, USA

Luis M. Ortega Internal Medicine/Nephrology and Hypertension, Allegheny General Hospital, Temple University School of Medicine, WPAHS Campus, Pittsburgh, PA, USA

Mark G. Parker Division of Nephrology and Transplantation, Maine Medical Center, Portland, ME, USA

Raimund H. Pichler Division of Nephrology, Department of Medicine, University of Washington, Seattle, WA, USA

Troy J. Plumb Internal Medicine, Nephrology, University of Nebraska Medical Center, Omaha, NE, USA

Vishal N. Ratkalkar Department of Medicine (Nephrology), Medical College of Wisconsin, Milwaukee, WI, USA

Kevin R. Regner Department of Medicine (Nephrology), Medical College of Wisconsin, Milwaukee, WI, USA

Robert E. Richard Department of Hematology, VA–Puget Sound Health Care System, University of Washington School of Medicine, Seattle, WA, USA

Rudolph A. Rodriguez Department of Nephrology, Puget Sound Veterans Affairs Medical Center, Seattle, WA, USA

Mitchell H. Rosner Department of Medicine, University of Virginia, Charlottesville, VA, USA

Ankit Sakhuja Internal Medicine, Medical College of Wisconsin, Milwaukee, WI, USA

Scott L. Sanoff Department of Medicine, Division of Nephrology, University of Virginia, Charlottesville, VA, USA

Sejal P. Sarolia Humble, TX, USA

Lynn E. Schlanger Department of Nephrology, Veteran Affairs Medical Center at Atlanta, Decatur, GA, USA

Neha Sehgal Division of Nephrology, Medical College of Wisconsin, Milwaukee, WI, USA

Shirin Shafazand Division of Pulmonary, Critical Care and Sleep Medicine, University of Miami, Miller School of Medicine, Miami, FL, USA

Shamik Shah Department of Nephrology, Apollo Hospitals, Gujarat, India

Lena Sibulesky Department of Transplantation, Mayo Clinic Florida, Jacksonville, FL, USA

M. Salman Singapuri Division of Nephrology, Department of Medicine, Emory University of Medicine, Atlanta, GA, USA

C. John Sperati Division of Nephrology, Department of Medicine, Johns Hopkins University School of Medicine, Baltimore, MD, USA

Leslie F. Thomas Nephrology and Hypertension, Mayo Clinic Arizona, Phoenix, AZ, USA

Denyse Thornley-Brown Department of Internal Medicine (Nephrology), University of Alabama at Birmingham, Birmingham, AL, USA

Ashita J. Tolwani Department of Nephrology, University of Alabama at Birmingham, Birmingham, AL, USA

Rebecca L. Toonkel Department of Pulmonary and Critical Care, University of Miami, Jackson Memorial Hospital, Miami, FL, USA

J. Kevin Tucker Department of Medicine/Renal Division, Boston, MA, USA

Nina Vasavada Department of Medicine, University of Louisville, Louisville, KY, USA

Brahm Vasudev Medical College of Wisconsin, Milwaukee, WI, USA

Monica Vasudev Allergy and Clinical Immunology, Medical College of Wisconsin, Milwaukee, WI, USA

Hani M. Wadei Department of Transplantation, Mayo Clinic, Jacksonville, FL, USA

James C. Wasserman Department of Medicine, Main Medical Center, Portland, Cumberland County, ME, USA

Kambiz Zandi-Nejad Nephrology, Harvard Vanguard Medical Associates, Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, MA, USA

