

Second Edition

# *Clinical Applications* of **PATHOPHYSIOLOGY**

**ASSESSMENT,  
DIAGNOSTIC REASONING,  
AND MANAGEMENT**

**Valentina L. Brashers**

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# **Clinical Applications of Pathophysiology**

**Assessment, Diagnostic Reasoning,  
and Management**



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# **Clinical Applications of Pathophysiology**

## **Assessment, Diagnostic Reasoning, and Management**

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**Second Edition**

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# Preface

Welcome to the second edition of *Clinical Applications of Pathophysiology: Assessment, Diagnostic Reasoning, and Management*. As with the first edition, the purpose of this book is to provide a summary of the pathophysiology of selected common diseases or illnesses and the application of that information to clinical assessment, diagnosis, and management. Case studies are provided to reinforce the skills learned in each chapter, and an up-to-date list of suggested readings is included. This second edition is filled with new figures and tables. Two new chapters have been added that present immunologic diseases, and the case studies have all been significantly updated. The Suggested Solutions and Rationales to the case study questions are no longer contained within this volume; instructors who adopt the book for course use may obtain the Solutions from their Mosby sales representative or by calling Faculty Support at 1-800-222-9570.

This text is designed to be used by the health care clinician, student, and educator. By understanding the underlying pathophysiologic processes, the reader can better predict clinical manifestations, choose evaluative studies, initiate appropriate therapies, and anticipate potential complications. In addition, insights into the underlying disease process can prepare the practitioner for the use of new and innovative interventions and drugs.

This book is organized by body system, with 27 selected diagnoses that are not only common to clinical practice but represent concepts of pathophysiology, evaluation, and management that can be applied to many other illnesses. Each chapter has two distinct sections.

The first section contains a concise summary of the disease, including Definition, Epidemiology, Pathophysiology, Patient Presentation, Differential Diagnosis, Keys to Evaluation, and Keys to Management. Figures and tables illustrate important points. This information is followed by a unique “Pathophysiology → Clinical Link” diagram that emphasizes how an understanding of the pathophysiologic principles can guide patient care. A list of selected recent articles is included for each chapter.

The second section of each chapter contains a representative case study in a fill-in-the-blank format that can be used by clinicians and students to practice their skills and by educators to evaluate their students.



# Acknowledgments

This book would not exist without the generous and kind support of Drs. Kathy McCance and Sue Huether of the University of Utah. They not only encouraged me to write the first edition of this book but also supported me in developing this much-improved second edition. I have used their nationally-renowned text *Pathophysiology: The Biologic Basis for Disease in Adults and Children* in my classes for years, and am honored to be a contributing author to their outstanding scholarly works. They set the standard for the teaching of pathophysiology, and I am grateful for the opportunity to learn from them both. They are the very best of mentors, role models, and friends.

This second edition would not have been possible without the hard work and support of Managing Editor Brian Dennison at Harcourt Health Sciences who has joined me in my commitment to turning out the very best and most accurate book possible. Sue Meeks did an outstanding job of finalizing the chapters and getting them ready for this exciting new second edition.

I am endlessly grateful to the expert clinical nurses who contributed many of the case studies for this book. Their expertise has guided my teaching, my writing, and my practice for many years. I would also like to thank my students for their enthusiasm for pathophysiology; they are my inspiration and my reason for coming to work each day. I would like to especially thank Lucy Paskus for her hard work and scholarly contribution to two chapters. I am convinced that her name will appear on many important publications in the future. Eugene Corbett, Jr., MD, and Richard Keeling, MD, provided their valuable expertise to this book. They have my respect and gratitude for all their contributions to my teaching and writing.

My colleagues at the University of Virginia School of Nursing have been supportive in both word and deed of my unique role in the School. It is my privilege to work with such a knowledgeable, dedicated, and caring a group of professionals. I would like to especially thank Dr. Sharon Utz, who is my mentor, my boss, and my constant support in helping me grow professionally and personally as a part of nursing education. I would also like to thank my Dean, Dr. Jeanette Lancaster, who has always given me the opportunity to express my energies and ideas in creative ways.

Finally, I would like to thank my family and friends, especially Patty, for putting up with my long hours and distracted ways for yet another edition of this book.

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