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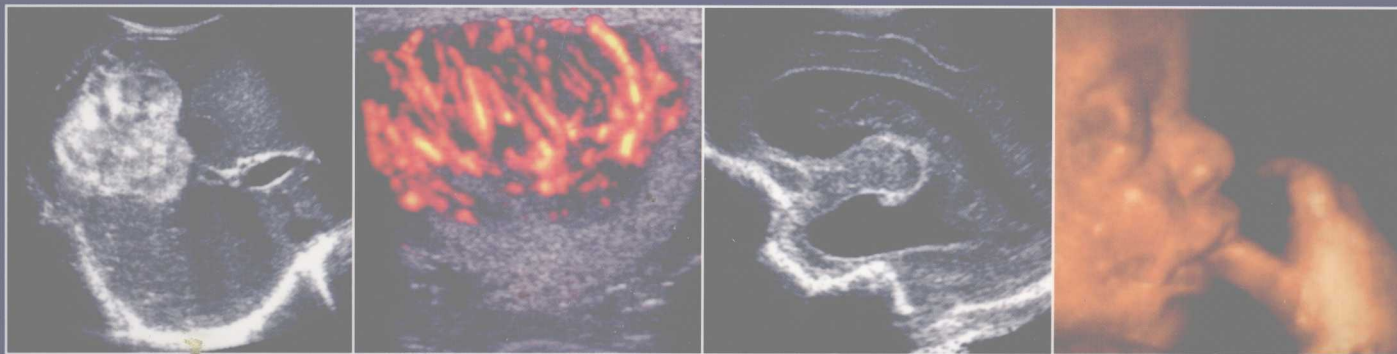
超声诊断学

第3版·下卷

Carol M. Rumack Stephanie R. Wilson

J. William Charboneau

Associate Editor: Jo-Ann M. Johnson



人民军医出版社

PEOPLE'S MILITARY MEDICAL PRESS

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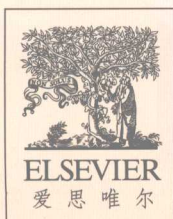
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To Barry, Becky, Will, Cody, Alexandra, Marc, and Beth, with love—for the greatest pleasure in life is time with family. To my parents for their love and their belief in me. And to all my students, for responding to the challenge and joy of studying medicine, in particular, ultrasound.

CMR

To my clinical colleagues, residents, and fellows at the Toronto General Hospital, who have provided me with a lifetime of professional joy. The neverending challenges and stimulation are a fertile ground for an endeavor such as this. And to my wonderful family, for their never-ending support.

SRW

To Cathy, Nicholas, Ben, and Laurie, for all the love and joy you bring to my life. You are all I could ever hope for.

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To Pat, Aidan, Lizzy, Kate, and Ciara, for your support, patience, and above all your love.

JAJ

Preface

Diagnostic Ultrasound, Third Edition, builds on the strong base of the previous editions. We understand that this textbook is the most commonly used reference in ultrasound practices worldwide, and we are pleased to provide a new update of images and text with many new areas of strength. Because sonography has expanded its frontiers in the past 6 years, it was time for a major revision of *Diagnostic Ultrasound* for it to remain the definitive reference work of this specialty. In particular, greater use of color and power Doppler and harmonic images, improved high-resolution transducers, greater fields of view, and more uses for ultrasound contrast agents have required the introduction of new chapters and new authors, as well as the expansion and enhancement of the Second Edition's original material.

Great strides have been made in obstetrical sonography with fetal imaging. Growth and development of the fetus, three-dimensional imaging, and MRI correlation are bringing new areas of understanding to fetal anomalies.

Organ transplantation is now a separate chapter on key issues surrounding this intense area of interest for sonography.

Approximately 100 outstanding new and previous authors have contributed to this edition, and all are recognized experts in the field of ultrasound. There has been a substantial increase in the size of the two volumes, with the major space reallocation applied to obstetrics and gynecology. Thousands of the original images have been replaced, and new images have been added. The Third Edition now includes more than 5000 images, many in full color. The layout has been exhaustively revamped, and there are highly valuable multipart figures or key feature collages. These images all reflect

the spectrum of sonographic changes that may occur in a given disease instead of the most common manifestation only.

The book's format has been redesigned to facilitate reading and review. There are again color-enhanced boxes to highlight the important or critical features of sonographic diagnoses. Key terms and concepts are emphasized in boldface type. To direct the reader to other research and literature of interest, comprehensive reference lists are organized by topic.

Diagnostic Ultrasound is again divided into two volumes. Volume I consists of Parts I to IV. Part I contains chapters on physics and biologic effects of ultrasound, as well as the latest developments in ultrasound contrast agents. Part II covers abdominal, pelvic, and thoracic sonography, including interventional procedures. There is a new chapter on organ transplantation. Part III presents intraoperative and laparoscopic sonography. Part IV contains many chapters on small-parts imaging, including carotid and peripheral artery and vein evaluation.

Volume II begins with Part V, where the greatest expansion of text and images has been on obstetric and fetal sonography. The first trimester is presented in depth in two chapters. Part VI comprehensively covers pediatric sonography.

Diagnostic Ultrasound is for practicing physicians, residents, medical students, sonographers, and others interested in understanding the vast applications of diagnostic sonography in patient care. Our goal is for *Diagnostic Ultrasound* to continue to be the most comprehensive reference book available in the sonographic literature with a highly readable style and superb images.

Preface

to the second edition

The First Edition of *Diagnostic Ultrasound*, released at the RSNA in 1991, has become the most commonly used reference textbook at ultrasound practices worldwide. Because sonography has so expanded its frontiers in the past 6 years, we believed that a major revision was required for *Diagnostic Ultrasound* to remain the definitive reference work for this specialty. In particular, greater use of color and power Doppler imaging and improved high-resolution transducers have required the introduction of new chapters and new authors, as well as the expansion and enhancement of the First Edition's original material.

Approximately 100 outstanding authors, all recognized experts in the field of ultrasound, bring you the latest state-of-the-art concepts on ultrasound performance, imaging, diagnosis, and expanded applications, including hysterosonography, laparoscopic sonography, and ultrasound-guided biopsy and drainage techniques.

There has been a 25% increase in the size of the two volumes, the major space reallocation applied to obstetrics and gynecology. Thousands of the original images have been replaced, and new images have been added. The Second Edition also includes more than 450 images in full color. The layout has been exhaustively revamped and now includes multiple-picture "Key Feature Collages." These reflect the spectrum of sonographic changes that may occur in a given disease instead of just the most common manifestation.

Many improvements in the book's format have been designed to facilitate reading and review. Color-enhanced boxes highlight the important or critical features of sonographic diagnoses. Key terms and concepts are emphasized in boldface type. To direct the reader to other research and literature of interest, the comprehensive reference lists are well organized by topic.

The book is again divided into two volumes. Volume I consists of Parts I–IV. Part I contains chapters on physics and biologic effects of ultrasound, as well as the latest developments in ultrasound contrast agents. Part II covers abdominal, pelvic, and thoracic sonography, including interventional procedures. Part III presents intraoperative and laparoscopic sonography. Part IV contains many chapters on small-parts imaging, including carotid and peripheral artery and vein evaluation. Volume II begins with Part V, a greatly expanded section on obstetric and fetal sonography. Part VI comprehensively covers pediatric sonography. Two new chapters on pediatric brain Doppler and pediatric interventional sonography have been added to Part VI.

This book is for practicing physicians, residents, medical students, sonographers, and others interested in understanding the vast applications of diagnostic sonography in patient care. As with the First Edition, *it is our goal to present to you the most comprehensive reference book available on diagnostic ultrasound.*

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