Pulmonary Circulation: Diseases and Their Treatment, 2nd edition. Andrew J Peacock MPhil MD and Lewis J Rubin MD, editors. London: Arnold/Oxford University Press. 2004. Hard cover, illustrated 614 pages, \$198.50.

The second edition of **Pulmonary Circulation:** Diseases and Their Treatment comes 8 years after the first edition. In that period there have been major advances in understanding the genetics and pathobiology of the diverse disorders that cause pulmonary hypertension and other pulmonary vascular disorders. Diagnostics have become more sophisticated and several new types of treatment have been established. Accordingly, this 600-page updated edition is both timely and welcome.

The editors, Andrew Peacock, from Glasgow, and Lewis Rubin, from San Diego, have attracted an international group of authors to contribute chapters in their subjects of expertise. The text's scope is comprehensive and the execution is accurate.

Diseases of the pulmonary circulation received relatively little attention before the Pulmonary Hypertension Registry from 1981 to 1984. Since that time, our knowledge of the physiology, pathobiology, diseases, and genetics of the pulmonary circulation has grown at an increasingly rapid pace, so there is little problem in filling a text of this size with 15 new, pertinent chapters. This edition incorporates new chapters covering the genetics of pulmonary vascular disorders, pulmonary vascular tumors, and veno-occlusive disease. Each of the major causes of secondary pulmonary hypertension now has an individual chapter. Pulmonary hypertension in the neonatal and pediatric age group has a separate discussion in this edition. The discussion of acute and chronic pulmonary thromboembolism reflects advances in diagnostics and treatment of this common and life-threatening disorder.

The book is aimed primarily at the practicing clinician, with the bulk of the text devoted to description of clinical diseases.

The text starts with a description of the anatomy and function of the normal adult pulmonary circulation (the description of the fetal circulation is deferred until a late chapter). This is followed by description of the current state of knowledge surrounding abnormal pulmonary anatomy and vascular remodeling. Several pages of color plates enhance these chapters. A new chapter reviews the major recent advances in the genetic basis of pulmonary hypertension.

The next section describes the diagnostics of the diseases of the pulmonary circulation and is followed by the largest section, which has chapters that describe each disease, written so that they can be read independently. This organization necessitates overlap with the previous chapters, which cover pathobiology and diagnostics, as well as the subsequent chapters, which discuss treatments. A reader who reads this text straight through may find too much repetition, but most readers will appreciate being able to enter at a chapter of specific interest and obtain an overview of that subject with the opportunity to refer to other chapters for further discussion of related information. Given the rapid pace of advances in treatment of pulmonary hypertension, the sections that discuss treatment have done a remarkable job of including very recent treatment trial results.

The final sections discuss pulmonary hypertension in special situations: critical care patients, patients in high altitude or underwater environments, and patients with intrapulmonary shunts.

The layout of the chapters is clear, with extensive identification of subsections, in case the reader wants to refer to just part of a chapter. The figures, tables, graphs, color plates, and radiographic reproductions are visually attractive and have appropriate legends. Some of the diagnostic and treatment algorithms are (often out of necessity) too complicated to be easily appreciated.

The chapters contain extensive references. The editors have done readers a service by highlighting the major review articles, key primary papers, and those that contain the first formal publication of management guidelines. Use of this system of denotation varies widely among the chapter authors, but it is still useful.

Effective treatments for pulmonary vascular diseases often involve medications that cost \$40,000 to \$100,000 per year. Many of the leaders in the field have consultative relationships with the companies that profit from these important medications. I would favor as a standard in textbooks that every author disclose such relationships, just as they would in submitting a journal article. That said, I see no evidence in this text to suggest that any author has not presented fully accurate and appropriate discussions of his or her subject matter.

This text is now a standard in the field and should be on the shelf of every practicing physician who evaluates and treats patients with pulmonary hypertension and other pulmonary vascular diseases. I know of no better text reference source. Given the pace of advances in our knowledge of the normal and abnormal pulmonary circulation, I would cheer having subsequent editions published at more frequent intervals.

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