Pulmonary Problems in Pregnancy. Ghada Bourjeily MD and Karen Rosene-Montella MD, editors. *Respiratory Medicine* series. Sharon R Rounds MD, series editor. New York: Humana Press. 2009. Hard cover, 419 pages, \$149.

For the non-obstetrician, pregnant and lactating women are frequently seen as particularly anxiety provoking. This is especially true within the intensive care unit, where the decisions of care affect both the well-being of a young woman and the fragile physiology of her unborn child. Additionally, the rarity of pregnant patients in the intensive care unit and the paucity of data on this population make management decisions involving both fetal and maternal well-being slightly unfamiliar to physicians caring for the critically ill. Diagnostic and management decisions for women experiencing pulmonary disease during pregnancy or women with chronic pulmonary disease who become pregnant are approached with similar appropriate caution by most pulmonologists. Pulmonary Problems in Pregnancy addresses the most common clinical scenarios that pulmonologists and intensivists will encounter with regard to pregnant patients in practice. The authors provide an excellent resource for the major intersections of obstetrics and pulmonary and critical care medicine. Moreover, they specifically address obstetric issues encountered in patients with chronic complex pulmonary diseases, including cystic fibrosis, neuromuscular diseases, rheumatic lung diseases, and pulmonary hypertension.

The book is divided into 3 sections, on normal pregnancy, general management principles in pregnancy, and pulmonary disorders in pregnancy. I found that the scope of the review of normal pregnancy, particularly the chapter on the physiologic transition from fetal to neonatal life in pregnancy, was focused more toward lung development than the complex physiologic events that occur in the fetus in the peripartum period. I would have favored the latter, given the rest of the book's focus on maternal medicine with a focus on the child in utero. A review of high altitude, chronic hypoxia, and sleep physiology in the pregnant patient follows, which is quite interesting, although not as immediately useful as the chapters that follow.

In the third section the authors provide an excellent review of general management principles in pregnancy. These chapters are clear and succinct, with thorough evaluation of commonly encountered clinical issues such as diagnostic imaging and prescribing for the pregnant and lactating woman. The chapter regarding diagnostic imaging reviews issues of radiation dose and exposure risk with various imaging modalities, as well as recommendations from the American College of Radiology regarding contrast administration to the pregnant or lactating woman. The chapter regarding prescribing to the pregnant or lactating mother provides a thoughtful commentary on decision making with regard to introducing a new medication, and a well referenced review of resources available to prescribers to assess data on individual medications. In the following chapter a review of fetal monitoring in the critical care setting contains useful examples from electronic fetal monitors that demonstrate patterns of fetal heart rate deceleration, and reviews the general implications of each pattern.

The third part of this book contains the majority of the book's content and leaves no important pulmonary problem that presents in pregnant patients unaddressed. These chapters are clear, extensively referenced, and focus on data where data exist. The limitations of evidence-based practice in pregnant patients are well known and not resolved here, but where data are present, they are referenced, and a discussion of the limitations of studying a pregnant population is included. There seems to be no particular outline to each chapter that provides a predictable presentation of the information, with some chapters including practice scenarios and management decisions, while others focus on comorbid conditions, epidemiology, or diagnosis. However, this seems appropriate, given the variability of topics addressed. I had hoped to have the physiology of the maternal-fetal interaction during critical illness addressed in depth at some point in this text. A brief commentary on the goals of ventilation that are specific to the pregnant patient is provided in the chapters on critical illness and acute lung injury in pregnancy, but there is no discussion of the effects of maternal illness on fetal physiology (eg, the effects of maternal pH on oxygenation of the fetus), which I would have found both interesting and useful. I remain impressed with the breadth of pulmonary pathology that is covered in this text, and am pleased that the authors included some very complex and unusual pulmonary disorders seen in pregnant patients, such as cystic fibrosis and pulmonary hypertension, as well as common disorders in pregnancy, such as asthma, which may be undertreated in the pregnant patient.

In my opinion, the major weakness of this text is the number of typographical errors, which are mildly distracting, including misspellings and reversed symbols (eg, "\leq" on page 99). Additionally, as I have previously mentioned, there were some physiology topics that I hope will be addressed in the next edition, which would bring the level of relevance and complexity of the physiology chapters up to the level of sophistication of the rest of the text.

Although I believe that the text is written clearly enough to be useful to medical students, residents, and primary care practitioners, I suspect that the audience that will find this text most useful is pulmonologists and intensivists. The breadth of pulmonary diseases addressed clearly intends to speak to pulmonologists, and the detail with which anesthesia and ventilation strategies are addressed is intended for intensivists. I believe this text will be a valuable addition to an office library for quick reference on this interesting patient population. Obstetricians may find the book useful as well, particularly with regard to anticipating complications of pulmonary disease in their patients. I welcome this text to shed light on some complex medical issues that may arise during pregnancy, and hope that this text provides some guidance to caring for this interesting and vulnerable patient population.

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Pulmonary Arterial Hypertension and Interstitial Lung Diseases: A Clinical Guide. Robert P Baughman, Roberto G Carbone, and Giovanni Bottino, editors. New York: Humana. 2009. Hard cover, 290 pages, illustrated, \$139.

Although relatively uncommon in the general population, interstitial lung diseases and pulmonary hypertension are two of the most complex and challenging areas of pulmonary medicine for which practitioners routinely provide care. These conditions are

known not only for their indolent presentation with dyspnea: they are most often fatal when treatment-resistant. Both conditions are also known for the complexity of the diagnosis, whether from the numerous subtypes of interstitial lung disease, or the potential need for invasive tests to confirm the diagnosis (eg, lung biopsy, right-heart catheterization). Because of such complexity, expert panels recommend that patients with these conditions receive care at a center that specializes in such disorders. Despite this, these conditions are not uncommon to the pulmonary practitioner, and the majority of day to day care will be provided by the patient's primary pulmonologist. A strong foundation in pulmonary hypertension and interstitial lung diseases is necessary for the practicing pulmonologist and is helpful for primary care doctors who will care for these patients.

The overlap of these conditions (pulmonary hypertension in patients with interstitial lung diseases) has garnered increased attention because of the higher mortality rate and the potential anti-fibrotic role of medications such as phosphodiesterase inhibitors (eg, sildenafil) and endothelin receptor antagonists (eg, bosentan) that are commonly used in pulmonary hypertension. Additionally, the combination of such severe conditions makes the clinical care that much more challenging. While the title Pulmonary Arterial Hypertension and Interstitial Lung Diseases: A Clinical Guide might suggest an in-depth analysis of this combined disease focus, this book is instead a thorough review of these 2 separate conditions, although there are chapters in the book that address such overlap.

Primarily designed for pulmonary physicians or physicians with an interest in such disorders, Pulmonary Arterial Hypertension and Interstitial Lung Diseases: A Clinical Guide provides an extensive review of many aspects of both interstitial lung diseases and pulmonary arterial hypertension, written by a collection of authors who are regarded as international experts in interstitial lung disease or pulmonary arterial hypertension. The book is divided into 2 separate sections. The first section covers general issues surrounding interstitial lung diseases and pulmonary arterial hypertension, while the second part focuses on specific disorders. Each chapter in the first section delves into a specific general topic, ranging from diagnosis and epidemiology to pathology, regarding pulmonary hypertension or interstitial lung diseases. The second section is primarily devoted to the interstitial lung diseases (only one of the 6 chapters is about pulmonary hypertension) and each chapter investigates topics regarding a subclass of the interstitial diseases (eg, collagen vascular disease associated interstitial diseases).

For such a heady collection of subject matter, this book is rather a quick read and could be covered in under 6 hours of uninterrupted reading. It would serve as a good review for pulmonary fellows and practitioners who do not routinely care for patients with these conditions. Included in the first section is a chapter on lung pathology, which provides a quick and toned down, but excellent, review of each of many interstitial lung diseases. The accompanying color plates of lung pathology provide a fast review of the pathology of the primary interstitial lung diseases. Similarly, each of the chapters in the second section provide an in-depth and thorough review of a specific condition, ranging from sarcoidosis to occupational interstitial lung diseases. The 2 chapters dealing with pulmonary hypertension in the setting of idiopathic pulmonary fibrosis, the first by Meyer and Raghu and the second by Martinez, are especially well written and provide a clear and directed review of the issues surrounding both the diagnosis and management of these conditions. All of the chapters are well referenced and cover most of the up-to-date information on each topic, as would be expected from such an august body of authors.

Despite the relatively short length of a book on such complex topics, there does not appear to be a paucity of detail. Indeed, many of the chapters describe the proposed genetic and cellular basis for specific conditions. The epidemiology of the interstitial lung diseases, especially idiopathic pulmonary fibrosis, and pulmonary arterial hypertension is also well covered and provides a quick reference for those who might not remember the natural history of the disease when meeting with a patient to discuss a new diagnosis and long-term prognosis. Treatment options are similarly easy to find for many of the conditions covered. Diagnostic and treatment algorithms are also included, which provide a useful reference for the busy clinician or fellow reviewing for the boards. Combining this information with a thorough, but uncongested, index allows this book to serve as a quick and easy desk-side reference.

However, partly because of such thorough reviews and the overlap of the covered topics, the book suffers from having many experts writing individual chapters without a clear overall direction. At times it seems the editors had intended the book to be a review of pulmonary arterial hypertension in interstitial lung diseases, rather than the book that resulted. Although many chapters on the interstitial lung diseases don't deal with pulmonary hypertension, the chapters on pulmonary hypertension seem to cover primarily the overlap with interstitial diseases. Additionally, some of the topics don't seem to fit together. The first section of the book covers several topics lumped together: the utility of many different diagnostic techniques for evaluating interstitial lung diseases is covered in the chapter "Pulmonary Hypertension in Interstitial Lung Disease," which deals primarily with the physiology and potential mechanisms of pulmonary arterial hypertension, rather than in a section on interstitial lung diseases. Much of the information is duplicated between chapters, and the writing style of each chapter is markedly different, as one would expect in a book resulting from the work of many different authors.

Although the book is well referenced and written by experts who have helped to guide the practice recommendations of several of the professional societies that dictate care for interstitial lung diseases and pulmonary arterial hypertension, there is little discussion of future directions in treatment. Most of the treatment sections describe current medications, but for a book that describes two of the most dynamic fields of pulmonary medicine today, one would expect a more thorough description of future research and treatment options.

Overall, Drs Baughman, Carbonne, and Bottino have collected an incredibly detailed yet manageable book on not one, but two complex subjects. The book is easy to use and provides a solid foundation for the clinical practitioner. This book will probably find its way onto, and remain on, the bookshelves of many providers.

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