sightful, including emphasis on recognizing and minimizing dynamic hyperinflation and intrinsic PEEP. Several illustrations help the reader to understand these concepts.

I must admit, however, to being dissatisfied with the chapter on ventilatory strategy for ARDS. Following lengthy discussion of the definition, clinical manifestations, and pathophysiology of ARDS, the discussion of ventilatory support begins with sections entitled "indications," "general objectives," and "general guidelines." Among the 7 "general objectives for ventilatory support" and the 9 items listed under "general guidelines for ventilatory management in ARDS," the importance of using low-tidal-volume ventilation is never once mentioned. When tidal volume is mentioned in various subsequent sections of the chapter, there is inconsistency in the recommendations, failure to note that tidal volume should be based on predicted body weight rather than actual body weight, and no mention of the pivotal ARDS Network clinical trial that showed improved survival with use of lower tidal volume. I was acutely aware of the lack of an evidence-based approach in this chapter. Concluding comments superficially address the role of adjunctive therapy for ARDS, such as prone positioning, corticosteroids, and inhaled nitric oxide—sections that would benefit from inclusion of current references.

The final chapter tackles weaning from mechanical ventilation. While many factors related to weaning success and options for weaning approaches are discussed, this is in a rambling fashion, and final explicit recommendations are lacking. There seems to be equal weighting of modern approaches of identifying when a patient can be successfully removed from the ventilator and extubated using a structured team-based approach and of outdated approaches of gradual weaning using SIMV or pressure-support ventilation.

This book represents a very personal and comprehensive review of mechanical ventilation by an experienced clinician and dedicated teacher. The liberal use of illustrations enhances the exchange of knowledge to the reader and is a clear strength. Highly motivated students and resident physicians will find the chapters on respiratory physiology, the ventilator, ventilator parameters, and what is unique about various ventilation modes instructive. The student reader should beware, however, this is not a "basics of…" text, as complex concepts are presented in considerable detail. In contrast, the discussion regarding the clinical application of the various ventilation modes, and some of the recommendations regarding mechanical ventilation for specific disorders—particularly ARDS—cannot be recommended and detract from the value of the book as a whole. These seem to have been driven more by local practice than by evidence: a conclusion accentuated by the complete absence of references in the book. This book's "Achilles heel" is perhaps related to the intense dedication of Dr Kamat to the task of writing a large textbook all by oneself. The involvement of additional authors would probably have strengthened the book considerably by including more evidence and citing the appropriate current and classic references, by tempering the opinion of one with the opinions of other experts from other institutions, and by aggressively editing for clarity and brevity.

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Adventures of an Oxy-Phile 2, 2nd edition. Thomas L Petty MD, with Robert McCoy RRT FAARC, Louise Nett RN RRT FAARC, and Kay Bowen. Denver: Snowdrift Pulmonary Conference. 2010. Soft cover, 208 pages, $19.99

In December of 2009, with the passing of Thomas L Petty MD, the world of pulmonary medicine lost a true icon. Beginning with his graduation from medical school in 1958, *Dr Tom* (as many patients and colleagues affectionately knew him) enjoyed a career that spanned more than 5 decades. Fortunately for patients around the world, Dr Petty's career is rich with contributions advancing the art and science of pulmonary and critical care medicine.

Dr Petty has been credited variously as "the father of pulmonary medicine," "the father of LTOT" (long-term oxygen therapy), and "the father of pulmonary rehabilitation." Starting in 1965, when he first discovered the possibilities that new liquid-oxygen portable systems offered to those needing home and ambulatory oxygen, Petty elevated and promoted the medical management of COPD like no other before him or since. Additionally, in a paper that appeared in the fall 1967 issue of the *Lancet,* he and his surgical partner Dr David Ashbaugh were the first to describe the sequelae of ARDS. The face of critical care medicine and the provision of mechanical ventilation have not been the same since.

In the early 2000s, Dr Petty experienced health issues of his own—issues that in his words placed him on *the other end of the stethoscope*. This was Dr Petty's way of letting everyone know that he too was now a regular user of supplemental oxygen. Once again, another legacy was established: that of LTOT patient advocacy. As a result, today's LTOT users are much more aware of their numerous options for supplemental oxygen. There too is a growing awareness that for optimum effect, LTOT must prevent arterial desaturation (unintended or otherwise) not just some of the time, but all of the time. Success, in Dr Petty's opinion, depended upon knowledgeable LTOT users able to maximize their LTOT delivery options to maintain effective oxygenation under all conditions of use.

To nurture this growing patient-centric movement, in 2004 Dr Petty published his first book on the subject, *Adventures of an Oxy-Phile*,[1] in which he proudly stated in the preface, "This book is written for and by patients who have learned to adapt to the need for supplemental oxygen. I hope it will serve thousands of patients and their families, as well as other students of oxygen." I couldn't agree more. (Although the first edition of *Adventures of an Oxy-Phile* is out of print, a free copy can be downloaded from the Web site: www.drtompetty.org.)

The writing of the second edition, **Adventures of an Oxy-Phile 2**, commenced in full fervor by Dr Petty in August of 2009, during an extended period of wellness. Fortunately, the book was mostly complete by the time of his passing, and was easily brought to its final form by 3 life-long colleagues and close friends.

As with the first edition, **Adventures of an Oxy-Phile 2**, is more about LTOT users, although there is ample attention directed at the underlying science of continuous supplemental oxygen therapy. However, with the second edition—208 pages versus 96 for the first—there is considerably more ma-

terial about both themes. In all, there are 20 chapters, 9 individual vignettes by LTOT users, and 11 chapters by acknowledged experts (four by Dr Petty himself) on various aspects directly related to providing LTOT in the United States and abroad.

Following a moving dedication and foreword, 2 invited commentaries from colleagues and friends, and a preface by the author himself, **Adventures of an Oxy-Phile 2** begins with 4 chapters by Dr Petty, the first of which is a lay person's introduction to the need for oxygen. In chapter 2, Dr Petty discusses his personal experiences with oxygen, beginning in 1965, as an early investigator of the effect of ambulatory oxygen in minimizing the discomfort of altitude-induced hypoxia, to his status as an LTOT user. In chapter 3 he answers questions often asked by LTOT users. Chapter 4 is a reprint from the earlier edition, and is another lay person's introduction to the physiology of oxygen transport. Taken together, these first 4 chapters nicely set the table for what is to follow, including the manner in which each of the contributing experts present technical material.

Chapters 5 and 6 include the first 2 of the 9 personal anecdotes provided by LTOT users. In chapter 5 we learn how even a highly educated physician-patient can take a trip down the "river of denial" when faced with a diagnosis of COPD, and how he later had to learn to cope with oxygen. Chapter 6 offers a glimpse into just how far a resourceful retired engineer on LTOT would go to overcome obstacles encountered when initially trying to obtain the best delivery device for his needs in the United States, and then later, when retiring to Vancouver Island, trying to navigate the unknown Canadian Provincial Health Care System.

In chapter 7 a second expert offers a wonderful description of transtracheal LTOT. Following a thorough explanation of the ins and outs of transtracheal, including a balanced discussion of the potential advantages, disadvantages, and benefits, 4 patient testimonials from transtracheal users are presented. For readers interested in further pursuit of this topic, the contributing author graciously provided accompanying references.

Chapters 8 through 11 offer the reader 4 more personal anecdotes. First there is a story of how a newly diagnosed COPD patient with obstructive sleep apnea embarked on her "personal marathon" to maintain an active life despite her diseases, and how during that journey she gained so much from pulmonary rehabilitation and networking with patient groups. We also learn how her journey led her to transtracheal LTOT. Next there is the almost unbelievable story of an individual with a lifelong habit of brisk walking exercise receiving the diagnosis of COPD (secondary to bronchial obliterans), who now faced the reality of having to continue his passion for walking while using LTOT. Through sheer determination, by his own account, he has now walked in and completed 3 full marathons, over 20 half-marathons, and several 10-kilometer walks and 5-milers.

In chapter 10 we hear from a seasoned bike rider who simply refused to allow a diagnosis of COPD, with the resultant need for LTOT, to interfere with his long-held desire to bicycle across the United States. Next there is the odyssey of a politically active LTOT user who decided in 2006 to challenge the inherent difficulties of flying to Eastern Europe while using LTOT from 2 portable oxygen concentrators. No doubt his success had some influence on the Federal Aviation Administration's recent decision to permit the use of certain portable oxygen concentrators on all domestic United States air carriers.

In chapter 12 we hear from another expert, this time an acknowledged pulmonary rehabilitation specialist who went on to become a premier authority on arranging for the use of LTOT aboard cruise ships. Due to her unwavering efforts, what was once a virtual impossibility is now an everyday occurrence.

Chapters 13, 14, and 17 give us the final 3 testimonials, which deal with the genesis of several patient-advocacy groups, including the worldwide, Internet-based Emphysema Foundation for Our Right to Survive (EFFORTS). Lastly, we learn how 2 Italian LTOT users overcame obstacles to travel by train to an in-country conference on the quality of life for patients on oxygen.

Chapters 15, 16, 18, 19 and 20 give us the final 5 contributions by the experts. In chapter 15 we learn how home oxygen therapy started and is currently provided in Japan, and in chapter 16 we are treated to a similar history of LTOT in Poland. As one would expect, both authors pay a huge debt of gratitude to Dr Petty for his invaluable contributions in the 1980s as a visiting professor in Japan and for generously allowing Polish researchers to spend time with the Petty team at the University of Colorado in Denver.

Chapter 18 addresses the all-important role of the home respiratory therapist (RT) in optimizing LTOT outcomes. Authored by a highly regarded pulmonary rehabilitation RT, this chapter should be required reading for every RT, regardless of their site of practice. The author rightfully opines that many hospital-based RTs tend to view oxygen therapy as "routine" and are therefore not always included in its delivery. The unfortunate consequence of this passivity is that less than half of patients discharged following a COPD exacerbation receive LTOT to control baseline hypoxemia.[2] No wonder the recidivism rate for COPD patients following hospital discharge is so alarmingly high.[3]

Chapter 19 should also be required reading for all RTs. The author, who in my opinion is clearly the most acknowledged expert in oxygen-conserving technology, takes the reader on a fact-filled journey into the confusing world of continuous versus intermittent oxygen flow. There is a special focus on the variables that must be considered to ensure that optimum oxygen saturation is the rule and not the exception, regardless of what flow pattern is employed by the LTOT equipment. Once again the need for all RTs to know and understand the possibilities and limitations of all LTOT delivery devices is underscored.

Chapter 20 completes the expert contributions and is authored by, again, one of the world's leading LTOT researchers. In this final chapter the reader gets an idea of where LTOT research is headed and the issues that investigators ought to focus on. There is no doubt that the science behind LTOT will continue to emerge, further validating this life-saving and cost-effective therapeutic intervention. The book ends with a list of LTOT resources, a glossary of terms, and an insightful biography of each contributing author.

This book is intended primarily for LTOT users, and I wholeheartedly recommend it as such. To that end, the 11 chapters by the contributing experts are written in plain prose that can easily be understood by most LTOT users. As one would expect, so too are the anecdotes from LTOT users. However, based upon my personal observations and experiences, the book would be a valuable resource for all RTs who care for patients with COPD and other chronic respiratory conditions requiring LTOT. The

hospital-based RT would benefit from learning about the nuances (some subtle, some not so) of LTOT and the importance of ameliorating the life-threatening effects of chronic hypoxemia. Home-care RTs would also benefit, by sharing the LTOT user vignettes with their LTOT users, thereby enhancing how they manage and care for such patients. I also highly recommend the book for all RT education programs to help future RTs understand the vital role of LTOT in the care and management of COPD.

In the final analysis, **Adventures of an Oxy-Phile 2** is a fitting tribute to a giant in the pulmonary community, who always placed his patients at the forefront. With the publication of this book, I'm pleased to note that Dr Petty's commitment to his patients will endure long after his passing.

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Neonatal Respiratory Care Handbook. Elgloria A Harrison MSc RRT-NPS. Sudbury, Massachusetts: Jones & Bartlett. 2011. Soft cover, spiral bound, 272 pages, $32.95.

The neonatal and pediatric intensive care units (ICUs) are important areas dedicated to the treatment of acute and chronic illness of neonatal and pediatric patients. Respiratory therapists must have unique skills to meet the challenges created by these patients. The vast array of procedures, strategies, and equipment used in neonatal and pediatric ICUs creates an environment of continuous learning. In an era focused on competence and precision when applying advanced medical technology, the **Neonatal Respiratory Care Handbook** functions as an excellent adjunct resource for therapists to reference at the bedside and enhance key concepts specific to the neonatal and pediatric environment.

The **Neonatal Respiratory Care Handbook** is a pocket-size book organized into chapters that represent key primary pathophysiologic conditions specific to pediatric and neonatal patients and the treatments that they require. The book provides an opportunity to enhance the knowledge base of entry-level and advanced therapists who might be looking for additional information that applies to a specific clinical situation, targeted treatment, or the function of a specific piece of equipment.

The book utilizes easy-to-recognize, color-coded headings and accompanying outlines located on the first page of each chapter. Chapter outlines include the goals and objectives dedicated to each topic. Each chapter follows a consistent format divided into sections, including primary definitions of each condition, a description of clinical presentation, differences between the primary subject matter and similar clinical conditions, research supporting each section, and relevant treatment options and strategies. A list of key terms is located on the first page of each chapter to help identify important subject-related language or phrases associated with and found within the content of the chapter. References are documented by means of end notes within the content of each chapter, and corresponding references are found at each chapter's conclusion. Finally, a glossary with 13 pages of simple sentences and additional explanations is found at the back of the book, to allow immediate orientation to a subject, condition, or term that might be used in any part of the book.

Chapter size averages approximately 24 pages and includes a combination of colored illustrations, diagrams, and figures. Figures or diagrams of equipment setups are crisp, easy to interpret, and have the textbook appearance of clarity. Diagrams range from actual photographs of caregivers delivering therapy to computer-generated drawings of equipment setups, with or without mannequins. Tables are also available and list additional information about disease classification, treatment options, or medication administration. Some of the tables have very small print and are difficult to read.

An introduction paragraph explains a scenario surrounding the need for a respiratory therapist's attention to the chapter subject. Personal experience accounts are found in this section and in other areas throughout the book to help the therapist understand the importance of the subject. The rationale and background information surrounding the key topic found in the introduction help identify the primary goal and objective of the chapter.

Chapter definitions for each condition are written in succinct 1–3 paragraph format and easy-to-understand language that could be straightforwardly interpreted by therapists who have a basic foundation in respiratory care practice. In most chapters, definitions are accompanied by a historical fact, a clinical note, used to explain a specific portion of the definition (such as clinical signs of respiratory distress of the newborn) or a table or figure used to improve the understanding of the condition's definition.

Descriptions are presented in well-organized paragraph format, followed by concise bullet-pointed subject matter for quick and easy identification of key factors. These factors include the patient population affected, causes, clinical signs and symptoms, presentation of the disease, and basic definitive testing procedures used in diagnosis of the condition. Figures and tables are used to represent classification of some disease entities based on its severity. For example, in the description of asthma in chapter 3, a table was used to identify asthma triggers, medical history, and aggravating factors, while another table described the classification of asthma identified by the National Asthma Education and Prevention Program (NAEPP) and asthma severity score. Clinical pearls or "take-home messages" are present in the book. These are also helpful for the inexperienced clinician who may be seeking the interpretation of the topic's significance.

"Distinguish" is a section used to explain the similarities and differences between the chapter's pathophysiologic condition and other clinical situations that may mimic it. This is valuable for the clinician, as it compares conditions by name, clinical presentation, and diagnostic test for easier identification and understanding. In chapter 1, "Acute Respiratory Distress Syndrome," a clinical case review is used to clarify individual phases of the disease, initial presentation, recommendations for phase identification, and the therapist's response.

The research section includes both historical and current references that address