

disease. This provides the patient useful guides to treatment planning.

"Pulmonary Medications and Hygiene" (16 min). The explanation of oxygen therapy is not thorough enough. The qualifications for oxygen therapy are not mentioned. This is important because many patients don't understand that shortness of breath is not the qualifier. A review of pulse oximetry would be helpful, as oximetry is used so frequently in patient evaluations and pulmonary rehabilitation. The short discussion of bronchodilators, antibiotics, and steroids includes an excellent demonstration of various metered-dose inhaler delivery techniques. Stronger emphasis on the importance of spacers would be helpful. Bronchial hygiene is discussed and several methods are demonstrated. The review of postural drainage is well presented.

"Stress and Relaxation Techniques for Pulmonary Patients" (15 min). The importance of smoking cessation and avoidance of second-hand smoke is emphasized and several approaches to smoking cessation are given. The presentation about the stress caused by the physical and emotional impact of pulmonary illness is well done. A simple diagram of the physical stress cycle is shown and explained. Stress factors and the results of stress are explained in simple, understandable language. Stress management is also well presented. This section emphasizes the importance of having a time to relax each day. The use of muscle relaxation, diaphragmatic and pursed-lip breathing, and imagery techniques are well demonstrated. Several examples of how to simplify daily routines are given and there is a discussion of the importance of enjoyable activities. The tape ends with this strategy to manage stress: Pace, Plan, Enjoy.

"Exercise for Pulmonary Patients" (12 min). This video provides a simple explanation of the physical importance of conditioned muscles and advocates using a pulmonary rehabilitation program as a starting place to begin an exercise program. Important points about exercise are explained: the safety of the exercises, oxygen monitoring while exercising, adaptation of physical limitation to the exercise regimen, and slow starts and gradual increases in the program. Warm-ups and stretches are discussed and demonstrated. The increase in a sense of well being and the social aspects of a pulmonary rehabilitation program are mentioned.

"Healthy Choices for Managing Your Pulmonary Illness" (14 min). This video is designed for patients following a pulmonary rehabilitation program. Many helpful subjects are presented in this video. Smoking cessation is emphasized and several cessation methods are described. The signs and symptoms of illness are well presented, including changes in mucus amount and color, increased coughing, and shortness of breath. Thorough hand-washing is stressed. Flare-ups are explained, and the video stresses the importance of having a treatment plan to manage them promptly. A short segment on nutrition is included and small, more frequent meals are recommended. Suggestions for a balanced diet and simple food preparation are well presented. A couple is shown talking about their coping methods for maintaining intimacy. The video discusses advance directives to physicians, and there is a well-done section on community support, which emphasizes continuing activities and the importance of staying active.

This video series was enhanced by the selection of the patients who appear in the videos. It is so much easier for the viewer to identify with people who have similar problems.

The video designed for home use, "Living with Your Pulmonary Illness," will be a treasured resource for patients. One of my active pulmonary rehabilitation maintenance group members (for 11 years), Gloria Myers, reviewed the videos and thought they were all excellent, especially the illustrations and portrayals of patients. She found the patients shown in the videos "real" and very credible—not actor types. Gloria also thought the tapes extremely informative and very clear and concise. She appreciated that the sound quality was good; people in the video spoke slowly and calmly and were easy to understand, partly because they spoke in a "nonmedical" fashion. Gloria thought the videos would be an asset for pulmonary rehabilitation programs and that they would be especially good for our graduates (people in the maintenance program), as review material, since "many of us have attended for a long time and forgotten to pay attention to some important information."

Barbara McMullan RRT
Pulmonary Rehabilitation Program
Duke University Medical Center
Durham, North Carolina

Diagnosis and Management of Pulmonary Embolism (CD-ROM). Stavros Konstantinides MD, Annette Geibel MD, and Wolfgang Kasper MD. 2002. Stuttgart, Germany: Thieme Medical Publishers. \$99.

Diagnosis and Management of Pulmonary Embolism is an interactive CD-ROM for teaching clinical decision-making regarding pulmonary embolism. The program on the CD-ROM describes 8 patient cases and guides the user through diagnostic dilemmas, therapeutic options, and outcomes—all with appropriate references. Additionally, there are radiographs, electrocardiographs, and echocardiographic and angiographic videos with each case, which show commonly-used diagnostic modalities and captivate one's attention. The program is intended for an audience of medical students and practicing physicians, but it would also be appropriate for nurses interested in critical care, emergency room care, or the management of pulmonary embolism in particular. However, the content focuses more on the diagnosis of pulmonary embolism rather than the management of critically ill patients with pulmonary embolism. There is very little discussion of the respiratory care or ventilator management of such patients, so this CD-ROM may not appeal to respiratory therapists.

This CD-ROM works only with the Windows operating system (Windows 95 or higher). The minimum required central processing unit speed is 333 megahertz, and there must be at least 5 megabytes of free space on the hard drive and 64 megabytes of random-access memory available. A 12× compact disc reader is necessary, and monitor resolution must be set at 1,024 × 768 pixels and 32 bits color depth to view all the images and videos. If the resolution is not set properly, the program will automatically guide you through a few easy steps to change the settings. I tested the software on a computer that has a 900 megahertz Athlon processor and had no difficulty.

The program appears with a split screen and is extremely easy to use. On the left side is a list of the 8 patient cases, each with a one-sentence description. Each case can be clicked to open and the case appears on the right side of the screen. By clicking on the arrows and directions, the user can navigate through each case with ease. Images are clear, videos begin without additional prompting, and interpretations of the studies are readily available once the user has had an opportunity to review the studies.

Furthermore, any of the cases or portions of cases can be skipped, and it is simple to exit the program and then re-enter it at the same point.

The 8 patient cases demonstrate the protean manifestations of pulmonary embolism. The cases range from a patient with a relatively minor pulmonary embolism and no hemodynamic compromise to a patient with acute pulmonary embolism and right ventricular overload. Also included are 2 cases with diseases that can mimic pulmonary embolism: acute mitral regurgitation and atrial septal defect. When a case is opened, a list of case segments appears, including history, physical examination, laboratory data, electrocardiogram, and other relevant information. Images such as chest radiograph, duplex ultrasound, chest computed tomography, and echocardiography are then available with a click. The case concludes with any further diagnostic procedures that were ordered, followed by a description of the patient's treatment and clinical course and a brief discussion of the case's management. In general, the cases are well described, clear, and easy to learn from. I think the cases are appropriate for the intended audience. One of the best features of the program is that it allows the user to be a diagnostic sleuth, as it does not present the next step in the case until the user has an opportunity to formulate an answer.

However, there are several flaws with the presentations and discussions that could mislead practitioners. This program was written by a group of physicians who are researchers of echocardiography for diagnosing and managing pulmonary embolism, and they advocate echocardiography extensively, which is not agreed upon by all experts in this field. Every case includes an echocardiogram as part of the workup, and the echocardiography results are heavily relied on for management decisions. For example, studies have found that patients with pulmonary embolism who have signs of right ventricular strain on echocardiogram have increased mortality, and it has therefore been hypothesized that reducing right ventricular afterload with thrombolytic therapy might improve survival, even in cases where there is no hemodynamic compromise.^{1,2} Many experts would agree, however, that, despite numerous investigations, thrombolytics have not been proven to provide a clear survival benefit in that situation. One of the cases presented in this CD-ROM is of a patient

who has an acute pulmonary embolism and right ventricular overload on echocardiogram. The patient receives thrombolytics, possibly leading the user to believe that obtaining an echocardiogram and administering thrombolytics is the correct decision with all patients of that type.

Additionally, many of the 8 example patients were included in study protocols and therefore received many diagnostic procedures. Several of the patients had positive chest computed tomography angiogram, duplex ultrasound of the extremities, and pulmonary angiogram, in addition to echocardiogram. Seeing the correlation between those different studies is interesting, but this CD-ROM could give the reader the impression that all of those tests should be performed, when in practice pulmonary embolism only needs to be diagnosed with a single positive study.

I think the program places too much emphasis on the complicated technology used for diagnosis of pulmonary embolism and not enough emphasis on identification of patients, simple diagnostic algorithms, and treatment. Nothing is mentioned about the utility of D-dimer testing. There is no discussion of the most appropriate diagnostic study to order first, which is usually a ventilation-perfusion scan or a chest computed tomography angiogram, not an echocardiogram. Also not referenced are the data comparing low-molecular-weight heparin and unfractionated heparin, the duration of anticoagulation therapy, or the appropriateness of a hypercoagulability workup in some patients.

Overall, **Diagnosis and Management of Pulmonary Embolism** is an interesting tutorial on pulmonary embolism, but it focuses too heavily on diagnostic modalities and new technology. With its interactive design and outstanding graphics, the program is entertaining while providing education on a limited approach to the diagnosis and management of pulmonary embolism. However, some information in the program can be misleading and too little time is spent on the relevant and practical clinical aspects of caring for patients with pulmonary embolism. As part of a library, this CD-ROM might be useful for some practitioners, but I would not recommend purchasing it for personal use.

Renee D Stapleton MD

Division of Pulmonary and Critical Care
Medicine
University of Washington
Seattle, Washington

REFERENCES

1. Goldhaber SZ, Visani L, De Rosa M. Acute pulmonary embolism: clinical outcomes in the International Cooperative Pulmonary Embolism Registry (ICOPER). *Lancet* 1999;353(9162):1386-1389.
2. Kasper W, Konstantinides S, Geibel A, Olschewski M, Heinrich F, Gresser KD, et al. Management strategies and determinants of outcome in acute major pulmonary embolism: results of a multicenter registry. *J Am Coll Cardiol* 1997;30(5):1165-1171.

Pulmonary/Respiratory Therapy Secrets, second edition. Polly E Parsons MD and John E Heffner MD, editors. Philadelphia: Hanley & Belfus. 2002. Soft cover, illustrated, 539 pages, \$34.95.

As a respiratory care educator, I cannot overstate the value of a good reference text. As the ever-expanding titles in my library vie for premium shelf space, more and more, natural selection takes over and those works with unturned pages are relegated to the back of the pack. I am pleased to say that **Pulmonary/Respiratory Therapy Secrets** has found its place not only among the front-runners, but also frequently occupies a seat in my book bag.

Pulmonary/Respiratory Therapy Secrets is a clinical reference for pulmonary and critical care medicine. The text presents numerous topics from a diverse and prolific group of authors, written in a question-and-answer format designed to function with the stated goal of the text: "Pulmonary clinicians and respiratory therapists must first pose proper questions before they can formulate effective solutions to their patients' respiratory problems." The intended audience is experienced clinicians, medical students, residents, and fellows. The question-and-answer format works well, because it utilizes and reinforces the critical thinking skills needed to be an expert clinician.

In general, the design of the book is visually appealing. The book is small enough to be kept handy, though not quite small enough to be comfortably kept in a lab coat. The paperback binding is sturdy, and my copy shows no signs of wear, even after being carted around town in my bag. The book's cover art is very basic and leaves something to be desired. That fact has some impact on the immediate visual appeal of the text—but the old adage about not judging a book by its cover still holds true! The book's use of illustrations, tables, and radiographs enhance the wealth of informa-