New Media

CD-ROM Review

Central Venous Catheters

(c) 2000 - Oliver C. Wenker, Ann T. Malecha, Irwin M. Freundlich, Susan R. Spence.

Available from Cook Canada (1-800-668-0300 or 1-905-640-7110)

This CD-ROM tutorial, which runs on both Windows and Macintosh platforms, is intended "to offer information, education and training to users of central venous catheters and to improve awareness of the indications, contraindications, warnings and potential complications that may be associated with placement of central venous catheters." The tutorial includes a brief 15 minute quick-start overview as well as a much more comprehensive presentation involving ten "multimedia learning modules" along with three superb interactive quizzes, all illustrated with a large number of colour graphic images. Video clips illustrating central line insertion by the internal jugular and subclavian routes are also included, narrated in a pleasant female voice with a distinct Texas accent. There is also a bibliography of over 6000 abstracts related to central line insertion, occupying some 3344 pages of text. (Do not attempt to print out!)

I had no trouble installing the tutorial on two different Windows machines. The videos ran smoothly without trouble. I particularly enjoyed the interactive quizzes, which illustrate a number of common and rare catheter malpositions. (The quizzes are interactive in that they provide an instant commentary on any wrong answers entered.) The only problem I found here was that sometimes the x-ray images were too small to allow one to readily identify the pathology present.

One quite unexpected surprise I found while exploring the contents of the CD-ROM were two almost identical files named cvc.pdf and cvcv.pdf in the bibliopc\acord4 directory. These files are copies of a 119-page textbook on central line insertion authored by Dr. Wenker. Why there is no mention of this valuable

resource anywhere in the CD-ROM packaging or in the CD-ROM opening menu is a complete mystery!

In my opinion, despite some slight problems with the x-ray images and an occasional spelling error, the authors achieved their goal admirably. Highly recommended.

D. John Doyle MD
Toronto, Ontario

CD-ROM Review

SimBioSys PFT

Critical Concepts Inc. www.critcon.com \$79.00 USD
ISBN:1890404047

Underlying many lung diseases are changes to the biomechanical properties of the lungs. Understanding diseases such as asthma, pulmonary fibrosis or emphysema requires a working knowledge of how these biomechanical changes occur. Pulmonary function testing looks at several aspects of lung biomechanics known to be clinically important and is a widespread method for pulmonary diagnosis, for determining severity of disease, and for providing objective measures of progress or deterioration.

SimBioSys PFT is a software package on CD-ROM that teaches one about pulmonary function testing. It uses a software physiology simulator (mathematical model) to illustrate concepts and principles that are more difficult to learn using only static text and diagrams such as when reading a textbook. SimBioSys PFT gently walks the user through the essential steps of pulmonary function testing with a series of paragraphs, images and illustrations. The user is later able to practice and reinforce his or her clinical skills by taking on some patient cases.

The underlying model used is quite sophisticated and involves "coupled models of the lung lobes, chest wall, diaphragm, airways and gas exchange." The SimBioSys series of software packages are "flight sim-

ulators” that are based on modelling the physiological functions of the human body, allowing students, scientists and health professionals to experiment on a fairly realistic cyber-patient. The SimBioSys engine is based on over 150 differential equations, and has over 1000 variables.

SimBioSys PFT is promoted as “a systematic curriculum for learning to interpret pulmonary function tests” that “uses hypertext, illustrations, and dynamic interactive simulations”. After one spends time studying pulmonary function principles and the patterns of pathologic derangements, the user is presented with a number of unknown cases for diagnosis. Topics included in the CD-ROM include respiratory system static and dynamic measurements, gas exchange measurements, respiratory strength, disease patterns in pulmonary function (increased lung compliance, increased airways resistance, mixtures, etc.), and patient case studies.

I found the program to be fun, comprehensive and easy-to-use. This CD-ROM is a must for every anesthesia teaching library.

D. John Doyle MD
Toronto, Ontario