New Media

CD-ROM Review: The Evolution of the Anesthesia Machine

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This Windows CD-ROM is a marvelous historical survey of the evolution of the technology used in our profession. It was produced using Macromedia Director and in collaboration with the Wood Library Museum of the American Society of Anesthesiologists where Dr. Ortega was awarded an anesthesia history fellowship. It was, quite justly, awarded first prize for being the outstanding scientific and educational exhibit at the ASA annual meeting in 1998. Both authors were affiliated with Boston University at the time. It was developed "in an effort to enhance safety in anesthesiology through the understanding of its history."

I had no trouble getting the software to install on my test computer, a 300 MHz Pentium II laptop running Windows 98. The CD-ROM will automatically play when placed in the CD-ROM drive. The setup program will add a menu to your Start Program Menu, as well as add Microsoft DirectX and Microsoft Media Player capability where needed. (Microsoft DirectX and Media Player are required to play the media content of "Evolution of the Anesthesia Machine".) There is a nice option to run the software entirely from CD-ROM, which will appeal to many people with limited disk space.

As the title suggests, this is a CD-ROM about the history of the anesthesia machine. In fact, the focus of the CD-ROM goes beyond mere history of anesthesia technology to additionally offer a considerable amount of material dealing with the American origins of ether anesthesia, starting, of course, with the details of Morton's public demonstration of ether anesthesia at the "Ether Dome" of Massachusetts General Hospital on October 16, 1846. To place this date in the context of contemporary European affairs, there is even a small section covering the key historical events of the time, such as the publication of the Communist Manifesto in 1848. These kinds of little extras help make this CD-ROM a really attractive product.

A particularly nice feature of the CD-ROM is the "timeline" section, which covers the history of anesthesia from the 1840s to the present, one decade at a time. At each decade, a series of icons is offered dealing with such topics as the Allis ether inhaler (1874) or the Richardson ether bottle (1920). Some of these sections have associated video clips. Another interesting feature is a series of brief interviews with historically important individuals such as Dr. Leroy Vandam or recent individuals involved in advancing anesthesia technology.

I found the most delightful aspect of the CD-ROM to be a series of short black and white video clips teaching how to use open drop ether anesthesia using a Shimmelbusch face mask. The videos show real historical footage of a patient receiving ether anesthesia, complete with an episode of laryngospasm.

The CD-ROM closes with a look at anesthesia developments we can expect to see in the future, as exemplified by video clips of interviews with an advanced anesthesia machine designer at Ohmeda and with the inventor of the bi-spectral index (BIS) monitor.

While it is true that this CD-ROM would be of relatively little value in preparing for the anesthesia fellowship examination, it will almost certainly delight those practitioners interested in knowing how our forefathers provided anesthesia care. Think of it as an anesthesia museum on CD-ROM. Highly recommended.

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Embedded Computers in the Operating Room and in the Intensive Care Unit

Computers are now an important and integral part of modern anesthesia care. In many cases "embedded" computers are integrated "transparently and seamlessly" into medical instruments so that the user never realizes that he or she is using a computer per se.