ventilation monitoring. Unfortunately, there is only one chapter that seriously examines the question of cost-effectiveness, and that analysis is neither scientific nor rigorous.

If computers in critical care and pulmonary medicine are your specialty, this book belongs on your shelf. If not, borrow a copy from the library first.

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The Pathophysiology and Techniques of Cardiopulmonary Bypass—Volume II. BY JOE R. UTLEY (WITH 29 CONTRIBUTORS). Baltimore/London, Williams and Wilkins, 1983. Pages: 253. Price: 39.00.

The Pathophysiology and Techniques of Cardiopulmonary Bypass—Volume II is the result of the Second Annual Cardiothoracic Symposium held in San Diego, California, in February, 1982.

Each chapter has a different author, and, as such, the quality varies. Topics presented range from basic research to up-to-date reviews to "how-to" chapters. The chapters on Vasomotor Activity, Fluid Balance during Cardiopulmonary Bypass, Complement Activation are very good. The chapters on Pulsatile Flow and Cardioplegia Solutions are excellent reviews of controversial subjects. The chapter on Carbon Dioxide Transport and Acid Base Balance is very complex. It is difficult to follow because the presentation is from an approach different from that usually taught in anesthesia. Perhaps it is better, but it requires very thoughtful reading. The chapter on Hypothermia for Cardiopulmonary Arrest for Neurosurgical Procedures is a "how-to" version but would be very helpful if the reader suddenly were confronted with one of these very demanding cases.

This is primarily a surgical book written by surgeons from surgeons' viewpoints. A comment about the rise of K^+ with muscle relaxants treats succinylcholine and suxamethonium as distinct muscle relaxants. It also is stated that if a cerebral air embolus occurs, pentobarb coma should be instituted. This is certainly controversial.

Overall, the book is a very good review of many aspects of cardiopulmonary bypass. It certainly deserves to be in departmental libraries as a useful reference for a subject whose references are often difficult to locate.

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