

Book Review

TECHNIQUES IN EXTRACORPOREAL CIRCULATION

Edited by Philip H. Kay and Christopher M. Munsch

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In *Techniques in Extracorporeal Circulation*, a comprehensive 19 chapters written by an international gathering of 45 authors present a great deal of information. Subjects include equipment, physiology of bypass, surgery without bypass, blood conservation, port access, and robotic surgery, and education, to name a few. Techniques, effects, controversies, and details of the equipment of extracorporeal bypass and other perfusion practices are thoughtfully presented and suitable for readers a wide range of knowledge. Each chapter has its own index, a key point section, introduction, body, summary, and references. The graphics are clear and easy to examine.

This book is ambitious in presenting current practices. At the moment, as you take your manuscript to the printer, new pertinent information is becoming available. Kay and Munsch have published four books in this series to date. In some chapters, a large portion of the research cited is a decade or two old, sometimes with conflicting opinions on the superiority of equipment and techniques. It is true that some early research in medicine is accepted and there is no need to repeat the studies. In the chapter on organ dysfunction during extracorporeal circulation, data from a 1974 and 1986 paper are referenced to suggest that arterial filters may not be as helpful as we assumed. In the chapter on filters in cardiopulmonary bypass to follow,

references from 1994 and 1997 report adverse neurological outcome when arterial line filters are not used.

I am torn between calling this an introduction to perfusion for health professionals and prospective students and a view/review of current techniques for those well versed in perfusion practice. This is an ambitious undertaking to capture a wide range of readers. Some chapters present years of experience combined with current research and have a lot of detailed information complex, such as cardiopulmonary bypass and the brain. Persons taking their first view of perfusion might find this a bit overwhelming, although this book is ideal for those familiar and more interested in the research, experiences, and opinions of colleagues. Conversely, the chapters on alarms and safety in cardiopulmonary bypass and priming fluids could be better suited as introductions. Multi-author books are often inconsistent in the quality and complexity of the writing.

The sections on good anesthesia for cardiopulmonary bypass, inflammatory response to cardiopulmonary bypass, and robotics were very valuable. I would be tempted to use these chapters for reference in the future. Some include what seems to be ever present "brief history." Perhaps history is to be understood and appreciated without being revisited too often like the salad before each meal. A person looking for review might find this redundant.

In summary, I would recommend this book in conjunction with other textbooks. It would be suitable for a prospective perfusion student, health care professional with an interest in the practices of perfusion, or experienced perfusionist. Some chapters will be better targeted for one group than another, with an overall scope of subjects appropriate for current trends in perfusion. There is certainly information for everyone, with enough directions for obtaining more details in areas in which an individual might feel unfulfilled.