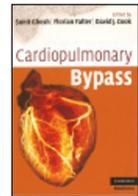


## BOOK REPORT

# Cardiopulmonary Bypass

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Edited by Ghosh S, Falter F, Cook DJ. *Cardiopulmonary Bypass*. Cambridge, UK: Cambridge University Press; 2009. 207 pp. ISBN-13: 978-0521721998



This book aims at providing an 'easily readable source of material for the everyday practice of clinical perfusion.' The information included should interest both newcomers to perfusion and also more experienced perfusionists, anesthesiologists and surgeons.

This 207-pages work includes 15 chapters, is well illustrated and contains a lot of tables and interesting diagrams. The first chapters present the equipment and the preparation of the cardiopulmonary bypass (CPB) circuit, the conduct of the bypass and the process of weaning from mechanical to physiological circulation. Two chapters describe the management of the hemostatic and metabolic consequences of the CPB circuit. One chapter is dedicated to myocardial protection. The effects of extracorporeal circulation on the body are described, with particular attention to the brain and the kidney, two organs at high risk of complication after CPB. Mechanical circulatory support, deep hypothermic circulatory arrest and extracorporeal membrane oxygenation are described in specific chapters. The last chapter describes CPB in noncardiac procedures, such as thoracic aortic surgery, pulmonary embolism, hepatic and pulmonary transplantation, major oncologic surgery, and trauma. The editors and authors are UK and US anesthesiologists, perfusionists and surgeons with recognized expertise in the field of CPB.

This book covers most of the topics related to the management of CPB – in adults. Unfortunately, there is no chapter dealing specifically with pediatric CPB.

The information provided in this book is relatively basic, and is less complete than in many textbooks on the subject. Several chapters refer to relatively old concepts

of perfusion that have been challenged since (that is, the use of crystalloids as the priming fluid, management of the on-bypass hematocrit on bypass, overview of the coagulation cascade, and so forth). Little information is provided about new perfusion approaches such as the Heart Port<sup>®</sup> technique, the mini-bypass technique, the different coating options of the bypass circuitry, the different mechanical circulatory support devices, and so forth. In this field, the more recent strategies are not described.

Each chapter ends with suggested further reading that most often includes other reference books or relatively old articles, which do not really represent the actual trends in clinical perfusion.

In conclusion, while this book should interest both newcomers and experienced perfusionists, it does not fully meet its objectives – sometimes being incomplete and sometimes being too basic.

#### Abbreviations

CPB, cardiopulmonary bypass.

#### Competing interests

The authors declare that they have no competing interests.

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