

Although there are several books on PCR already available, *PCR* by Newton and Graham is a welcome addition, particularly for beginners. This book consists of two parts. Part 1 (chapters 1-3) explains the principles of the PCR amplification of nucleic acids, the reagents, consumables, and instrumentation required, and the guidelines for setting up and optimising the PCR process. In Part 2, each chapter (chapters 4-13) details an application of PCR: cloning and modifying PCR products; isolating and constructing DNA clones; PCR mutagenesis; sequencing PCR products; DNA sequencing and genome mapping; fingerprinting; characterising unknown mutations; analysing known mutations; detecting pathogens; and quantitative PCR. The principles of each application are well illustrated with simple diagrams—even some rather complex concepts are made readily comprehensible. However, some beginners may be disappointed to find that there are no suggested protocols for specialised applications. The original articles that are listed at the end of each chapter will need to be consulted.

The description of the basic principles and optimisation of PCR in the first three chapters is quite adequate, with minor exceptions. The section on the choice of polymerases in particular (2.2), is useful reading even for seasoned practitioners. In the section on primer design (2.4) the authors should have advised readers to check their primer sequences against those in a DNA sequence database to make sure that the primers do not exhibit extensive homology to other sequences. The authors also do not mention that the

newer models of thermal cycler allow a temperature gradient to be set across the reaction block such that the optimum annealing temperature can be experimentally determined in a single PCR run.

In part 2, some of the special applications of PCR receive much attention. However, a few areas such as differential display (5.6) and quantitative reverse transcriptase-PCR (13.2) are dealt with in a few sentences. It is understandable that some of the more restricted applications of PCR such as in vivo footprinting of protein binding sites on DNA are omitted, but the more useful applications such as the serial analysis of gene expression (SAGE) should have been included.

Despite minor deficiencies, this book would be useful for those who are contemplating to use PCR in their research for the first time. A good understanding of the fundamentals of PCR described in the first three chapters will enable readers to tackle most problems that would be encountered when using PCR. Even for the more experienced molecular biologist, the survey of various applications of the PCR in this book should enrich his or her repertoire of research techniques.

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Comprehensive postanesthesia care

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Modern anesthesiology has evolved to provide care to patients not just in the operating room. Preoperative assessment, and intra-operative and postoperative management are all integral parts of modern anaesthesiology—the anaesthesiologist has taken up the role of a ‘perioperative physician’.

In their book *Comprehensive Postanesthesia Care*, Prof M Brown and Prof EM Brown have concentrated on an extremely important yet relatively overlooked topic of anaesthesiology. The early recovery period

is especially critical, as up to 30% of patients will experience some form of complication during this period.¹ However, there are hardly any anaesthetic books that are dedicated solely to postanesthesia care. This book will definitely fill this niche and will be welcomed by most practising anaesthesiologists.

The book is divided into three parts and has 35 contributors from more than 20 institutions in the United States. The first part covers general considerations in the postanesthesia care unit (PACU); the

second deals with specific clinical problems that are commonly encountered in the PACU; and the third presents some administrative issues in relation to PACUs.

The first and third parts of the book address all the important issues in setting up a new PACU. Chapter 2 in the first part and chapter 23 in the third part give practical guidance regarding the equipment required in and physical layout of a PACU. The suggestions are based on well-established guidelines and standards, such as those established by the American Society of Anesthesiologists. Chapter 3 provides some useful protocols for the day-to-day running of the PACU. Chapter 24, the last chapter of book, covers the importance of maintaining the quality of care in the PACU, while adhering to the concept of continuous quality improvement. These two parts of the book will be of interest not only to practising anaesthesiologists, but also to nurses and hospital administrators.

All the clinical material is contained in the second part of the book, which contains 18 chapters and is undoubtedly the most important part of the book. The chapters cover problems of all the body systems, as well as specific problems such as pain management and infection control. There are also separate chapters that concern geriatric, paediatric, and ambulatory surgical patients. Practising anaesthesiologists and physicians working in intensive care units or in other departments that take care of postoperative patients will find this section useful. Each chapter starts with a review of the relevant basic science, such as physiology or pharmacology. Next is a thorough discussion of the commonly encountered clinical problems and their diagnosis, monitoring, and management. The basic science section of each chapter covers information that is applicable to the postanesthetic period and all areas of clinical anesthesiology. As such, this book serves as a ready reference not only for day-to-day patient carers in a PACU, but also for qualified anesthesiologists who are revising a particular topic

or for trainees reinforcing their knowledge before examinations. Beginners will find this part of the book an excellent introduction to the integration of basic sciences such as physiology, and clinical medicine such as anaesthesiology.

Most chapters have been extensively researched and contain an average of 40 to 60 up-to-date references, although some chapters have a few referencing inaccuracies. Certain chapters, such as the one on fluid and electrolyte management and the one on allergy, contain more than 200 references! The English is easy to read and the management guidelines are clear, specific, and thus of high practical value. The book lacks an outline at the start of each chapter, which may make searching for information more difficult. In some chapters, the authors could have included more figures, tables, and diagrams, and reduced the amount of text.

In attempting to accommodate the need of a highly diverse group of readers, which include junior anaesthesiologists, specialist anaesthesiologists, nurses, and hospital administrators, this book is a substantial 573-page volume. As such, it may not fill the requirement of those who are looking for a quick practical manual in the PACU. Nevertheless, this book will be invaluable to those who are preparing to set up a PACU and will also be an ideal reference in the PACU.

Reference

1. Zelcer J, Wells DG. Anaesthetic-related recovery room complications. *Anaesth Intensive Care* 1987;15:168-74.

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