

8, 9, and 10 review rewarming alternatives including passive rewarming, active external rewarming, and active internal rewarming by means of cardiopulmonary bypass or peritoneal dialysis. Chapter 11 briefly reviews the prevention and therapy of pneumonia, sepsis, and other secondary complications after near drowning. The author suggests that selective decontamination of the digestive tract with topically applied nonabsorbable antibiotics is the current standard of care, although this treatment has not gained widespread acceptance in the United States.\* In their panel discussion, the authors discuss controversies raised in the preceding chapters and inconsistencies in the suggested therapeutic regimens. Appendix A presents statistics and the epidemiology of near drowning in the Netherlands. Appendix B summarizes the treatment of hypothermic near-drowning victims based on the sometimes varying treatment protocols in the preceding chapters. A selected reference list for all chapters at the end of the book includes up-to-date citations and classic articles from international sources.

This book is consistently easy to read, well written, and fairly concise, despite some repetition from one chapter to another. For example, "No one is dead until warm and dead" is repeated in several chapters. The text is written in terms that will be useful to both paramedical and medical personnel. Some important issues in treatment of the near drowning victim, however, are only briefly mentioned in this text. For example, dexamethasone is mentioned as routine therapy for aspiration pneumonia without any discussion despite this being quite controversial. Similarly, cryoprecipitate is recommended as accepted treatment with inadequate supporting evidence. Greater detail on the role of mechanical ventilation with PEEP and measures for controlling elevated intracranial pressure would have been appropriate.

As stated in their preface, the authors intended to provide an overview of accidental hypothermia and near drowning to stimulate discussion and research. They accomplished this goal. This book is a useful, concise, up-to-date review for clinicians responsible for the care of these complex patients, and provides much more information than found in any chapter in a standard textbook. As the editors acknowledge, however, this text is not meant to be comprehensive, and does not provide all of the relevant information. For this, the reader must still go to other sources, especially the references cited in this book. *Accidental Hypothermia and Near Drowning* is an excellent addition to the existing literature on this topic.

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**Risk and Outcome in Anesthesia.** EDITED BY DAVID L. BROWN. Philadelphia, J.B. Lippincott, 1988. Pages: 420. Price: \$29.50.

David Brown has assembled specialized contributions from 27 anesthesiologists and presents them in two separate series: one on Perioperative Risk and one on Postoperative Outcome. The selections are prefaced with his own historical description of the growth of interest in anesthetic risk and of how the definition of anesthetic risk has changed over time. A final chapter (*Anesthesiology and Medicolegal Outcome* by Richard Ward and Margaret Lane) reviews some current

issues, particularly pressures from the legal profession to correlate medical practice with outcome. The material in this text is of conceptual value for the mature anesthesiologist, as well as the referring surgeon, internist, or pediatrician. Sooner or later, every anesthesiologist will want to understand this material.

In his introduction, Dr. Brown reviews the colorful history of debate over the risk of using anesthetic agents, a debate that began when unexpected deaths followed the introduction of inhalational anesthesia using ether and chloroform. His account of efforts to eliminate use of chloroform in favor of ether is charming and reminiscent of the great halothane debate. Dr. Brown, however, has a more concrete application for information generated by the dispute. He uses early data on the relative safety of ether and chloroform to trace the development of a framework for analysis of risk in anesthesia, and to present his own views. Dr. Brown believes that attempts to minimize perioperative risk and improve outcome will require three separate efforts from anesthesiologists: "First, efforts to educate physicians and the public about facts already known about anesthetic risks must continue. Second, a common data base and language for perioperative risk and outcome must be established so that communication is facilitated. Finally, anesthesiologists need to expand anesthetic care to include the postoperative period not only for critically ill patients, but for all patients."

The chapters that follow contain much useful information. The section on Perioperative Risk includes review studies in the subspecialty areas of cardiovascular and pulmonary disease, hematologic and immune function, psychiatric, endocrine and renal, and gastrointestinal function. The Perioperative Outcome portion includes chapters on anesthetic choice, critical care, hemodynamic monitoring, cardiopulmonary anesthesia, neuroanesthesia, pediatric anesthesia, obstetric anesthesia, and acute and chronic pain therapy. Each chapter includes extensive references. The effort is made not simply to review studies of individual risk situations and their possible outcomes, but to construct and explain modern definitions of risk (and hence of possible negligence) in anesthesia. For instance, many risks, such as that of aspirating gastric contents (concisely discussed in the chapters on Pulmonary Disease, Pediatric, and Obstetric Anesthesia) are now so preventable that their very occurrence tends to be considered almost a sign of professional negligence. The chapter on Anesthetic Choice analyzes the difficulties of comparing the risks of general *versus* regional anesthesia, or research attempts to try determining an ideal anesthetic for any given procedure. Although analysis points to considerable difficulties in attempting such comparisons, the chapter is written both from a research point of view and also with the clinician very much in mind. Contextual limitations on good practice are well presented in the chapter on Critical Care: finite resources, changing perceptions in the public and in the medical profession regarding therapeutic interventions and shortages of nursing personnel, as well as the limitations of current predictive indices are cited. The discussion of Hemodynamic Monitoring is precise and lucid. A review of the current debate about when or whether to transfuse stresses the paucity of data balancing an "optimal" hemoglobin level *versus* the risks of transfusion. Anemia has not been linked to wound dehiscence, and inconsistencies in other data suggest anemia is associated with, rather than determinant of, postoperative infections. The authors cite data on risk of impairment of immunologic function by anesthetics, and offer limited support for a reduction in the incidence of major infections.

The final review chapter presents medicolegal cases from over 900 closed claims derived from the ongoing study of closed claims against anesthesiologists undertaken by the Committee on Professional Liability of the American Society of Anesthesiologists. We were disappointed that no distinction was made in this study as to the status of the responsible anesthetist (physician, dentist, nurse, or anesthesia associate). This chapter includes a review of the "Team Concept" and notes that

\* Orlowski, J: *Pediatr Clin No Amer* 34:75-92, 1987.

malpractice claims appear more frequently when the team as a whole appears less functional—just as problems can occur at any moment during a plane flight, but these are minimized if the crew is working well together. This provided somewhat dubious comfort, as we were airborne while reading this chapter!

We found some omissions. We missed an overall discussion of risk, perhaps a more philosophical discussion of risk as “the probability of dangerous occurrences in the context of available information.” There are some specific omissions: awake sedated tracheal intubation under topical anesthesia is discussed only for pediatric patients with abnormal airway anatomy, not for obstetric or other high-risk adult populations, nor for oral surgery. Hypnosis is not mentioned.

Overall, this is an excellent, provocative text. It should stimulate us to standardize our information and focus our understanding of the

risks to which anesthesiologists, as well as their patients, are still exposed despite many advances in practice.

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### Erratum

In the June, 1989 issue, a Clinical Investigation (Bricker SR, Telford RJ, Booker PD: Pharmacokinetics of bupivacaine following intraoperative intercostal nerve block in neonates and in infants aged less than 6 months. *ANESTHESIOLOGY* 70:942-946, 1989) contains an error in that the combined mean peak blood concentration in neonates is  $0.87 \mu\text{g} \cdot \text{ml}^{-1}$  and not  $0.82 \mu\text{g} \cdot \text{ml}^{-1}$ .