

areas of interest, and a number of the reproductions are of poor quality. On the other hand, the pictures of patients positioned for various procedures provide clear illustrations of the problems the anesthesiologist and his patient are about to face.

Evaluation of the text in view of information currently available in a number of recent review articles indicates its functional inadequacy in this area. However, no current text devoted to neuroanesthesia is presently available, although recent publishers' advance notices indicate that at least two books are about to be published. A combination of a number of review articles on cerebrovascular physiology and pharmacology and McComish and Bodley's text would provide a suitable reference source for neuroanesthetic practice until the newer offerings can be evaluated.

The purchaser of this book receives a practical cookbook to neurosurgical anesthesia and little additional food for thought. Considering that a stated goal of the book is to improve the anesthesiologist's comprehension and enjoyment of neuroanesthesia, the skimpiness of the basic concept chapters will do much to undermine his confidence when he interacts with his, hopefully, more up-to-date neurosurgical colleagues. There is no one-stop shopping here!

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Note: The above book was received several years after its publication. Review was deemed justified because there is no comparable text currently in print.—B.R.F.

IRCS Journal of Medical Science. University Park Press, Baltimore, Maryland 21202, 1975. Annual subscription \$77.00.

"The International Research Communications System (IRCS) exists to provide scientists with a medium for the immediate publication of original research results in all areas of biomedical research." Communications are limited to 500 words, five references, and such tables and illustrations as can be included in a single page of print. The reports are reviewed and published within an average of four weeks in one of the IRCS Specialist Journals. The IRCS Journal of Medical Science, a monthly, reprints about 20 reports selected for their general interest, as well as a complete list of all articles in those journals. This interesting experiment in communication could be useful to young workers in a hurry afraid of being scooped (the urgency is not apparent in all cases). Whether the journal will appeal to mature scientists who like to evaluate the quality of what they read is more problematic. The publishers say this is a new way to keep up-to-date; they do not say it is a better one.—B.R.F.

Public Health Aspects of Critical Care Medicine and Anesthesiology. EDITED BY PETER SAFAR. Philadelphia, F. A. Davis Co., 1974. 396 pp. Price: \$20.00.

The purpose of this book is to encourage and assist physicians and other personnel to extend their roles beyond those of treating individual patients to health maintenance, medical care delivery, and the discovery and implementation of possible solutions to the society's problems in critical care medicine (resuscitation, emergency medical care, and intensive care).

These goals are admirably met by the authors. Dr. Safar begins with a well organized, thoughtful analysis of what is right and wrong with medical care, particularly as it relates to emergency medical services. He discusses the position of emergency medical services and critical care medicine from a global perspective and then goes on to review the national health care industry. For those accountable to the Joint Commission on Accreditation of Hospitals, a chapter contributed by that organization discusses the development, function, and standards for anesthesia services and special care units.

The achievements and failures of emergency and critical care medicine in Allegheny County, Pennsylvania, from the street ambulance to the operating room and intensive care unit, are carefully defined and illustrated. Guidelines for staffing, organizing, physical standards and leadership are presented, along with an extensive bibliography for further education. Dr. Safar has long promulgated that knowledge of cardiopulmonary resuscitation requires a broad base at many levels of the community. Accordingly, a teaching program for cardiopulmonary resuscitation, structured for varying degrees of expertise, is included.

Dr. John Bunker considers the problem of surgical workloads from several viewpoints, and regards anesthetic mortality as a public health hazard, in keeping with the "public health" aspect of the book. An engrossing chapter on the delivery of anesthesia services outside of the United States and Canada follows. The economic implications of providing even basic anesthesia to the underdeveloped countries of the world are enormous. Sensible recommendations are offered for a non-sensible world where, for example, the quality of medical care offered at the Hadassah Hospital in Jerusalem, Israel, cannot be shared with some nearby populations. As Dr. Safar states:

Efforts to prevent premature death and to reduce pain and suffering have been a farce throughout history, when national and political leaders have forced young people to kill and die in wars, while physicians at home have labored to keep alive non-salvageable patients or have treated essentially healthy persons.

Several excellent short chapters discuss anesthesiology in relation to inhalation therapists, nurse anesthetists, dental anesthesia, allied health personnel, obstetrical anesthesia, outpatient anesthesia, and departmental and individual financing. One suggestion that disturbs the reviewer involves a comparison between the need for critical care physi-

gians and the need for operating room anesthesiologists. Weil and Shubin state that during elective procedures, intraoperative mortality in major institutions is less than 2 per 1,000. (Anesthetic mortality in healthy patients approximates 1 per 10,000). Since the mortality rate in intensive care and coronary care units is 15-20 per cent, they urge greater physician-specialist commitment to critical care medicine than, for example, to intraoperative anesthesia. This injunction must be challenged, despite the reviewer's personal commitment to intensive care medicine. First, the reason intraoperative anesthesia mortality is low is precisely that the anesthetist is responsible for just one individual. Second, critically ill patients die despite the best and most intensive care available. If high-quality intensive care units with extensive physician-specialist coverage show mortality rates of 15-20 per cent, how would more physician-specialist involvement improve this figure? In the ICU, the patient's disease process is a far better prognostic indication of survival than the intensity of care received. Borrowing from anesthesia to cover the ICU is highly questionable when the mortality rate in elective surgical patients approaching 0:10,000 can be maintained only with quality intraoperative anesthesia.

Dr. Safar's book is pertinent to practitioners of anesthesia, critical care and emergency medicine; hospital administrators; and demographers of health care in this country. The planning of medical care is proceeding rapidly and needs just such a forum to focus on priorities. For example, the high-quality outpatient anesthesia practiced in the Phoenix Surgicenter contrasts with the dismal lack of coverage in obstetrical suites, and accents the need for proper coverage of both. The book should be especially interesting to hospital-based practitioners, health care planners, and academicians involved in the future management of their own hospital, service, or specialty, whether anesthesia, cardiology, emergency medicine or any other. Every departmental library should have a copy. It is not an idealist's dream but a participants' handbook for changing the environment of critical care medicine.

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Brain Dysfunction in Metabolic Disorders. EDITED BY FRED PLUM. New York, Raven Press, 1974, 324 pp. Price: \$21.50.

This volume brings together a group of contributors who share a common interest in the metabolic basis for a variety of brain disorders. For the most part, the individual authors assume that the reader possesses a modest background in neurology and biochemistry, and therefore basic introductory comments to each of the subjects considered tend to be sketchy. An exception to this is the excellent chapter

by Siesjö *et al.*, which leads off the section entitled "Clinical Disorders of Cerebral Oxidative Metabolism." It is this section which should be of greatest interest to anesthesiologists, since it deals with cerebral hypoxia and ischemia (Siesjö *et al.*), the relationship of cerebral blood flow to metabolism (Reivich), the cerebral metabolic effects of seizures (Plum *et al.*), and cerebral utilization of non-glucose substrates (Ferrendelli). Of considerable interest, too, are the discussions that follow these chapters (as well as most of the other chapters).

The other major section of this book deals with neurologic changes in hepatic disease. Interestingly, in examining the possible mechanisms of neurologic disorders in both hepatic disease and hypoxia, it would appear that synaptic transmission is the sensitive site of action. Furthermore, the source of dysfunction might well be a failure of neurotransmitters due to either false transmitters or actual depletion of true transmitters. In one of the discussion sections, Dr. Kety suggests that the brain might be compared to a computer that uses most of its energy to keep the filament in the tubes heated and but a small fraction of energy for switching purposes. Yet, in terms of output, it is the switching function that is the more critical. Thus, he suggests that in both hepatic dysfunction and marginal oxygen deprivation a very subtle change in metabolism might grossly alter cerebral function without measurable biochemical change. Such a concept is useful in understanding the basis for a variety of brain disorders in which cerebral oxygen consumption is apparently unaltered.

Other chapters in this book deal with cerebral dysfunction secondary to uremia, osmotic alterations, porphyria, endocrine disease, malnutrition, vitamin deficiency, and lead toxicity. Several chapters deal directly or indirectly with the possible biochemical basis for a variety of psychiatric disorders that are not normally considered metabolic disorders.

Of considerable value to anyone wishing to pursue one of these topics in greater depth are the generally very complete bibliographies following the chapters. For the most part, these bibliographies are reasonably current, including literature references through 1973.

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Respiratory Insufficiency. EDITED BY B. BURROWS, R. J. KNUDSON, AND L. J. KETTEL. Chicago, Year Book Medical Publishers, 1974. 187 pp. Price not listed.

To the average anesthesiologist, the term "respiratory insufficiency" probably brings to mind a narrowing of respiratory reserves conducive to respiratory failure. The commonest etiologic groups of which he might think would be the postoperative and traumatic groups. To such an anesthesiologist this