

cians 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