The fourth article in this section, by Zander and Campiche from Lausanne, is a brief review of the clinical features of extradural hematoma. This article does not add any new knowledge to the problem of extradural hematoma, but it appropriately emphasizes the fact that the single most important variable in the treatment of extradural hematoma is the rapidity of decompression of the brain.

The second section of the book, on "Technical Standards," contains chapters on "Supratentorial Craniotomy" by Pertuiset and "Removal of Extramedullary Benign Spinal Cord Tumors" by Guidetti. These two chapters are obviously intended for the neophyte in neurological surgery as they cover the basics of operating room procedures and techniques. I would certainly be fearful of the results if anyone not familiar with neurological surgery attempted to perform an operation on the basis of information contained in these chapters.

In summary, this small book contains four competent review articles on topics of importance to neurological surgeons and an appended section that I suspect will be of relatively limited value. Anesthesiologists will find the first chapter particularly useful.

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Respiratory Illness in Children. By H. WILLIAMS AND P. PHELAN. Philadelphia, J. B. Lippincott, 1975. Pages: 448. Price: $44.00.

This book treats three aspects of respiratory illness in children: epidemiology, pathophysiology and psychosocial factors. The pediatric anesthesiologist and the physician specializing in pediatric respiratory intensive care will find something of interest in each aspect since in the long run, all are intertwined in the management of patients who are also children.

An enormous number of respiratory diseases is discussed, but the coverage is very uneven. For example, there is only a superficial treatment of congenital diaphragmatic hernia and of tracheoesophageal fistula, both together making up about one page. This is a major limitation for the anesthesiologist. On the other hand, cystic fibrosis and asthma are discussed in great detail and are presented very well.

There are four valuable chapters, each devoted to a discussion of a single respiratory symptom or topic: Stridor, Wheezing, Cough, and Aspiration (this last under the heading of Pulmonary Complications of Inhalation). These chapters are well written and attempt to correlate clinical findings with pathophysiologic function. The anatomy and the physiology that form the basis of the symptom are first discussed, so that the clinical findings can be understood. The clinical significance of the symptom and the respiratory diseases manifesting the symptom are then gone into. These chapters contain material that should be part of the background of any physician who is responsible for the management of respiratory function in children. These four and the two on Cystic Fibrosis and Asthma are the best in the book.

There is a chapter on pulmonary function and pulmonary function testing in children. Most of this chapter concerns only the school-age child and is based mainly upon studies in the adult. When there are known differences in physiology between the child and adult, these differences are brought out. The discussion of ventilation–perfusion ratio inequalities is skimpy.

The authors have a large clinical experience in treating a wide variety of respiratory diseases in children. Much of their book is a practical discussion of this experience with each disease, under the headings of clinical features, diagnosis and treatment. General references and further readings are given at the end of each chapter.

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The Anesthesiologist and the Surgeon. Partners in the Operating Room. By JOHN P. BUNKER. Boston, Little, Brown and Company, 1972. Pages: 158. Price: $9.95.

When I was asked to review this book, I thought it would be simple. However, I find it to be more complex than I had initially thought. The reason for this is that the book is written on several levels. If there is any one theme, it might perhaps be described as that keynoted in the Foreword by Franz J. Ingelfinger, Editor of *The New England Journal of Medicine*. Dr. Ingelfinger writes about Excellence, a quality perhaps not so much in vogue today as when Dr. John Gardner wrote his book of the same title.

However, excellence is not the only theme found in this book. As a surgeon, I was somewhat put off by the petulant attitude of Dr. Bunker that surgeons have not capitulated more readily to the dominance of the anesthesiologist in the operating room. This attitude is strongly reminiscent of that expressed in the surgical editorial in *Surgery, Gynecology & Obstetrics* a few years ago. The whole thing, of course, was a tempest in a teapot.

Another feature that leaves a surgeon less than enchanted is the arrogation to the specialty of anesthesiology of all of the research endeavors that advanced the field. No mention is made of surgical pioneers such as William Stewart Halsted who, at great personal risk, experimented with anesthetics in the early years of surgery. Through the intervening years surgeons have continued to

add considerably to knowledge not only of anesthetics but of the altered physiology of anesthetized patients.

With socioeconomic issues, Dr. Bunker seems to be at his best. He amasses significant statistics to show that virtually all operations in the United States are unnecessary, there are not enough anesthesiologists for these unnecessary operations, and that the best place in the world to have medical care is the United Kingdom. Each of these points is debatable, and all are still undergoing considerable revisionist thinking.

Particularly disturbing to me was the account of the first heart transplant at Stanford. Dr. Bunker implies that Dr. Shumway and his group were completely oblivious to the rights of the donor patient. This is manifestly unfair. Dr. Shumway pioneered the technique of orthotopic cardiac transplantation in animals fully ten years before it was applied to man. Whole-organ kidney and liver transplants in man were done for several years prior to the first known heart transplant. The problem for Dr. Shumway, as recognized by anyone conversant with the physiology of the human being, was that he had to transplant a heart that would beat. For ten years, Dr. Shumway had to wait until suitable criteria for brain death were evolved, promulgated and accepted. To imply that he had not considered the rights of the donor is, to say the least, erroneous.

Dr. Bunker seems to feel that there has been a continuous battle between surgeons and anesthesiologists. The final chapter of this book is entitled "The Taming of the Surgeon." The implications of the title are not completely borne out by the subsequent pages, but one is left with the feeling that now that the surgeon has been tamed and the anesthesiologist is captain of the ship, that all is well.

On the contrary, the battle, if there is one, is never won. To paraphrase from the Presidential Address of Dr. James V. Maloney to the Society of University Surgeons in February 1970, "The conflict between surgeon and anesthesiologist establishes the critical lines of tension in the operating room. Both specialties are inherently valuable. This tension will never be resolved and *never should be* resolved. Failure to accept this reality has led to a lot of nervous indigestion and unnecessary commotion." It is only because of this tension that the excellence desired by Dr. Ingelfinger and Dr. Bunker can be constantly renewed.

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Intentional Hemodilution. Volume 41. EDITED BY K. MESSMER AND H. SCHMID-SCHÖNBEIN. Basel, Switzerland, S. Karger AG, Medical & Scientific Publishers, 1975. Pages: 310. Price: $40.00.

This book presents the Proceedings of the Second International Symposium on Hemodilution, held in Bavaria in October 1974. It contains an approximately equal number of experimental and clinical papers, for which most of the data have been obtained since the First Symposium in 1971.

The book is divided into six sections: Blood Flow Distribution and Tissue Oxygenation; Oxygen Uptake during Hemodilution; Coagulation and Prevention of Thrombus Formation; Coronary Blood Flow and Cardiac Performance in Hemodilution; Extreme Hemodilution; and Clinical Hemodilution. Much of the work included has been performed in or influenced by Dr. Messmer's laboratory at the Institute for Surgical Research of the University of Munich, and reflects that group's great productivity. The balance of the contributors represent many countries and reflect the current state of the art regarding this ever-more-widely employed technique of intentionally induced acute anemia.

Twenty-four papers are included. They are largely concise, cogent, topical, and well referenced. Discussion of the presentations has been reproduced faithfully, and adds to the subject matter by defining nuances, limitations, and disagreements. The editors are to be congratulated both for the speed of their efforts and their competence. I recommend that the reading of this book should be performed *vis a tergo*, as Dr. Norman Matheson's summary of the Symposium constitutes a masterful introduction to the detailed content thereof.

Presentation of two points seems worthwhile to pique the curiosity of readers: First, there is remarkable disagreement regarding the implications of the various types of *in-vitro* measurement of blood viscosity. Whether cells or plasma constituents are primarily responsible for the rheologic properties of blood is even in dispute! Second, it is becoming apparent that the ultimate limits of tolerable hemodilution are set by the adequacy of myocardial function, in turn dependent upon myocardial oxygenation.

An obvious omission in the book is the lack of discussion of the role of the autonomic nervous system in the circulatory compensation to acute anemia. The increased clinical use of beta-adrenergic blockade requires that its effect on the response to an acute reduction in erythrocyte volume be defined.

Elective intra-anesthetic hemodilution during general, orthopedic, and non-cardiac thoracic surgery appears to have achieved greater popularity in Europe than in the United States. However, the logistical problems of blood procurement and the incidence of hepatitis attendant upon administration of homologous blood are problems not limited by national or continental barriers, and it is not unreasonable to expect that this technique will achieve greater acceptance in this country. It behooves the anesthetist to be aware of the consequences of acute anemia, and this volume is an effective vehicle for this purpose. The high cost