

Book Reviews

BRAIN TUMORS: AN ENCYCLOPEDIA APPROACH

Second edition. Edited by Andrew H. Kaye and Edward R. Laws, Jr.
1080 pp., illustrated. Philadelphia, Churchill Livingstone, 2001.
\$250. ISBN 0-4430-6426-1.

REDUCTIONISM is, in the words of Peter Medawar, “the most successful research stratagem ever devised.” Thanks to reductive analysis, biomedical research has produced countless pieces of information. What we need from time to time is a fresh selection of relevant results. A textbook that attempts an integration of recent advances is indispensable, particularly in the study of cerebral tumors, in which developments in diagnosis and therapy are abundant.

Neuro-oncology is a challenging discipline. As compared with neoplasms in other organs, brain tumors have several peculiarities. The cause remains elusive, the clinical manifestations are diverse, and therapy continues to be mainly surgical. In the case of malignant brain tumors, perhaps more than in all other forms of cancer, a paradox has become evident: our diagnostic capabilities have become more and more precise, but there have been few advances in treatment during the past 50 years.

The fact that a second edition of *Brain Tumors* has appeared six years after the first is evidence of rapid advances in all areas of neuro-oncology. The book will be indispensable for anyone involved in the study of brain tumors, especially for neuropathologists, neurologists, neurosurgeons, endocrinologists, and radiologists. The editors have gathered well-known experts to author each of the 63 chapters, providing the reader with a comprehensive selection of important issues on all aspects of brain tumors and ensuring that this book will become a classic source of multidisciplinary information.

The organization of the book is didactic; section I comprises 23 chapters that explore all basic diagnostic and therapeutic aspects of neuro-oncology; section II includes a thorough review of each type of tumor, from gliomas to metastases. Each chapter discusses epidemiology, histopathology, clinical data, diagnosis, and therapeutic procedures. In all, there are more than 1000 pages of nonrepetitive information.

The book is particularly useful as a first source of integrated information for the everyday practice of neuro-oncology. I particularly enjoyed the chapters on historical perspective, the developing brain and cellular targets for neoplastic transformation, epidemiology and prognosis, experimental therapy for brain tumors, and laboratory-model systems for brain-tumor research. All of these chapters, and many others, formulate interesting concepts and contain countless pieces of important information on the biology of brain tumors. Nonetheless, the word “encyclopedia” is a risky editorial compromise for “completeness,” and I think that some important pieces are missing from the book. For instance, although malignant gliomas are by far the most frequent primary brain tumors, only 25 pages of text are devoted to them. The pros and cons of aggressive versus conservative therapy for malignant gliomas should have been more thor-

oughly discussed, especially with regard to cases that predictably will not benefit from aggressive therapy.

I envision that tumor genetics, immunotherapy, radiosurgery, and technologic advances in instrumentation, robotics, and cybernetics will revolutionize our approach to brain tumors. The field of radiosurgery is rapidly moving toward the development of sophisticated equipment and precise three-dimensional imaging software that will enable the neurosurgeon to function in a virtual scenario, which will prevent the usual complications of open surgery. In the future, the neurosurgeon will be an expert on cybernetics, automation, and robotics who is able to perform bloodless neurosurgery. As for the basic sciences, it seems likely that genetic manipulation of cells and novel concepts in immunology will make the “magic bullet” against cancer a reality; tumor cells with transfected genes — cytokine genes or genes for highly immunogenic antigens — hold promise for the treatment of cancer.

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CLINICAL TOXICOLOGY

Edited by Marsha D. Ford, Kathleen A. Delaney, Louis J. Ling,
and Timothy Erickson. 1168 pp. Philadelphia, W.B. Saunders, 2000.
\$125. ISBN 0-7216-5485-1.

MEDICAL toxicology, which encompasses the pathophysiology, diagnosis, and treatment of clinical problems related to poisoning and drug intoxication, has in the past decade become an established subspecialty with demonstrated breadth and depth of knowledge. Medical toxicologists treat patients with acute drug overdoses, as well as those poisoned by industrial chemicals, native or exotic snakes, wild mushrooms, herbs, and alternative medical products. Medical toxicologists are emergency physicians, internists, pediatricians, occupational physicians, clinical pharmacologists, specialists in laboratory medicine, nurses, and clinical pharmacists. They direct poison-control centers, drug-detoxification centers, research units in clinical pharmacology, and public health agencies.

Medical toxicology is now recognized as a subspecialty by the American Board of Medical Specialties, and since 1994, over 200 physicians have successfully completed the certifying examination administered by the American Board of Emergency Medicine. Training in medical toxicology requires a two-year postgraduate fellowship after the completion of a residency in a primary specialty such as emergency medicine or pediatrics. The training program includes direct patient care, consultation to poison centers and evaluation of cases at the centers, rotations in occupational medicine, and course work in clinical pharmacology, pharmacokinetics, and the medical management of exposure to hazardous chemicals.

Such a large and diverse field calls for comprehensive textbooks to summarize existing knowledge and address areas of consensus and controversy. Twenty-five years ago, there