Orbital Tumors
Orbital Tumors

Diagnosis and Treatment

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With 482 Illustrations, 276 in Color
A bout every 10 years a new book appears on any given medical specialty subject. Naturally, this is not because the entire body of knowledge in that specialty is overhauled every 10 years but because the progress made over a decade usually warrants expressing new perspectives on quite a few diseases. Orbital oncology certainly qualifies as a subspecialty that merits an update every decade. At least two or three excellent textbooks on orbital tumors have been written since the mid-1980s. This book reports advances in knowledge about orbital diseases and their treatment and offers an up-to-date, single-volume reference for orbital tumors with particular emphasis on new improvements in diagnostic and therapeutic measures.

I cannot claim deep personal knowledge on all the topics covered; this work would not have been possible without the expert help of the contributing authors and the work of others who published their findings in the medical literature of the past four decades. The contributors were selected not only from ocular oncologists but also from practitioners in other fields, including radiology, pathology, neurosurgery, medical and radiation oncology, and plastic surgery to expand the input from other clinical disciplines into daily practice. My role as the editor and author was to study others' work, analyze it critically by sifting it through the filter of my own experience in ophthalmology and oncology, and present the whole as an informative package. My contributions as an author in 16 chapters are influenced by my ways of thinking and doing; the reader should be aware of these prejudices; I alone am responsible for any errors of omission and commission.

Part I comprises advances in oncogenesis and its relationship to orbital tumors. Changes in the biological behavior of diseases in the general patient population are much slower than technological advances; nevertheless, those alterations take place as well. One of the major medical issues of our time, for example, is the changes in the immunological status of individuals. This issue influences the entire field of medicine, particularly oncology, including the treatment of orbital tumors. Chapters 2 to 5 summarize these influences.

Medical genetics gained momentum during the past two decades and now affects the clinical practice of almost every discipline of medicine, including ophthalmology and orbitology. Chapters on principles of molecular genetics and immunosurveillance mechanisms of neoplasia and on the occurrence of multiple, malignant neoplasms in retinoblastoma have been included to apply molecular concepts to clinical practice related to orbital tumors.

Advances in one discipline often directly benefit practice in another field. In orbitology, no development has been more influential than the revolution in imaging techniques, including ultrasonography, computerized tomography, and magnetic resonance methods. Four chapters in Part II are devoted to the role of imaging in diagnosis of orbital tumors. Other diagnostic advances entailing immunohistochemistry, flow cytometry, gene microarray, and the polymerase chain reaction are summarized in a separate chapter on orbital biopsy.

A brief section on inflammatory, space-occupying lesions of the orbit is presented in Part VI, including infectious and other inflammatory conditions and thyroid-associated orbitopathy (Graves disease).

Up-to-date information on treatment of orbital tumors is summarized in Part VII. Brief but current staging of malignant orbital tumors is included and advances
in surgical, radiation, and chemotherapy are summarized in a practical fashion. Not only is the book intended to help general ophthalmologists, oculoplastic surgeons, and orbitologists in their daily practice, it is also a reference for pediatricians, radiologists, pathologists, neurosurgeons, and otolaryngologists who are dealing with orbital tumors.

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