

Book and Media Reviews

Pediatric liver tumors, Series: Pediatric Oncology 1st Edition

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Pediatric Liver Tumors (Springer 2011) is an excellent resource for physicians involved in the care of children with benign and malignant tumors of the liver. Editors Arthur Zimmerman and Giorgio Perilongo along with Co-Editors Marcio Malogolowkin and Dietrich von Schweinitz have assembled a comprehensive, but readable 200-page reference. This book documents the advances in biology, imaging, surgery, and chemotherapy that have significantly improved outcomes in pediatric liver tumors, particularly hepatoblastoma the most common malignant pediatric liver tumor.

Pediatric Liver Tumors is a book that will be of value to any physician or scientist (especially trainees) involved in pediatric liver tumors including pediatric oncologists, surgeons, hepatologists, radiologists, pathologists, and basic and translational science researchers. *Pediatric Liver Tumors* covers all aspects of the field. There are chapters devoted to epidemiology, molecular biology, pathology, clinical trials, and several to patient management. The content on patient management includes detailed discussion of imaging, surgical treatment, transplantation, chemotherapy, salvage strategies, and supportive care.

Chapters 1 and 2 provide an introduction and background to pediatric liver tumor care and research. The "Historical Background" (Chapter 2) includes some intriguing anecdotes, going back centuries to the Dark Ages, about the history of pediatric tumors: "In this protracted period over many centuries, children were hardly

considered to be part of society with little attention being given to their plight and especially their diseases ... Tumors of any organ including the liver were recorded as curiosities due to all sorts of mystical or religious causes ..." Jumping forward several centuries the authors describe in detail the evolution of the international groups involved in liver tumor research, including COG (the Children's Oncology Group), SIOP (the International Society of Pediatric Oncology) and SIOPEL (the SIOP Epithelial Liver tumor group). Although, my initial impression was that this background section was "fluff", I found that on closer review it provided a good overall perspective, particularly for those who are new to the field. Overall the book's introductory and background sections provide a very good summary of the clinical liver trials conducted world-wide and highlight the different historical approaches taken by the Europeans and the North Americans to treating and studying hepatoblastoma.

The chapter "Epidemiology of Pediatric Liver Tumors" provides an excellent overview of both descriptive and analytical epidemiology of pediatric liver tumors. The descriptive epidemiology reviews the incidence of all types of pediatric liver tumors and compares international variations. The analytical epidemiology content is more intriguing. It reviews the studies that have established the well-known link between very low birth weight (VLBW) and hepatoblastoma. It also reviews data on some lesser known associations such as the link between maternal smoking and hepatoblastoma.

The chapters "Molecular Aspects of Hepatoblastoma" and "Ontogenetic Aspects of Liver Tumors" are both very good. Of particular interest is the section on altered developmental signaling pathways in hepatoblastoma. The review of these pathways that govern proliferation, differentiation, and maturation during embryonic development and their relationship to oncogenesis is extremely valuable reading. It provides a foundation for understanding the development of targeted drugs and therapies which hopefully will be available in the future for treating hepatoblastoma.

No potential conflict of interest.

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The chapters covering patient management include clinical presentation and diagnosis, imaging and staging, pathology, surgery, transplant, chemotherapy, and supportive care. For clinicians much of this content will be familiar. However, for trainees these chapters are an excellent resource. Furthermore, clinicians are likely to benefit from the chapters that cover issues outside their niches. For example, as a pediatric oncologist I found Chapter 10 “Surgical Treatment” to be an excellent summary of pediatric liver surgery fundamentals. The many excellent diagrams and pictures make the explanations of surgical assessment, technique, and complications understandable to the non-surgeon reader.

“Salvage Strategies” and “Alternative Approaches for Treatment” (Chapters 13 and 14) are parts of the text that

are valuable to clinicians at all levels of experience. These chapters summarize the sparse data that are available for very some challenging clinical problems. The discussion of relapse treatment and non-surgical local-control approaches such as chemoembolization and radiofrequency ablation is thorough and up-to-date. The summary table of published reports on hepatic artery chemoembolization (HACE) will likely help many clinicians evaluate this approach as an option for patients with disease that cannot be treated by the usual approaches.

Overall, *Pediatric Liver Tumors* is a well-written, well-organized reference for physicians and scientists involved in clinical care and research related to children with liver tumors. The editors and co-editors have succinctly chronicled the advances in this rapidly evolving area.

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