

Hepatocellular Carcinoma

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Editors

Hepatocellular Carcinoma

Targeted Therapy and Multidisciplinary Care

 Springer

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Foreword

It is a great pleasure and an honor to write the preface for this outstanding book dedicated to the therapy of hepatocellular carcinoma (HCC). This tumor, which is a major health problem worldwide, has stimulated the energy of several disciplines. The liver is a massive and complex organ requiring an excellent knowledge of its anatomy and physiology, with an exquisite comprehension of its impact on cardiovascular, pulmonary, and renal function.

Initially, the treatment of HCC was limited to surgical approaches with liver resection being the only option with curative intent. The development of HCC in chronic liver disease was associated with a high risk of technical difficulties and a high morbidity/mortality rate. This has challenged liver surgeons to improve their knowledge regarding liver anatomy, assessment of liver function, use of intraoperative imaging, tolerance of vascular clamping, and better anticipation of postoperative liver recovery. As shown in several chapters of this book, progress in liver surgery for HCC has expanded its development, yielding a true specialty. Imaging of liver parenchyma was motivated by two different goals including an efficient screening along with an accurate evaluation of the tumor in a background of abnormal parenchyma. Interventional radiology was initially focused on the treatment of this tumor with substantial technical advances allowing an efficient destruction of larger tumors. In parallel, radiologists developed transarterial chemoembolization and radioembolization. Those two locoregional approaches can stabilize the tumors, allowing in some cases for subsequent resection or transplantation. These multiple therapeutic approaches have contributed to expand the indications for liver transplantation, which remains the best curative treatment for limited HCC in patients with advanced chronic liver disease. However, this luxury treatment is restricted to very few countries, with a discrepancy between the increasing number of candidates and the limited number of grafts. Therefore, there is a considerable need for alternative treatments which are extensively developed in this textbook.

There is no efficient treatment without an accurate comprehension of the development of HCC. Beyond viral infections of the liver, the role of other potential causes is emphasized in an important chapter. There is no doubt that etiologies of HCC will not be considered similarly in the future, given more attention to both environmental and chronic medical conditions. These emerging factors, such as

metabolic syndrome, will probably highlight future targets relevant to the screening of high-risk patients.

The chapter on staging of HCC is very comprehensive. As such, J.N. Vauthey dedicated a great part of his initial studies to the stratification of patients with similar prognostic factors. The ongoing debate on transplant candidates confirms that stratification of patients is a prerequisite before considering any therapeutic modalities.

Indeed, our clinical experience shows that HCC is often a heterogeneous disease with variable outcomes. The chapter on pathologic considerations confirms that HCC has multiple histological components which will be clarified in the future by molecular classifications.

The last chapters of this remarkable book highlight that management of patients with HCC relies necessarily upon multidisciplinary effort involving the skills of radiologists, pathologists, oncologists, gastroenterologists, hepatologists, anesthesiologists, hepatobiliary, and transplant surgeons. In addition, these specific areas of knowledge and experience are guided by the important innovations from Asian countries and efficiency of medical treatment to an increasing degree. Of note in this book, supervised by eminent US authors, an entire chapter is devoted to the guidelines for treatment in Japan. Sorafenib has been approved as a standard of care for advanced HCC. Several studies evaluating other antiangiogenic agents and multi-target inhibitors are at various phases of their development with promising results. However, the most fascinating forthcoming issue will be the appropriate combination of medical treatment with surgical and radiological procedures. The improvement of resectability and survival observed in patients with colorectal liver metastasis treated by novel active chemotherapy was a major therapeutic step. Recent results in HCC strongly support that similar expectations might be achieved to improve outcome by including neoadjuvant or adjuvant therapy.

Jacques Belghiti

Clichy, France
October 2010

Preface

Hepatocellular carcinoma (HCC) is a major cause of cancer mortality worldwide. Because early detection is rare, the overall prognosis is generally poor. Understanding of the etiology, epidemiology, pathophysiology, molecular biology, and clinical features of HCC is important in providing optimal patient care. In addition, understanding of the limitations of our current knowledge and therapeutic capabilities is essential in order to guide future research efforts. Management of patients with HCC is necessarily a multidisciplinary effort which involves the skill of radiologists, pathologists, gastroenterologists, anesthesiologists, surgeons, medical oncologists, radiation oncologists, nurses, and other health professionals. This book is dedicated to the researchers, clinicians, and support staff involved in the fight against HCC, with admiration and appreciation for the work that is done every day to prevent, detect, and treat this disease. Most of all, this book is dedicated to the patients we treat, in the hope that sharing the collective wisdom of this esteemed group of experts will stimulate and encourage collaborative efforts to combat this formidable cancer.

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