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Edited by Richard M. Gore
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Contemporary Issues in Cancer Imaging
A Multidisciplinary Approach

Series Editor

Rodney H. Reznek
Cancer Imaging, St Bartholomew's Hospital, London

Editorial Adviser

Janet E. Husband
Diagnostic Radiology, Royal Marsden Hospital, Surrey

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Contributors

Marshall S. Baker
Department of Surgery
Division of Surgical Oncology
NorthShore University Health System
University of Chicago
Evanston, IL
USA

Malcolm M. Bilimoria
Department of Surgery
Evanston Northwestern Healthcare
University of Chicago
Evanston, IL
USA

Cheri L. Canon
Department of Radiology
University of Alabama Medical Center
Birmingham, AL
USA

Chiao-Yun Chen
Department of Radiology
Kaohsiung Medical University
Department of Medical Imaging
Kaohsiung, Taiwan

Richard M. Gore
Department of Radiology
NorthShore University Health System

University of Chicago
Evanston, IL
USA

Curtis R. Hall
Department of Pathology
NorthShore University Health System
University of Chicago
Evanston, IL
USA

Janardan D. Khandekar
Department of Medicine
Evanston Northwestern Healthcare
University of Chicago
Evanston, IL
USA

Melin Khandekar
Harvard Radiation Oncology Program,
Harvard Medical School,
Boston, MA
USA

Jung Hoon Kim
Body Imaging Section
Department of Radiology
University of Iowa Hospital and Clinics
Iowa City, IA
USA

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List of contributors vii

Marc S. Levine
Department of Radiology
Hospital of the University of Pennsylvania
Philadelphia, PA
USA

Mark E. Lockhart
Department of Radiology
University of Alabama Medical Center
Birmingham, AL
USA

Hiroyuki Osawa
Department of Internal Medicine
Division of Gastroenterology
and
Jichi Medical University
Shimotsuke, Tochigi
Japan

Mark S. Talamonti
Department of Surgery
Division of Surgical Oncology
NorthShore University Health System

University of Chicago
Evanston, IL
USA

Hironori Yamamoto
Department of Internal Medicine
Division of Gastroenterology
Jichi Medical University
Shimotsuke, Tochigi
Japan

Kenjiro Yasuda
Department of Gastroenterology
Kyoto Second [Red] Cross Hospital
Haruobi-cho, Kamigyo-ku
Kyoto
Japan

Huan Zhang
Department of Radiology
Ruijin Hospital
Shanghai
China

Series Foreword

Imaging has become pivotal in all aspects of the management of patients with cancer. At the same time it is acknowledged that optimal patient care is best achieved by a multidisciplinary team approach. The explosion of technological developments in imaging over the past years has meant that all members of the multidisciplinary team should understand the potential applications, limitations and advantages of all the evolving and exciting imaging techniques. Equally, to understand the significance of the imaging findings and to contribute actively to management decisions and to the development of new clinical applications for imaging, it is critical that the radiologist should have sufficient background knowledge of different tumors. Thus the radiologist should understand the pathology, the clinical background, the therapeutic options, and prognostic indicators of malignancy.

Contemporary Issues in Cancer Imaging – A Multidisciplinary Approach aims to meet the growing requirement for radiologists to have detailed knowledge of the individual tumors in which they are involved in making management decisions. A series of single subject issues, each of which will be dedicated to a single tumor site and edited by recognized expert guest editors, will include contributions from basic scientists, pathologists, surgeons, oncologists, radiologists, and others.

While the series is written predominantly for the radiologist, it is hoped that individual issues will contain sufficient varied information so as to be of interest to all medical disciplines and to other health professionals managing patients with cancer. As with imaging, advances have occurred in all these disciplines related to cancer management and it is our fervent hope that this series, bringing together expertise from such a range of related specialties, will not only promote the understanding and rational application of modern imaging but will also help to achieve the ultimate goal of improving outcomes of patients with cancer.

Rodney H. Reznick

Preface to Gastric Cancer

Gastric adenocarcinoma is the second most common cancer in the world. Nearly one million new cases of this tumor develop annually and well over 700 000 individuals die from this neoplasm each year. In Asia, gastric cancer accounts for 31% of all cancer incidence cases in men and for 22% in women. Because of aggressive screening programs, gastric cancer is often found at an earlier, potentially curable stage in Asia. In the West, this tumor is usually diagnosed in its later stages and the prognosis is grim. Indeed, even with modern diagnostic and treatment methods, only 10% of patients in the West are alive within five years of diagnosis.

Improvements in overall survival of patients with gastric cancer can only be achieved by earlier diagnosis and by tailored therapeutic strategies that are based on histologic tumor type, tumor location, tumor stage at the time of presentation, and the physiologic status of the patient. The purpose of this book is to provide a state of the art, integrated diagnostic and therapeutic approach to patients with this lethal neoplasm. The role of the upper gastrointestinal series, endoscopy, endoscopic ultrasound, multidetector computed tomography (CT), magnetic resonance imaging, and positron emission tomography//CT in the diagnosis, treatment, staging, and follow-up of patients with gastric cancer is emphasized. The relative strengths and weaknesses of these diagnostic examinations will be presented in context with the most recent epidemiologic, pathologic, and therapeutic concepts regarding this tumor.

Only by a well orchestrated team approach including epidemiologists, diagnostic radiologists, gastroenterologists, oncologic surgeons, radiation oncologists, and pathologists, coupled with a better understanding of the molecular genetics of gastric cancer, can we hope to successfully address this major global health problem.

Richard M. Gore, MD