Preface

Screening, Prevention, and Treatment of Esophageal, Gastric, and Hepatic Malignancies

Landmark achievements during the past quarter century in understanding the pathophysiology of upper gastrointestinal and hepatic malignancies include identification of the role of Barrett’s esophagus in esophageal adenocarcinoma [1]; the role of Helicobacter pylori infection in gastric adenocarcinoma [2] and gastric lymphoma [3]; the roles of hepatitis B and C infections in hepatocellular carcinoma [4,5]; and the genetic basis of hemochromatosis [6], an important risk factor for hepatocellular carcinoma. Unfortunately, these recent landmark achievements in pathogenesis have been inadequately translated into patient therapy, whereas other recent advances in the diagnosis and therapy of these malignancies have been inadequately implemented for patient care and public benefit. Because of these barriers and challenges, most of these malignancies are still diagnosed late and are largely fatal, resulting in more than one million potentially preventable deaths per year worldwide.

Physician education about these recent advances can have manifold salutatory effects. Greater awareness and information about these advances by internists and generalists can improve the access of their patients to new screening protocols, diagnostic techniques, and therapies. The internists and general practitioners have the direct and nearly universal patient access to educate the American public about these malignancies and to refer them one-at-a-time for the most advanced diagnostic techniques and therapeutic regimens. Earlier diagnosis and more modern therapy improve the prognosis of these malignancies. The gastroenterologist and the gastrointestinal

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surgeon, radiologist, and oncologist also require a critical review of new and important developments in these common malignancies to offer their patients better and more modern diagnostic tests and therapies. By emphasizing recent developments, areas of controversy in the literature, and future directions concerning these malignancies in this issue of the *Medical Clinics of North America*, it is hoped to satisfy these important educational needs, and stimulate basic and clinical research to help reduce gastrointestinal and hepatic cancer incidence and mortality, until some day soon—through an integrated strategy of cancer prevention, screening, and therapy of premalignant lesions—these malignancies shall become as extinct as scourges of the past.

Gastroesophageal reflux disease is the primary underlying cause of esophageal adenocarcinoma, the fastest increasing cancer in the United States and the Western world [7]. The pathogenesis of gastroesophageal reflux disease provides a rational and scientific basis for therapy of the disease and prevention of complications, including esophageal adenocarcinoma. Roy Orlando continues a remarkably long and productive research career by presenting an up-to-date and well-written review of the pathophysiology of gastroesophageal reflux disease, with special reference to Barrett’s esophagus. Mitchell Cappell presents a comprehensive overview of gastroesophageal reflux disease, with a special focus on recent and novel developments, including therapy for Barrett’s esophagus. Barrett’s esophagus is a rapidly evolving and clinically important subject because it is the primary proximate cause of esophageal adenocarcinoma. Richard Sampliner, an internationally recognized expert on Barrett’s esophagus, presents a thorough review of this subject. His review of recently promulgated surveillance guidelines for Barrett’s esophagus is of particular interest to the internist and practicing gastroenterologist, whereas his discussion of management controversies and promising novel therapy should be of interest to the clinical researcher.

Barry Marshall, acting virtually alone and against conventional wisdom, discovered the pathophysiologic importance of *Helicobacter pylori* [8,9]. Although *H pylori* has received tremendous publicity as the primary etiologic factor in duodenal ulcers, its association with gastric malignancies may be clinically more important worldwide, particularly in terms of mortality. This article provides new insight into the relationships between *H pylori* infection and gastric adenocarcinoma or lymphoma. Understanding these relationships may provide clues as to the pathophysiology of these malignancies that could aid in their prevention and therapy.

Hepatocellular cancer is a major problem in certain parts of the world and an increasingly important problem in the United States [10]. Because this malignancy is so highly fatal once established, an important therapeutic strategy is to focus on precursor lesions and major risk factors, such as hepatitis B and C infection. Indeed, the recent increase in the incidence of this malignancy in the United States is largely related to chronic hepatitis C infection consequent to an epidemic of acute infection in the 1970s and 1980s
Drs. Hayashi and DiBisceglie comprehensively review the highly clinically relevant association of hepatitis B and C infections with hepatocellular carcinoma. Interruption of the sequence from acute infection to chronic infection to carcinogenesis should provide a fruitful avenue for clinical research. Landmark achievements in the basic pathophysiology of hemochromatosis, including the discovery of pathogenetic genetic mutations, have been inadequately translated into patient care. Hepatocellular carcinoma is a very common consequence of hemochromatosis [12]. Drs. Harrison and Bacon review the clinical presentation, pathogenesis, diagnosis, and treatment of hemochromatosis from the highly clinically relevant perspective of hepatocellular carcinoma.

Of further relevance to the reader are the novel technologies increasingly being applied to diagnose and treat gastrointestinal malignancies, which are reviewed in the previous issue of Medical Clinics of North America.

I thank my family for enduring too many days of work on this journal and too few with my family; my wife for her patience and understanding; and my children Adina, David, Miriam, and Daniel for their support. I additionally thank my son David for applying his superb computer skills to help me in the computer management of the documents and figures. I thank J. Heather Cullen, the Publishing Manager of the Medical Clinics of North America, for her cheerful assistance and support during a collaboration of nearly 10 years and seven issues edited by me in the Clinics of North America series. I thank the librarians at Maimonides Medical Center, Lydia Friedman, Richard Patrimonio, and James Verlander, for bibliographic assistance during my writing of several articles in the issue.

The value of this work is in its use. Use it wisely. Read, study, critically review, and most importantly apply. The Medical Clinics of North America await you.

Good luck and enjoy!

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References


