

Preface

Colon Cancer Screening, Surveillance, Prevention, and Treatment: Conventional and Novel Technologies



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Guest Editor

During the past year about 55,000 Americans succumbed to colon cancer [1]. This number is about 55 times the number of American fatalities up to now in the current Iraqi conflict and is about the same number of American fatalities during one decade of war in Vietnam. Indeed, during the approximately 15 minutes it takes to read this preface another American will succumb to colon cancer. These deaths are largely preventable. Unfortunately, the major recent advances in colon cancer pathogenesis, screening, and prevention have been inadequately translated and ineffectively implemented for patient care and public benefit.

The American public needs further awareness and education about the importance of colon cancer screening, prevention, and therapy. You, the internists and general practitioners, have the direct and nearly universal patient access to educate the American public about this cancer and to refer them one-at-a-time for appropriate screening and surveillance. Colon cancer is the most dramatic example of the importance of educating the internist, and through him or her the general public about cancer, because this cancer is so ubiquitous and so preventable. This issue of the *Medical Clinics of North America* is dedicated to you, the internist: to educate you to educate your patients, to instruct you to refer your patients for screening and surveillance, and to inform you of novel diagnostic tests and therapies to offer your patients.

The gastroenterologist and the gastrointestinal surgeon, radiologist, and oncologist will also refer to this issue for a critical review of new and

important developments in colon cancer. Educating the physician should benefit the patient by access to better and more modern therapies. By emphasizing recent developments and future directions in this issue, it is hoped to stimulate basic and clinical research to help reduce the cancer incidence and mortality, until some day soon—through an integrated strategy of cancer prevention, screening, and therapy of premalignant lesions—colon cancer shall become as extinct as scourges of the past.

I provide a comprehensive overview of this subject with an emphasis on colonic adenomas, the major precursor lesion, and on screening and surveillance for cancer prevention. This article introduces the next article on screening of patients at average risk for colon cancer. In Dr. Mandel's excellent historical approach to this subject, the seminal clinical trials are critically reviewed. This is a highly important clinical area for the internist and gastroenterologist, as evidenced by the recent explosive growth of screening colonoscopy. Dr. Syngal and colleagues present a concise but thorough review of high-risk groups for colon cancer, their surveillance protocols, and the surveillance techniques. This work provides a user-friendly reference for the general clinician and practicing gastroenterologist. Chemoprevention of colon cancer is a pioneering field with immense clinical potential, as demonstrated by the limited, but established, efficacy of nonsteroidal anti-inflammatory agents. Ernest Hawk and colleagues review all the promising chemopreventive agents, as well as the rapidly changing chemotherapeutic armamentarium for advanced colon cancer.

Novel technologies are increasingly being applied to diagnose and treat colon cancer as well as other gastrointestinal cancers. Applications of these novel technologies are reviewed with respect to colon cancer as well as other gastrointestinal cancers. Virtual colonoscopy is a rapidly evolving and highly clinically relevant technology. The literature on this subject is growing exponentially with widely divergent results between studies [2,3]. This field is critically and comprehensively reviewed by Dr. Lefkowitz and colleagues, including reviews of very recent clinical studies. Endoscopic ultrasound is becoming increasingly important in the staging of upper gastrointestinal and rectal cancers. Proper staging permits more precise therapy. For example, detection of clinically unsuspected metastases by endoscopic ultrasound can help prevent unnecessary cancer surgery. Drs. Tamerisa, Irisawa, and Bhutani thoroughly review this subject, and new techniques of endoscopic ultrasound-guided ablative, chemotherapeutic, and radiation therapy. Although already established in Japan and Europe, endoscopic mucosal resection and endoscopic ablation are being increasingly applied in America to treat precancerous or early cancerous lesions. The excellent review by Drs. Monkewich and Haber should be of great interest to gastrointestinal endoscopists, but should also provide useful information to internists and other generalists about these rapidly evolving therapeutic options for their patients with gastrointestinal cancers. With the recent explosion of laparoscopic surgery, surgeons have increasingly applied

this technology to treat precancerous and cancerous gastrointestinal neoplasms because of the reduced perioperative morbidity and mortality with this minimally invasive technique. Dr. Torres and colleagues review in detail the principles, technique, results, and controversies of laparoscopic surgery for cancer. Although laparoscopic surgeons will find this review of particular interest, all physicians treating gastrointestinal malignancies should find this article informative and important.

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If clinicians apply the currently available knowledge, techniques, and modalities as herein presented, for more aggressive screening, surveillance, prevention, and early intervention of colon cancer, tens of thousands of lives shall be saved. Reading and comprehension are the prerequisite; application is the essence.

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