

FOREWORD

Gastrointestinal cancers represent a heterogeneous group of diseases of the gastrointestinal tract. These include cancers of the colon, rectum, stomach, pancreas, esophagus, anus, gallbladder, liver, and bile duct. There is an interplay of various non-modifiable and modifiable risk factors that foster the conversion of normal cells to precursor cells, precursor cells to premalignant cells, and premalignant cells to malignant cells. The non-modifiable risk factors are mostly genetic and aging, whereas some of the key modifiable risk factors are smoking, excessive alcohol consumption, and obesity. The initial trigger by these risk factors may be specific for each cancer, but a shared feature among gastrointestinal cancers is increased mortality and morbidity due to late-stage detection, and poor survival following metastasis. Despite significant advances in our understanding of molecular pathogenesis and the development of targeted therapies, gastrointestinal cancers continue to be a leading cause of cancer-related deaths.

Gastrointestinal cancers are diverse in etiology and clinical management. The chapters of this book explore the clinically relevant aspects of this diversity under three broad categories: epidemiology and pathology, early diagnosis and prognosis, and surgical management. The etiological aspects focus on stomach cancer while the pathological aspects provide an overview of colorectal cancer, how primary colorectal cancer becomes metastatic through epithelial mesenchymal transition, and how macrophage-derived extracellular vesicles drive tumor development and enable the progression of most gastrointestinal cancers. Chapters on early detection and prognosis emphasize on biomarker discovery, both at genetic and proteomic level, and how these can be used to effectively predict the origin, progress, prognosis, and treatment response of gastrointestinal cancers in general and pancreatic cancer in particular. Given that the gastrointestinal tract is solely responsible for the processing of the diet we consume, the impact of diet that we consume cannot be ignored. There is a dedicated chapter that covers the role of diet and lifestyle on colorectal cancer incidence and survival. Despite various treatment modalities, for localized cancers, surgery is still the best form of curative treatment, and the role of surgical management of gastrointestinal stromal tumors and esophageal cancers are elegantly summarized in two chapters.

Such a broad spectrum of diseases like gastrointestinal cancers cannot be covered in a single book; however, the contents of this book provide the readers with an overview of several important aspects of gastrointestinal cancers and may be of interest to healthcare professionals interested in gastrointestinal cancers.

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