

CRC

CANCER
OF THE
ESOPHAGUS
Volume II

C. J. Pfeiffer

CRC

PRESS

Cancer of the Esophagus

Volume II

Editor

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Editor-in-Chief

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CRC SERIES IN GASTROINTESTINAL DISEASE

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DRUGS AND PEPTIC ULCER

Volume I

Therapeutic Agents for Peptic Ulcer Disease

Volume II

Pathogenesis of Ulcer Induction Revealed by Studies in
Humans and Animals

CANCER OF THE ESOPHAGUS

EXPERIMENTAL PATHOLOGY OF THE LOWER DIGESTIVE TRACT

PREFACE

It has been a great pleasure for me to organize the present volumes, *Cancer of the Esophagus* and I express my hearty thanks to all of the contributors from the many countries who have repeatedly shown their dedication and international cooperation toward solving the problem of cancer of this site.

Esophageal carcinoma is one of the most interesting cancers because of its high variation in international and regional mortality. It remains one of the most vexing and obdurate problems to the surgeon, radiotherapist, and other oncologists since it is difficult to detect early and clinically manage and is usually rapidly fatal. Furthermore, for the experimental investigator and epidemiologist, it offers a challenging but promising subject, most notably in the field of environmental and chemical carcinogenesis. In view of its importance, it is paradoxical that more monographs and symposia and funding for medical research on this subject have not been forthcoming. This is true, in total international perspective of the cancer field, notwithstanding the excellent initiatives and long-time support by the International Agency for Research on Cancer in Lyon and some other agencies that have encouraged important studies in the high-risk areas of Iran, France, and elsewhere. It is heartening to see the recently enhanced cooperation between the East and West on this important oncologic problem. I am particularly pleased that the present volumes demonstrate this with important chapters from the high-risk esophageal cancer areas in China, as well as from high risk zones in France, the U.S. and elsewhere. It is hoped that the future will witness increased activity in this field. One important milestone has just recently occurred with the founding in Japan, under the presidency of Professor Komei Nakayama, of The International Society for Diseases of the Esophagus.

The reader of the present books will note both convergent and some divergent views arising from different authors and different countries. At times these discrepancies relate mainly to the degree of optimism or pessimism pertaining to a particular surgical procedure, diagnostic method, chemotherapeutic or radiotherapeutic regimen. Perhaps it is most realistic, in appraising the present status of cancer of the esophagus, to agree with Professor Roussel that while patients can be made more comfortable today, we have not yet significantly improved the long-term results of therapy for most patients during the past two decades. Further, we have not yet identified the specific, probably chemical, causes of human esophageal cancer. Still, it is also realistic to hold an optimistic view for the future since, as the reader will ascertain:

- Screening procedures and diagnostic techniques are improving.
- Precursor lesions and risk-associated conditions are becoming better understood.
- Fundamental knowledge is rapidly accumulating about carcinogenesis and mutagenesis in the cancer field in general, with respect to site specific chemical carcinogens in the esophagus and to possible esophageal chemical carcinogens for humans. Important data are currently being consolidated from multidisciplinary study.
- For patients detected early with this disease, though they are still too few, long-term cure rates are improving as a result of more judicious surgical and radiotherapeutic practices.

With future work, it can be expected that the most benefit will derive from closer, if not exact, identification of the possible environmental/dietary causes and limitation to their exposure and development of ways and means to detect earlier the onset of esophageal cancer. Thus, the problems of cancer of this site are similar to those confronting cancer in general. We hope that the present volume will stimulate international oncology workers in all disciplines to pursue this worthy challenge.

C. J. Pfeiffer

THE EDITOR

Carl J. Pfeiffer, Ph.D., is Professor of Gastrointestinal Physiology and Director, Laboratory of Investigative Gastroenterology at the Faculty of Medicine, Memorial University of Newfoundland, St. John's, Newfoundland, Canada. Formerly, he was Director of Research, Institute of Gastroenterology, Presbyterian-University of Pennsylvania School of Medicine, Philadelphia and was recently Visiting Professor, Kyoto University School of Medicine, First Department of Surgery, Kyoto, Japan.

Professor Pfeiffer received a B.A. from Duke University, an M.A. and Ph.D. in Physiology-Pharmacology from Southern Illinois University, and a M.Sc. from Harvard University, School of Public Health. He has trained numerous postdoctoral and other trainees from several countries and has been active in cancer research for many years, including some international studies. His efforts have focused upon upper digestive tract carcinomas. In 1977-78 he was awarded the American Cancer Society-Eleanor Roosevelt-International Cancer Fellowship.

He is the editor of *Peptic Ulcer*, *Gastric Cancer*, *Drugs and Peptic Ulcer*, author of *Gastrointestinal Ultrastructure* and other books, as well as author or co-author of more than 100 scientific papers and chapters. Professor Pfeiffer is a member of the American Gastroenterological Association, the American Physiological Society, the Society of Toxicology, The International Society for Diseases of the Esophagus, among others. One of his chief interests is promoting international cooperation in medical research and education.

DEDICATION

This two volume set is dedicated to the late Professor Morton I. Grossman, a gastroenterologist deeply loved, admired, and respected around the world for his countless contributions to understanding the physiology and disease processes of the digestive tract. Professor Grossman died a victim of adenocarcinoma of the lower esophagus on May 26, 1981.



Professor M. I. Grossman (left), Professor C. J. Pfeiffer (center), and Dr. T. Aoki (right) at the Fourth International Conference for Experimental Ulcer, Tokyo, Japan, October 1980.

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*The Diagnosis and Treatment of Esophageal
Carcinoma*

Chapter 1

CYTOLOGY AS A SCREENING METHOD FOR ESOPHAGEAL
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Chuin Shen and Yi-Jing Shu

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