Gastrointestinal Cancer:
Advances in Diagnostic Techniques and Therapy

This volume contains 29 selected papers presented at the International Conference on Gastrointestinal Cancer, Tel Aviv, November 1977. 23 further papers are published as Gastrointestinal Cancer: Advances in Basic Research, forming vol. 4 in the series Frontiers of Gastrointestinal Research (for contents see pp. VIII)

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Gastroenterologists and Oncology
Gastrointestinal Cancer: Advances in Basic Research

23 selected papers presented at the International Conference on Gastrointestinal Cancer, Tel Aviv, November 1977. Published as Vol. 4 in the series Frontiers of Gastrointestinal Research

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This First International Conference on Gastrointestinal Cancer, organized by the Israel Gastroenterological Society and Cancer Association, was held in Tel Aviv in November 1977 and attended by 850 physicians, scientists, paramedical and laypersons from 33 countries.

Our cosponsors and collaborating organizations, whom we would like to thank, included the American Cancer Society, College of Gastroenterology, and Society for Gastrointestinal Endoscopy; the Collegium Internationale Chirurgiae Digestive (CICD); the EORTC Cooperative Group on GI Cancer; The Weizmann Institute of Science, the Sick Fund of the General Federation of Labor, Israel, the Beersheba, Haifa, Jerusalem and Tel Aviv Medical Schools and the Israel Clinical Oncology Society.

The Conference was based on key-note lectures, free papers and workshops; of these, selected review lectures and original papers have been chosen for publication.

We would like to thank the chairmen of the various sessions who kindly assisted in reviewing the papers, the members of the International Advisory, Scientific and Organizing Committees, and our many Israeli and non-Israeli friends who helped make the conference a success. Our special thanks are given to Drs. H. Colcher, C. Rubin, P. Sherlock, S. Winawer and N. Zamcheck who assisted in creating this pioneer meeting.

Considering the poor prognosis of gastrointestinal cancer at present, it is hoped that this initial and integrated approach to the problem will help us understand, prevent and detect earlier, at least, the many potentially treatable tumors and cure or alleviate the remainder.

Paul Rozen, MD
Organizing Secretary of the Conference
Tel Aviv 1978

Preface 1

Paul Sherlock
Gastroenterology Service, Memorial Sloan-Kettering Cancer Center, and Cornell University Medical College, New York, N.Y.

This International Conference on Gastrointestinal Cancer had its genesis in October 1974 at the World Congress of Gastroenterology in Mexico City. A few of us who met there were of the opinion that there was a need to have a multidisciplinary International Congress devoted to gastrointestinal cancer, and Israel was thought to be an excellent location for such a conference. It was clear that in spite of the fact that gastrointestinal cancer was a major problem worldwide, relatively little attention was paid to it, particularly by gastroenterologists.

Cancer of the colon is an important problem in the United States and pancreas cancer is on the increase. Gastric cancer still represents a major illness in Japan and in certain parts of Europe, Asia, and South America. Cancer of the esophagus and primary cancer of the liver are diseases of the more underdeveloped countries but continue to account for a substantial number of cancer deaths in the industrialized countries as well. It is unfortunate that the majority of patients found to have cancer of the gastrointestinal tract will be beyond cure by the time the diagnosis is made and will die from their disease in spite of the most extensive application of available therapy. We need to do much better. This dismal record of survival signifies the need for the identification of etiologic and risk factors, pathogenesis and more effective diagnostic techniques to be used in the incipient stage of disease as well as more effective treatment modalities.

For the past 25—30 years, intensive clinical research has been directed toward lymphoma and leukemia even though these neoplasms are much less common than large bowel cancer. In 1973, for example, 126 papers were published on lymphoma and leukemia in major clinical journals in the United States. In these same journals, only 13 papers dealt with large bowel cancer. However, there are many encouraging signs of increasing interest in gastrointestinal cancer.

1 The closing remarks given at the Conference.

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Experimental cancer has been studied for decades by basic scientists. Newer methodologies being developed in immunology, cellular proliferation, and carcinogenesis have great potential for studying the biology of gastrointestinal cancer. In the United States, the National Cancer Plan executed by the National Cancer Institute provides an opportunity for a new look into digestive tract cancer. Many efforts are being made to bridge the gap between the basic and clinical sciences. There are regional, national, and international cooperative treatment programs such as the EORTC (European Organization for Research on Treatment of Cancer) to evaluate combination chemotherapy, radiation therapy,
and immunotherapy in the management of gastrointestinal cancer with the hope that results will eventually approach those achieved with lymphomas and leukemias. These activities in many countries are encouraging trends.

In May 1975, the American Gastroenterological Association organized a Postgraduate Course on Gastrointestinal Cancer. The outstanding faculty encouraged gastroenterologists, internists and surgeons to take more active roles in the management of patients with gastrointestinal neoplasms, to become more involved in basic research and clinical investigation and to provide new perspectives for the study of gastrointestinal cancer. One aim of the course was to introduce gastroenterologists, gastrointestinal surgeons, internists oncologists, family physicians, residents and fellows-in-training to an integrated approach to the management of gastrointestinal cancer and provide some insight into current knowledge about its behavior. The attendance and response indicated that the gastroenterological community was eager to learn more about gastrointestinal cancer.

As a result of that course, a special issue of Clinics in Gastroenterology was devoted to gastrointestinal cancer, presenting some of the newer concepts of etiology, diagnosis, prognosis, and treatment of gastrointestinal cancer. Dr. Zamcheck and I had the pleasure of being co-editors of that volume. This increasing interest in gastrointestinal cancer led to this Conference in Tel Aviv. It has also led to a course which will be given in Mexico City under the direction of Dr. Villalobos.

Clinicians and investigators of diverse disciplines are directing attention to the complexities of human gastrointestinal cancer. Digestive tract cancer is not a disease which an individual, however talented, can investigate by himself. The realization of this fact has generated national postgraduate courses, the formation of cooperative clinical groups and this International Conference as well as organ-site directed research programs, as for example, the colon and pancreas. This wholesome integration of specialists and experts is bringing together new working teams for both clinical management and investigation. This has led to some reorganization of our institutional hierarchies. In the past, surgeons commonly accepted the responsibility for the care of the cancer patient; the medical gastroenterologist rarely exerted a primary role. Indeed, until very few years ago, surgery comprised the only treatment modality available to the patient. Today,

in addition, chemotherapy is extensively applied; radiation therapy is increasingly used with more sophisticated treatment planning; immunotherapy is being tested; but more importantly, combinations of several modalities are being investigated. Physicians are being trained in digestive tract oncology and responsibility for the care of the patient with gastrointestinal cancer is now shared by those familiar with new treatment modalities.
The gastroenterologist's role in cancer research is essential. Any program of gastrointestinal oncology without continuing research at various levels will soon lose its effectiveness. This research can be both basic and clinical. There are many opportunities for study at various levels and there are many new programs investigating all aspects of gastrointestinal cancer that need gastroenterologists on the team. More gastroenterologists are needed for research into etiology and detection and to apply their knowledge of the structure and function of the gastrointestinal tract to the cancer problem. Many techniques developed by gastroenterologists and used for research into other disease processes can be applied to cancer.

Gastroenterologists teaching at the undergraduate and graduate levels can stimulate interest in the student and house officer which may lead to involvement by those individuals in the cancer problem at a future time. It is important to have enough information in the medical school curricula and enough teaching of modalities and disciplines relating to cancer to stimulate the imagination of students at a relatively early stage in their careers. During postgraduate training programs, exposure to oncology may lead to careers in oncology. Unless individuals are exposed they will not be aware of the challenges. The role of the gastroenterologist in graduate training and oncology is to teach by example; most house officers and trainees imitate their teachers. If the gastroenterologist is able to participate in or guide patient management, if he is deeply involved in surveillance of precancerous lesions, if he is well equipped to contribute to diagnosis, if he is capable of chemotherapeutic management, nutritional management, follow-up care, including terminal care with necessary psychological support, the trainees may imitate their teacher, participating in all of these roles.

I am certain that we all share a common viewpoint. We hope that the efforts of trained investigators applied to the problem of digestive tract cancer can teach us to: (1) recognize early cancer; (2) understand and treat it; (3) reduce disability and suffering, and (4) most importantly eventually prevent it.

This First International Conference on Gastrointestinal Cancer has demonstrated the increasing interest in digestive tract cancer and the universal concern for the patient with digestive tract cancer, transcending most boundaries of language, custom, commerce, and politics. It is hoped that this Conference will encourage all of us to join forces to deal with this very important matter. Every individual can easily find problems which fit his interest and capability and unlimited opportunity for service in the study and care of the cancer patient. The patient can only benefit by these endeavors. It is hoped that this First very successful International Conference will lead
to the Second, Third, etc. Conferences on Gastrointestinal Cancer. Perhaps we may be designated a Congress rather than a Conference.

On behalf on the Organizing and Program Committees and all who helped to plan and implement this Conference, we thank you for attending and participating in this effort. To Dr. Paul Rozen, the Organizing Secretary, we extend our special thanks, and we now return him to his family once again.

At this Conference ends, I say Shalom and hope to say Shalom to open the next Conference (or Congress), hopefully in the very near future, when advances in our understanding of the biology and management of cancer will give us further hope for conquering the disease.