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Volume IX

Digestive Cancer

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Proceedings of the 12th International Cancer Congress, Buenos Aires, 1978

Volume IX
DIGESTIVE CANCER

Editor:

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Foreword

This book contains papers from the main meetings of the Scientific Programme presented during the 12th International Cancer Congress, which took place in Buenos Aires, Argentina, from 5 to 11 October 1978, and was sponsored by the International Union against Cancer (UICC).

This organisation, with headquarters in Geneva, gathers together from more than a hundred countries 250 medical associations which fight against Cancer and organizes every four years an International Congress which gives maximum coverage to oncological activity throughout the world.

The 11th Congress was held in Florence in 1974, where the General Assembly unanimously decided that Argentina would be the site of the 12th Congress. Argentina was chosen not only because of the beauty of its landscapes and the cordiality of its inhabitants, but also because of the high scientific level of its researchers and practitioners in the field of oncology.

From this Assembly a distinguished International Committee was appointed which undertook the preparation and execution of the Scientific Programme of the Congress.

The Programme was designed to be profitable for those professionals who wished to have a general view of the problem of Cancer, as well as those who were specifically orientated to an oncological subspeciality. It was also conceived as trying to cover the different subjects related to this discipline, emphasizing those with an actual and future gravitation on cancerology.

The scientific activity began every morning with a Special Lecture (5 in all), summarizing some of the subjects of prevailing interest in Oncology, such as Environmental Cancer, Immunology, Sub-clinical Cancer, Modern Cancer Therapy Concepts and Viral Oncogenesis. Within the 26 Symposia, new acquisitions in the technological area were incorporated; such acquisitions had not been exposed in previous Congresses.

15 Multidisciplinary Panels were held studying the more frequent sites in Cancer, with an approach to the problem that included biological and clinical aspects, and concentrating on the following areas: aetiology, epidemiology, pathology, prevention, early detection, education, treatment and results. Proferred Papers were presented as Workshops instead of the classical reading, as in this way they could be discussed fully by the participants. 66 Workshops were held, this being the first time that free communications were presented in this way in a UICC Congress.

The Programme also included 22 "Meet the Experts", 7 Informal Meetings and more than a hundred films.

METHODOLOGY

The methodology used for the development of the Meeting and to make the scientific works profitable, had some original features that we would like to mention.

The methodology used in Lectures, Panels and Symposia was the usual one utilized in previous Congresses and functions satisfactorily. Lectures lasted one hour each. Panels were seven hours long divided into two sessions, one in the morning and one in the afternoon. They had a Chairman and two Vice-chairmen (one for each session). Symposia were three hours long. They had a Chairman, a Vice-chairman and a Secretary.

Of the 8164 registered members, many sent proferred papers of which over 2000 were presented. They were grouped in numbers of 20 or 25, according to the subject, and discussed in Workshops. The International Scientific Committee studied the abstracts of all the papers, and those which were finally approved were sent to the Chairman of the corresponding Workshop who, during the Workshop gave an introduction and commented on the more outstanding works. This was the first time such a method had been used in an UICC Cancer Congress.

"Meet the Experts" were two hours long, and facilitated the approach of young professionals to the most outstanding specialists. The congress was also the ideal place for an exchange of information between the specialists of different countries during the Informal Meetings. Also more than a hundred scientific films were shown.

The size of the task carried out in organising this Congress is reflected in some statistical data: More than 18,000 letters were sent to participants throughout the world; more than 2000 abstracts were published in the Proceedings of the Congress; more than 800 scientists were active participants of the various meetings.

There were 2246 papers presented at the Congress by 4620 authors from 80 countries.

The Programme lasted a total of 450 hours, and was divided into 170 scientific meetings where nearly all the subjects related to Oncology were discussed.

All the material gathered for the publication of these Proceedings has been taken from the original papers submitted by each author. The material has been arranged in 12 volumes, in various homogenous sections, which facilitates the reading of the most interesting individual chapters. Volume XII deals only with the abstracts of proffered papers submitted for Workshops and Special Meetings. The titles of each volume offer a clear view of the extended and multidisciplinary contents of this collection which we are sure will be frequently consulted in the scientific libraries.

We are grateful to the individual authors for their valuable collaboration as they have enabled the publication of these Proceedings, and we are sure Pergamon Press was a perfect choice as the Publisher due to its responsibility and efficiency.

Argentina
March 1979

Dr Abel Canónico
Dr Roberto Estevez
Dr Reinaldo Chacon
Dr Solomon Barg

General Editors

Introduction

This volume is concerned with gastro-intestinal malignancy and features colo-rectal, hepatocellular, pancreatic, gastric and oesophageal carcinomata. Aetiological considerations, epidemiological factors and different methods for early diagnosis, radiological, biochemical etc. are included. The treatment options, surgery, radiotherapy, chemotherapy, the use of irradiation to the primary site and combination modality therapy are discussed.

N. THATCHER
March 1979

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Colorectal Cancer

Colorectal Cancer: Early Diagnosis

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ABSTRACT

The Author summarizes the results of surgery of colorectal carcinoma, which are linked with an early diagnosis.
A review is then done of the available diagnostic procedures, which can lead to an early diagnosis (Clinic, Radiology, Endoscopy and its subsidiary techniques).
The conclusions may be of use in achieving a diagnosis early enough for effective therapy.

Key words: Colorectal cancer. Early diagnosis. Radiology. Endoscopy. Histology. Brush cytology. Endoscopic polypectomy. Perendoscopic CEA test. Endoscopic dye spraying method.

COLORECTAL CANCER : EARLY DIAGNOSIS

This Panel, as well as all the meetings about colorectal cancer that take place all over the world, is motivated by several factors:
- the high incidence of colorectal cancer, which is, moreover, on the increase,
- the lack of adequate therapeutic results which have not come up to expectation,
- the strong conviction that only an early diagnosis can assure a much better prognosis.

ANNUAL INCIDENCE OF COLORECTAL CANCER PER 100.000 INHABITANTS

USA 38-46

URSS 20

ITALY 20.7 (Mortality data - ISTAT, 1971)

In Piedmont (Italy) the annual incidence of colorectal cancer per 100.000 inhabitants is 35.18 cases.

COLORECTAL CANCER (RECTUM INCLUDED) 1965-1971

CANCER OF THE LARGE BOWEL (RECTUM INCLUDED 1965 - 1971						
	TOTAL NUMBER OF CASES			INCIDENCE PER 100.000 INHABITANTS		
SEX / AGE	M	F	MF	M	F	MF
0-19	7	46	53	0.18	1.16	0.65
20-39	129	130	259	2.85	2.95	2.90
40-59	1.140	1.137	2.277	29.97	28.42	29.18
60-79	3.586	3.173	6.759	150.35	103.80	124.20
80-99	667	903	1.570	256.27	201.13	221.37
TOTAL	5.529	5.389	10.918	36.48	33.95	35.18

(FROM THE CANCER REGISTRY OF PIEDMONT - TORINO, ITALY)

In recent years, remarkable advances in colorectal cancer therapy have resulted from improved surgical techniques, adequate preparation of patients before surgery and anaesthesiological and resuscitational assistence. The results of surgery, however, are disappointing in that they have not shown constant improvement.

This statement is confirmed by a survey of over 100 American Hospitals done in 1972 (End Results in Cancer - Report n. 4): the five-year survival of 22.910 cases of rectal cancer was 29% in the years 1940-49, raised to 40% in the next ten years, but did not change significantly afterwards. To date, the only way to improve the results of therapy is an early diagnosis: reports and clinical casuistries all over the world are in agreement on this point.

The five and ten year survival rates have been (End Results in Cancer) 70% and 63% respectively in cases of localized carcinoma, 34% and 23% in cases in which lymphnodes and/or neighbouring tissues and organs were also affected. The results of therapy, therefore, are linked with the degree of invasion of the lesion (Dukes A, B, C) and hence with the promptness of the diagnosis. With reference to the degree of invasion (Dukes), the five-year survival rates are: Dukes A 61-81%, B 25-64%, C 6-28% (from the Technical Report UICC Colorectal Cancer, 1975).

The large bowel can be easily reached with the diagnostic tools that are now available; it is therefore surprising that colorectal cancer which can be so easily diagnosed, often undergoes the operation in an advanced stage. The average period elapsing between the first symptoms and the diagnosis - called "fatal pause" by Bokelmann - is about seven

monts.

Nowadays, by means of the available diagnostic and therapeutic tools, a survival of over 5 years can be achieved in 75% of patients, if the diagnosis is prompt, that is early enough for effective therapy.

The diagnosis of early cancer can be made only on the surgically resected bowel and is obviously rare; the goal must be the detection of cancer before metastatic spread occurs.

At present the diagnostic procedures at our disposal can lead to a timely diagnosis, if employed as early as possible.

Diagnostic procedures

History
Digital rectal examination
Occult blood in the stools
Proctosigmoidoscopy with fiberscope
Double contrast barium enema
Coloscopy + subsidiary techniques

HISTORY - A carefully detailed history should always be taken, especially in the patient who has been previously labelled as "colitic".

Inquiries concerning the presence of gross or occult blood in the stools (never ascribe rectal bleeding to hemorrhoids without searching for additional lesions), the change in bowel habits, increased use of laxatives, irregular or alternating bowel habits, mucoid discharge, tenesmus, sense of incomplete or unsatisfactory evacuation, two-step defecation, decrease in the caliber of stools, anaemia of unknown aetiology, episodes of unexplained "colic" pain, "cramps" or gas distension pain, increasing constipation, episodes of incomplete obstruction, are mandatory.

Patients presenting one or more direct "warning" symptoms must be thoroughly examined in order to confirm or rule out a colorectal tumour. Obviously a careful examination will be the more justified if the warning symptoms mentioned are accompanied by indirect signs, such as familiarity for large bowel cancer or polyps or malignancy elsewhere, surface tumours, or previous diagnosis of high risk lesions.

According to personal experience, a period of time from six to fifteen months approximatively elapses between the first changes in bowel habits and the definitive diagnosis. After the diagnosis has been made, in many cases, a careful history will prove that one or more warning symptoms have been in existence for more than a year.

In our experience, such delay seems to be caused in about 40-45% of cases by the negligence of patients who underestimated their symptoms; an additional 10-15% of such patients had been treated for hemorrhoids; the other cases had not undergone diagnostic examinations at all, or

only a conventional Barium Enema, or the diagnostic work up had not been completed by Endoscopy.

DIGITAL RECTAL EXAMINATION - Digital rectal examination in exceedingly important. A high percentage of rectal cancers are within reach of the examining finger and may be detected by this technique, which must always be performed for all Patients with colorectal symptoms.

TESTS FOR OCCULT BLOOD IN THE STOOLS - The guaiac test seems to be the most reliable and simple method of testing the faeces for blood.

This test decreases the false-positive results, it is practical and hence acceptable to the patients, can be performed quickly and easily, and proved very useful also as a routine office procedure.

PROCTOSIGMOIDOSCOPY WITH FIBERSCOPE - Conventional rigid proctosigmoidoscopy, which has been for years the main procedure for the early diagnosis of colorectal tumours, is now being replaced by flexible fiberoptic sigmoidoscopy, which gives remarkable technical and diagnostic advantages.

By means of the flexible sigmoidoscope a quick, careful, comfortable exploration of the rectum, sigmoid colon and beyond, can be accomplished at the same time, with the same preparation of the patient and with better results - as compared to the rigid scope.

The availability of more effective fiberoptic instruments allows us to plan the endoscopic examination of the large bowel according to new criteria, particularly for the early diagnosis of tumours.

After an accurate Double contrast Barium Enema, the 'long' fibercoloscope (160-185 cm) is indicated when lesions are suspected between the splenic flexure and the caecum. 'Short' or 'medium' fibercoloscopes (60-110 cm) are more effective for the routine endoscopic examination of the rectum, sigmoid and discending colon, as well as in screening and follow up procedures of patients affected by high risk lesions, follow up of patients operated for colonic cancer or polyps, first examination of patients showing direct or indirect warning sign and symptoms.

The flexibility and easy manoeuvering of the fiberoptic instrument allows a quick exploration up to the splenic flexure in 5-10 minutes, that is at the same time as that of conventional rigid proctosigmoidoscopy. Besides these advantages, the flexible sigmoidoscope is more comfortable for the patient, allows a better view and magnification of lesions, abolishes blind spots by means of the polydirectional flexibility of the tip, permits a proper dosage of insufflated air and an easy performance of all the endoscopic subsidiary techniques.

Thus, the effectiveness of the medium or short fibercoloscope in the detection of cancer must be emphasized. It is well known, in fact, that the majority of large bowel tumours are located in the left colon, especially in the rectum and sigmoid.

FROM THE CANCER REGISTRY OF PIEDMONT

COLORECTAL CARCINOMA

1965 - 1971

ASCENDING COLON	775	(7.1%)
TRANSVERSE COLON	561	(5.1%)
DESCENDING COLON	409	(3.8%)
SIGMOID COLON	2548	(23.3%)
RECTUM	6625	(60.7%)
TOTAL	10918	(100%)

(FROM THE CANCER REGISTRY OF PIEDMONT - TORINO, ITALY)

It appears from the personal series that out of 741 colonic polyps endoscopically resected between 1973 and 1978, about 87% were located in the left colon.

Similarly, out of 167 cancers diagnosed in the last 18 months, about 93% were found in the rectum, sigmoid and left colon. When only a conventional rigid proctosigmoidoscopy is performed up to 18-20 cm from the anal verge, a certain number of polyps and cancers will remain undetected a few centimetres beyond.

In a group of 200 patients, who underwent conventional proctosigmoidoscopy first and flexible sigmoidoscopy immediately after, cancer or polyps were detected beyond 20 cm in 25 cases(12.5%).

Flexible fiberoptic sigmoidoscopy, therefore,should be regarded as a routine examination, not a sophisticated supplement to conventional proctoscopy. Only in this way will a reliable early diagnosis of colorectal cancer become feasible.

DOUBLE CONTRAST BARIUM ENEMA - In the diagnosis of large bowel tumours a radiological study is the first examination to be performed: it is irreplaceable, easy and often more acceptable for the patient than endoscopy procedures.

The recent air contrast techniques represent real progress in radiology for they allow a careful study of the colonic walls and put into evidence any slight change in the mucosal surface. This method can assure a surprisingly high diagnostic accuracy.

Like all instrumental methods, however, radiological techniques have some limitations: organizational problems, failures caused by inadequate preparation of patients, difficulties in interpreting the films because of technical troubles (colonic areas left out from the films) or, more often, because of changes in the normal anatomic conformation and morphology of the bowel (diverticulosis, incomplete