THE CANCER LETTER

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COMMUNITY ONCOLOGY PROGRAM PROVES TECHNOLOGY TRANSFER CAN WORK; SURVIVAL IMPROVEMENT SHOWN

The Cancer Control Program has been the target of more criticism perhaps than any other aspect of the National Cancer Program in the last five years. It is the first place everyone looks when the budget has

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In Brief

DES EXPOSED WOMEN FACE NEW RISK: UNFAVORABLE PREGNANCIES; HUTCHINSON LABOR ELECTION SET

ANOTHER RISK for women exposed before birth to DES: They apparently will have a 75 percent greater chance of having miscarriages, premature live births, stillbirth or ectopic pregnancies than women not so exposed. Ann Barnes, Massachusetts General Hospital gynecologist, reported in the current *New England Journal of Medicine* on new information from the continuing study of DES daughters supported by NCI. . . . **NATIONAL LABOR** Relations Board has set April 11 as the date for an election on whether the Hutchinson Center Staff Assn. will be certified as the bargaining agent for many Fred Hutchinson Comprehensive Cancer Center employees. Scientific staff, including physicians, nurses, and graduate students, are excluded. . . . **BRIAN KIMES**, who has been acting chief of the Cancer Biology Branch in the NCI Div. of Cancer Biology & Diagnosis Extramural Research Program, now has the permanent appointment to that position. . . . **OTHER NCI** staff changes: Elizabeth Stroud, chief of the Personnel Management Branch, moved to the National Bureau of Standards as personnel director. Marianne Wagner, who has been personnel officer for the National Institute of Allergy & Infectious Diseases, has replaced Stroud at NCI. Paul Schaffer, who has been acting chief of the Management Policy Branch, has left for the Environmental Protection Agency. John Miller, Div. of Cancer Cause & Prevention administrative officer, has moved to the Dept. of Energy. Elaine Bratic, chief of the Information Projects Branch in the Office of Cancer Communications, has moved up to the assistant secretary for health's office as communications coordinator. She has been temporarily assigned to the HEW secretary's office as acting deputy assistant secretary for communications planning. Patricia Newman, OCC science writer, has been named chief of the Reports Section in OCC's Reports & Inquiries Branch. . . . **DAVID SATTERFIELD** (D.-Va.), second ranking Democrat on the House Health Subcommittee, has announced he will not seek reelection. Tim Lee Carter (R.-Ky.), topranking Republican on that subcommittee, previously announced he would retire at the end of this session. . . . **BIOLOGICAL BASES** and Clinical Implications of Tumor Radioresistance is the subject of the Second Rome International Sumposium Sept. 21-24. Unconventional dose delivery, hypoxic cell sensitizers, hyperthermia, combined drugs and radiation and high LET radiation will be discussed.

GRAND RAPIDS COP DEMONSTRATES BIG IMPROVEMENT WHEN GUIDELINES FOLLOWED

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to be cut, and in fact took a $5 million reduction from 1980 to the proposed 1981 fiscal year budget.

The premise behind the Cancer Control Program which formed the basis for the congressional mandate assigning control responsibility to NCI was that an active effort to transfer treatment advances from research to medical practice would improve the quality of care for cancer patients and increase survival rates.

The Div. of Cancer Control & Rehabilitation, soon to become part of the new Div. of Centers, Community Activities & Resources, has supported a variety of projects derived from that premise. Some of them have been extraordinarily successful, and it now appears that one of the best will be the Clinical Oncology Program.

The seven COP contractors will be winding down the implementation phase of their efforts during the next year, to be followed by a year of evaluation. If the preliminary evaluation pulled together by one of them, in Grand Rapids, is an indication of the results being achieved, the $150,000 a year each has been costing NCI will be money well spent.

Edward Moorhead, project director for the Grand Rapids COP, reported at the recent annual meeting of the Assn. of Community Cancer Centers on how the program has impacted treatment and survival of breast cancer and small cell lung cancer patients in his city.

In 1975, the five hospitals participating in the Grand Rapids COP treated 28 premenopausal breast cancer patients with positive axillary nodes. Of these, 18 percent received multidisciplinary consultation including consultation with a medical oncologist. Two year survival was 71 percent.

In 1977, the five hospitals treated 27 premenopausal patients with positive axillary nodes. The two groups were similar in age, stage and ethnic mix. Of those, 85 percent received multidisciplinary consultation according to guidelines written by COP members in 1976. Two year survival for the 1977 group was 81 percent.

The five hospitals treated 35 patients with small cell lung cancer in 1975, 26 percent of whom were treated along the lines of guidelines later developed by the group. Median survival was 5.5 months.

In 1977, 32 small cell lung cancer patients were treated, this time with 88 percent of them treated according to the guidelines. Median survival was 8.5 months. The two groups were similar by age, stage and standard deviation of age. One difference was that the 1977 group included more women than in 1975, reflecting the rising incidence of lung cancer in females.

Moorhead further broke down the figures for the lung cancer patients, revealing the significance of the multidisciplinary treatment. In the 1975 group, the 26 percent who received multidisciplinary therapy survived an average of 10.7 months; those who did not, 2,8 months. In the 1977 group, survival for the 88 percent treated according to the guidelines was 11 months; those who were not, three months.

"Community physicians can voluntarily comply with guidelines and accept citywide peer review," Moorhead said.

The guidelines were written by 14 disease site committees, each of which had multidisciplinary, multi-institutional representation. A total of 118 physicians, 23 percent of the Grand Rapids physician population, worked on the guidelines. They wrote 45 site specific guidelines and submitted them to exhaustive peer review. Copies were placed in each hospital where they are easily available to primary care physicians.

The Grand Rapids COP is in the process of evaluating the impact of the program on treatment of other disease sites, as are the other COPs. Moorhead and his colleagues are confident that significant improvements will be demonstrated in most of them.

Meanwhile, NCI is preparing to go ahead with its new Community Hospital Oncology Program, which will attempt to accomplish the goals of COP under somewhat different guidelines which enabled a broader range of institutions to compete.

NCI has completed its review of contract proposals; how many of the 30 or more proposals will be funded depends on clarification of the budget picture.

Stephen Carter, director of the Northern California Cancer Program, told ACCC members that "we need cost effective approaches to regional cooperation. We can't afford the luxury of overlapping and duplicating efforts."

NCCP, which includes five universities and a large number of hospitals, clinics and other regional and state organizations, offers "one approach to integrating communities into clinical research," Carter said. "The 1980s will be the decade of the community oncologist. The great majority of cancer patients will be treated in the community."

A major factor in NCCP's success has been that it does not attempt to control activities of its members. Each organization develops its own projects, with NCCP acting as a coordinator, Carter said.

The Northern California Oncology Group, a regional cooperative group organized by NCCP, has four major attributes, Carter said:

–Its regional concept, with membership restricted from the beginning to Northern California and Northwest Nevada.

–Its membership is multimodal, with the modalities coequal.

–It is disease oriented, with disease groups making

up most of the protocols.

—Its community outreach effort.

The regional characteristic permits frequent communication and tight quality control, Carter said. "Problems encountered in cooperative clinical trials include the compromise phenomenon—the more individuals who have to agree on something, the greater the tendency to too much compromise, resulting in something with the lowest common denominator; and the dilution phenomenon, in which the low quality of data from the least qualified dilutes the quality of data from the group. You can have a positive study lost because of low quality data."

Keeping the group close knit, with strict quality controls, minimizes those phenomena, Carter said.

THREE CBCCPs LISTED FOR TERMINATION SAY THEY'LL APPEAL DECISION TO NCAB

The three Community Based Cancer Control Program contractors marked for early termination by merit reviewers and NCI staff all plan to appeal that decision to the National Cancer Advisory Board.

Principal investigators for the New Mexico, Long Island and Rhode Island programs each told *The Cancer Letter* they are preparing rebuttals to the review findings and conclusions and will have them at NCI by the March 31 deadline asked by staff. The rebuttals will be presented in closed session to the NCAB at its May meeting.

Some projects at the three other CBCCPs which will not be totally terminated—in Los Angeles, Detroit and Hawaii—were recommended for phase out by the reviewers. Those contractors also were invited to defend the projects in question if they so desire.

NCAB could object to the termination recommendations; although an objection would be an advisory opinion only, it undoubtedly would carry a lot of weight with the NCI director, who has to make the final decision. NCAB has statutory power only to disapprove grants exceeding $35,000, and its opinions on all other matters falls into the category of advice, which the director can accept or reject. He has almost always accepted it.

PIs at New Mexico, Long Island and Rhode Island all insist their programs were not judged fairly. All contend that progress was being made in developing permanent support for most of their projects and that early termination would damage and perhaps ruin those efforts.

Charles Beeson, New Mexico PI, noted that his contract was scheduled to end in June, 1981. "We have only had a significant impact in the last one to two years, yet we've been judged on the basis of the problems experienced in the first couple of years.

"The peer review has been destructive," Beeson continued. "It will be a terrible waste if we are not allowed to make an orderly phase out."

Beeson said that the New Mexico legislature was in the process of approving funds for long term support of some projects; and that other projects had lined up potential sources of private and non-NCI public support. "Those efforts were hurt by the 'quit yesterday' termination letter from NCI," he said.

NCI's first notice of termination said no further funding would be available after March 31. That was extended to July 1 to enable the NCAB to play a role in the controversy.

Rajeshwar Prasade, Long Island PI, said he is "confident that almost all of our subcontracts would continue after the end of the contract period (originally scheduled for 1982). If we are terminated early, I think three quarters of them would cease. The others would continue, but with less activity. There is a good possibility all will continue, if the contract continues as planned."

Prasade said ongoing support would come for the most part from the agencies involved in the subcontracts. "It takes time to establish and strengthen the linkages and to upgrade the services."

One of the Long Island subcontractors is Brookhaven Hospital, which runs patient education and breast and cervical cancer detection and screening programs. A patient education protocol for colorectal cancer is being developed for use by physicians and will be distributed to all hospitals on Long Island. The detection and screening effort is being made at the hospital and at two clinics the hospital operates elsewhere. It is aimed primarily at the poor, blacks and hispanics.

Another subcontractor is Cancer Care, Inc., a New York City based agency supported by private donations. It is staffed by social workers and is involved in rehabilitation and continuing care. Its charter limits it to operating within a 50-mile radius of its office, which cuts out half of Long Island. It has an office now, supported by the CBCCP, in Woodbury, permitting it to cover all the 2.8 million persons on Long Island. It is just getting started with that office, and Prasade said that when its patient services build in that area, it will generate its own support and not need any NCI money.

Long Island Jewish Medical Center heads a consortium of five hospitals which are looking at abnormal Pap test results. This consortium started operating last July, only three months before the merit review and thus its contribution could not be adequately assessed, Prasade said.

Fiorindo Simeone, Rhode Island PI, said the merit reviewers "did not see many of the problems we had to resolve. Our actual achievements and the likelihood of greater achievements were not perceived.

"We had been making plans for continuing beyond 1982. We felt we could select worthy projects and could find support for them with local funding."

The legislature and governor assured Simeone of funds for some projects. Rhode Island American Cancer Society officials and other private sources were preparing to continue others. ACS will continue

some of the education and early detection efforts in any case, Simeone said.

"The state Health Department would in due time support our program in occupational carcinogenesis. We made a strong start. We have well qualified scientists in occupational disease working with us. We have organized a superb board with individuals representing major local industries, working together to identify problems and make some changes." An example is the jewelry industry, a major one in the state. Simeone said the industry has been persuaded to change from use of asbestos plates in soldering to other nonflammable materials.

The Health Department will carry on the program whatever happens to the CBCCP contract, but there will be a gap of at least a year since the state budget process has already been completed.

One program that cannot be continued without NCI funds is a project comparing three schools with a prescribed antismoking education effort with three schools without the program. "It is a superb demonstration that will come to fruition within six months to a year," Simeone said. "We believe it will succeed and can be replicated and used by others."

NCI's abrupt termination announcement stopped many programs in their tracks, Simeone said. Some staff members have accepted other jobs. "It will take two to three months to get the teams together in strength again," Simeone said. "Our program was slow getting under way. We had to depend on so many private agencies and physicians. Marshalling them behind a new program could not be done immediately. It takes time."

COALITION REPRESENTATIVES AGREE ON METHOD TO COORDINATE POSITIONS

Representatives of cancer-related organizations attending the recent meeting of the Coalition for Cancer Issues agreed on a procedure for coordinating development of positions on issues.

The coalition will meet as issues arise which one or more of the organizations feel should be considered. Views of organizations with a major interest in an issue will be heard, along with responses from the other representatives. Minutes of the meeting will be taken by the representatives back to their respective groups. The reaction of the groups, if any, will be communicated to the organizations most concerned with the issue for use in their presentations to Congress or elsewhere.

That procedure was worked out to permit the various organizations to join forces behind issues when they so desire without committing any of them to positions which may be at variance with the views of their members.

The first issue tackled under this procedure was the effort by the Assn. of American Cancer Institutes to get a line item for cancer center core support written into the renewal of the National Cancer Act.

Albert Owens, Johns Hopkins, representing AACI, said the line item was "the key to stability of funding for centers." Noting that congressional mandates have created a wide range of obligations for centers to meet, "there has never appeared in an appropriations bill anything that puts their money where their mouth was."

John Potter, Georgetown, representing the American College of Surgeons and AACI, said, "The importance of core grants to cancer centers can't be overemphasized. It is the glue that holds everything together."

Charles Cobau, Assn. of Community Cancer Centers, said he agreed "there is no question of the importance of adequate, ongoing core grant support for cancer centers. But I have some reservations about the strategy. A line item may not be the best strategy. You would have to stand up year after year to the scrutiny of justifying line item support. I would rather plead my case to the National Cancer Advisory Board and NCI director. If you have a line item, you have to use all the money. That plagued us in cancer control."

However, Cobau said, "ACCC is prepared to go to Congress and say we're in favor of a line item because you all (the centers which receive core grants—ACCC 'centers' are not yet considered in that category) feel that is the best way. If you guys want a line item, we'll support it."

Owens said the decision by AACI to seek a line item "was not something we came to in the heat of the moment. We don't want to circumvent tough peer review. We just want an honest chance to compete. We're trying to make the pie bigger, rather than slice it thinner."

Owens agreed that the Cancer Control Program (which has a line item) had its problems. "Yes, there were some hasty expenditures and some imperfect reviews. But the program got started."

Robert Andrews, representing the American Radium Society, commented that ACCC seemed to be presenting conflicting views. "What does ACCC want from the government?" he asked.

"Nothing," Cobau said. "We receive no federal support."

Larry White, representing the American Society of Therapeutic Radiologists, asked, "How will the line item affect other programs? With a limited amount of money available, will it come out of the others?"

"AACI's position is that we are asking for a substantial increase in cancer funds, including the line item," Potter said. "We're at a critical juncture. Should representations be made to Congress calling attention to the importance of cancer centers and their need for increased support?"

White said that any position taken by ASTR would have to be done by its executive committee. "I don't think there would be any problem if the strategy is for a total increase in the budget, and that

the line item would not be at the expense of other programs."

"We're all in agreement on that," Potter said.

Charles Smart, executive director of the ACOS Commission on Cancer, said ACOS policy has been "to stay out of the politics of funding."

Potter agreed to work out a consensus statement, supporting an increase in the total appropriation for NCI, that there be no cutback in other components of the National Cancer Program, and that adequate support of cancer centers is a vital part of the national program. "We'll try to work out a statement that will not have to be signed in blood," he said.

NCI RESPONSE LETTERS ANSWER ALL THE QUESTIONS YOU COULD ASK AND THEN SOME

NCI's Office of Cancer Communications responded to 24 million inquiries in 1979, and the rate so far this year is running somewhat higher. Requests for information are handled in a variety of ways, with the effort tailored to meet the concerns of the lay public and professionals asking for information.

A large percentage of the inquiries fall into categories which can be answered through standard responses, helping to reduce an overwhelming task down to still king-sized but manageable proportions. The standard responses are developed with the assistance of Biospherics Inc., under a $950,000 a year contract which includes the massive physical aspects of processing the huge amounts of incoming and outgoing mail.

Each standard response letter must be approved by an NCI executive or scientist with the appropriate expertise, or by someone outside government if the topic makes that advisable. The letters are personally addressed and are signed by an NCI staff member, usually Robert Avery, chief of OCC's Public Inquiries Section.

The responses deal with a wide range of topics, including current accepted treatment methods for several forms of cancer, descriptions of some NCI programs, NCI's positions on various "breakthroughs" hyped in mass publications, quackery, laetrile, and a variety of theories which get into the popular press. A large share of the inquiries are requests for information on smoking cessation, asbestos, diet and cancer, and alcohol and cancer, and the responses include with the letter various kits, booklets or pamphlets with more details. Responses also may include names and locations of cancer centers, clinical investigators, Cancer Information Service phone numbers, and other local resources and information sources when appropriate.

A sample of the responses:

General Information

The National Cancer Institute is the federal government's principal agency for research on cancer prevention, diagnosis, treatment, and rehabilitation, and for dissemination of information for the control of cancer. The institute is one of 11 research institutes and four divisions that form the National Institutes of Health, located in Bethesda, Md. As an agency of the Dept. of Health, Education & Welfare, the National Cancer Institute receives annual appropriations from Congress. These funds support cancer research in the institute's Bethesda headquarters and in about 1,000 laboratories and medical centers throughout the United States.

Patient Costs (primarily for insurance company inquiries)

In 1974, approximately 655,000 cases of cancer were diagnosed, and 1,310,000 were under treatment. This disease exerts a tremendous economic impact, not only on the individuals and their families, but also on the country as a whole. The total cost of cancer has been estimated at $15 billion a year. This figure includes direct costs for care and treatment as well as indirect costs such as the loss of earning power and productivity of the patients.

While no definitive study has yet been conducted to determine the total cost to a family, analysis of selected cases indicates that the expenses of a particular patient may range from $5,000 to over $20,000. The financial burden often has catastrophic consequences, particularly when a family has no medical insurance or the wage earner is unable to continue working.

The enclosed report on cancer patients first diagnosed in 1969 provides detailed information on payments for inpatient care made to hospitals participating in the National Cancer Institute's Third National Cancer Survey. Information is presented on hospitalizations during the two years following diagnosis.

Since the average length of stay and average payment per hospitalization vary according to the site of cancer, Table 4A presents these averages by the primary cancer site.

Tables 5A, 5B and 5C may be of particular interest to you inasmuch as they show both the amount in dollars and the percentage of the total costs paid by Blue Cross Insurance, private insurance, Medicare, Medicaid, welfare, and the patient himself.

Table 6 shows average payment by medical procedure (surgery, radiation, chemotherapy, and various combinations of therapy). Table 7 shows the number of hospital admissions by primary site of cancer and by medical procedure.

Vitamin C

This letter is in response to your recent inquiry about National Cancer Institute research on vitamin C as a treatment for cancer.

A recent NCI-supported study at the Mayo Clinic in Rochester, Minn. evaluated the effectiveness of vitamin C in relieving the symptoms and extending the lifespan of patients with advanced cancer who could no longer benefit from standard therapy. Patients given vitamin C were matched with a control group of similar patients given a placebo. Researchers reported that they saw no evidence of therapeutic benefit from vitamin C to the patients in the study. Vitamin C did not improve survival time, nor did it relieve symptoms such as nausea and loss of appetite and weight. Complete data from the study were published in the Sept. 27, 1979 issue of "The New England Journal of Medicine."

NCI also has tested vitamin C in animal models used to screen drugs for anticancer activity. These tests are ongoing; however, results thus far have not been encouraging.

Approved by Dr. Jane Henney, 9/24/79.

Hair Dyes

This letter is in response to your recent request for information about the possibility that hair dyes may cause cancer.

The National Cancer Institute has tested a number of hair dye ingredients in mice and rats. Preliminary results from these tests show that the following ingredients caused cancer in the laboratory animals: (seven chemicals were named—4 MMPDS, o-nitro-p-aminophenol, 2-nitro-p-phenylenediamine, m-toluenediamine, direct black 38, direct blue 6, and lead acetate.)

In the National Cancer Institute tests, the chemicals listed

above were fed to mice and rats. This method of testing was used to insure that the chemicals would reach all parts of the animals' bodies in which cancer could grow. In view of evidence that some hair dye chemicals can be absorbed into the human body's circulatory system through the skin, the animal tests by feeding were appropriate.

Although direct extrapolation of results from animals to humans is not possible, the Institute's test results do serve as a warning that the chemicals listed above may possibly be cancer-causing agents in humans.

You may examine the labels of specific hair dyes to see if these chemicals are listed. All cosmetics, including hair dyes, that have entered interstate commerce since April 15, 1977, have their ingredients listed on the label. To obtain a list of ingredients in hair dyes distributed before that date, you may wish to write directly to the manufacturer.

Regulation of foods, drugs, and cosmetics is the responsibility of the Food and Drug Administration. Should you wish to contact FDA for further information, the address of 5600 Fishers Ln., Rockville, Md. 20857.

We hope this information is helpful.

Approved by Dr. Richard A. Griesemer, DCCP, 2/2/78.

Standard Response Letter

Dear ( ):

This letter is in response to your recent request for information ( ). We are sorry that ( ), and we can understand your concern.

The National Cancer Institute provides support to many hospitals for clinical programs to evaluate promising new methods of cancer treatment. These new approaches may include anticancer drugs, radiotherapy, immunotherapy, and surgery, alone or in various combinations. We are enclosing a membership roster for clinical programs in your area and a listing that indicates the types of cancer being studied in each project. Physicians may contact doctors on the list to obtain information about new forms of treatment or to inquire about the possibility of entering a patient in a study.

NCI also supports a number of cancer centers in the United States that develop and investigate new methods of cancer diagnosis and treatment. We have enclosed a half-sheet giving the name and address of the center or centers closest to you.

Many competent and experienced oncologists (specialists in cancer treatment) do not participate in NCI-supported clinical programs. If you need help locating an oncologist, a listing of these physicians may be available from the State medical society, a nearby medical school, or the local chapter of the American Cancer Society. In addition, the Cancer Information Service whose telephone number is listed on the half-sheet enclosure may be able to help you locate an oncologist and provide further information about cancer-related services in your area.

We hope you will find this information helpful. Please let us know if we can be of further assistance.

(Signed by Avery)

Approved by Paul Van Nevel, Associate Director for Cancer Communications, 6/18/79.

Fluorine, Fluorides

To answer your question regarding the possible relationship between fluoridated water and cancer, all available evidence indicates that fluoride salts are not cancer-causing agents. In the United States, millions of people drink naturally or artificially fluoridated water. Epidemiological studies have shown that the incidence of cancer is no higher among these people than among those with fluoride-free water supplies.

NCI Virus Cancer Program

Ever since scientists learned that viruses can produce cancer in animals, they have searched for a viral explanation of human cancer. So far, no virus has been proven to cause cancer in people, and the search has shifted to the possibility that the viruses may combine with hereditary and environmental factors to start the cancerous process.

Viruses are extremely useful as tools to explore how a cell becomes malignant. Important advances have been made in knowledge of both RNA and DNA tumor viruses, which contain ribonucleic acid cores and deoxyribonucleic acid cores respectively. Viruses isolated from numerous animal species belong to these groups. In many animals, these are often associated with leukemias, lymphomas, sarcomas, and carcinomas. In some, the virus can be shown to reproduce the disease, and in a few it can be the major cause of a naturally occurring cancer.

Instead of searching for the complete virus in cells, researchers are looking for viral hereditary information and viral products such as enzymes and proteins related to known cancer viruses. New research techniques and sensitive immunological and biochemical tests developed in the past few years are enabling scientists to pursue this type of basic research.

Approved by Dr. L.R. Sibal, acting associate director, Viral Oncology Program, 5/3/79.

Diet, Nutrition and Cancer

The National Cancer Institute has established a Diet, Nutrition & Cancer Program to explore the role of diet and nutrition in the causation, prevention, and treatment of cancer. The program includes laboratory studies, epidemiological surveys, and clinical investigations.

In regard to cancer cause and prevention, some evidence suggests that a diet rich or deficient in certain elements may influence a person's risk of developing some forms of cancer. The enclosed fact sheet on diet, nutrition and cancer contains suggestions for a prudent diet as well as background information on fiber, fat, vitamins, and other dietary constituents and their relationship to cancer.

Preliminary investigations indicate that diet and nutrition may be a factor in improving successful treatment and rehabilitation of cancer patients. In currently funded research, the DNCP is investigating loss of appetite in cancer patients and ways to provide nourishment to them. Studies of optimal nutritional support as an adjunct to cancer therapy are under way at a number of institutions throughout the United States. Studies also are seeking to clarify how normal cells and tumor cells compete for nutrients and the possible role of vitamins in the prevention and treatment of cancer.

Much of this research is in early stages of investigation. In time, we expect the program to produce practical information that will be useful to the general public as well as to patients and their physicians.

Approved by Diane Fink, MD, 11/13/79.

Theories (Compensation for)

This is in reply to your recent letter stating that you have developed a theory on the origin and treatment of cancer. The National Cancer Institute is not authorized to make financial awards to those who develop theories relating to cancer. However, if you would like to send us a paper summarizing your ideas, we will be pleased to make it available to members of our scientific staff.

NCI scientists are glad to consider new theories about cancer. They read of many new ideas, form their own opinions and use the written material according to their individual judgments. If they have questions, they may contact a person who submitted a theory. However, because our scientists receive a massive volume of material for review, they find it impossible to reply to each person who offers his ideas.

Causes and Cures

There is no scientific evidence to indicate that ( ) prevents cancer in humans or animals, nor is there any scientific evidence to indicate that ( ) will cure any of the more than 100 forms of malignancy. Because cancer is a complex disease, no one treatment has yet proven effective against all of its various forms.

Theories

This is in reply to your recent letter to the National Cancer Institute regarding ( ). Thank you for making your ideas available to the Institute's scientific staff.

NCI scientists are glad to consider new theories about cancer. They read of many new ideas, form their own opinions and use the written material according to their individual judgments. If they have questions, they may contact a person who submitted a theory. However, because our scientists receive a massive volume of material for review, they find it impossible to reply to each person who offers his ideas.

Your concern for the cancer problem is appreciated.

Testing Theories

Thank you for your recent letter suggesting that ( ) may possibly be of value in the treatment of cancer. Let us assure you that the National Cancer Institute is vitally interested in substances that may be useful in treating cancer. Each year, thousands of plants, chemicals, and other materials are screened by Institute scientists for possible cancer-inhibiting properties.

We are making a copy of your letter available to our Drug Development Branch for its consideration. We are enclosing material discussing the current methods of treating cancer, which we believe you may find of interest. Your willingness to share your ideas with us is most appreciated.

Cancer of the Kidney

Although many types of malignant tumors may arise in the kidney, primary cancer of the kidney is uncommon. Renal cell carcinoma, also known as hypernephroma, is its major form. This disease is more common in men than women and usually occurs after the age of 50. The kidney can also be a site for metastasis of cancers originating elsewhere in the body, and it is necessary to determine whether the cancer is actually the primary tumor in order to plan proper treatment.

An initial symptom of cancer of the kidney is often the presence of blood in the urine. Pain in the back or side below the ribs (flank) may be present in about one-third of the patients with kidney tumors. At times a mass or lump may be noticeable in the side. In addition, renal tumors may be associated with fever and weight loss. Cancer of the kidney can be diagnosed by the use of x-ray techniques, which may include an intravenous pyelogram, nephrotomography or renal arteriography. In these procedures, contrast material is injected into a blood vessel and cleared by the kidney.

Treatment usually consists of surgical removal of the kidney (nephrectomy). If surgery is performed when the malignancy is localized in the kidney, survival rates are relatively good. Treatment with chemotherapeutic agents is under investigation in patients with disseminated renal cell carcinoma (those in whom the cancer has spread to other organs).

Approved by Dr. N. Javadpour, Surgery Branch, 4/3/78.

Unproven Methods: Hoxsey Herbs

To the best of our knowledge, there have been two facilities known as "The Hoxsey Cancer Clinic"—one in Portage, Pa., and one in Dallas, Tex., which later became the Taylor Clinic. The clinic in Portage was closed in 1958 by court action. In 1960, the Taylor Clinic in Dallas was prohibited by court injunction from selling or dispensing Hoxsey medications.

It is the legal responsibility of the federal Food & Drug Administration to see that medications prescribed for cancer and for other diseases are effective for their intended use. FDA's investigation of the Hoxsey method revealed that it is of no benefit to cancer patients.

In the trials leading to the closing of the Hoxsey Cancer Clinic in Portage, the government presented scientific evidence that Mr. Hoxsey's claimed "cures" fell into three categories: patients who had never had cancer; patients who had been cured of cancer before they went to the clinic; and patients who had cancer and still had it or who had died while under the Hoxsey treatment.

Wilms' Tumor

Wilms' tumor, a type of kidney cancer found in early childhood, has been reported in infants as young as 6½ months. It is the second most common abdominal malignant solid tumor occurring among children in the United States. The approximately 500 cases discovered annually comprise 20 percent of all cancers in young children. The peak incidence is at 3 or 4 years of age, and both sexes are affected equally. The presence of an enlarged abdomen, noticed either by a parent or by a physician during a routine physical examination, is usually the first symptom of this disease. Diagnosis is made by x-ray (intravenous pyelogram).

Prior to the development of pediatric surgical techniques, the disease invariably was fatal. Improved surgical techniques combined with radiation therapy and chemotherapy have resulted in a striking improvement in survival rates.

In 1969, the National Wilms' Tumor Study Group was established to study the long-term results of treatments for this disease. Three NCI Cooperative Clinical Study Groups combined efforts to establish the NWTSG: Cancer and Acute Leukemia Cooperative Group B, Children's Cancer Study Group, and the Southwest Oncology Group. Physicians associated with other institutions who were not members also cooperated in this undertaking.

Data from the NWTSG and other investigators indicate good results can be achieved even for advanced disease through use of chemotherapy combined with surgery and radiation. Chemotherapeutic agents that show promise are actinomycin D, vincristine, and adriamycin. The use of these drugs in various combinations has been most encouraging.

Chemotherapy combined with surgery and radiotherapy is curative in 80 to 90 percent of patients with Wilms' tumor, a previously fatal childhood cancer of the kidney.

Cleared by Dr. A. Levine, Pediatric Oncology, April 1978.

Hyperthermia

Hyperthermia, the use of heat to treat cancer, is still investigational. Scientists are trying to determine whether the technique may prove valuable, particularly in combination with other methods of therapy such as surgery, radiation, and chemotherapy.

Several approaches to the use of heat in treating cancer have been tried. One technique is total body hyperthermia in which the patient's entire body is heated to about 107 degrees for various lengths of time. Another method is to treat the tumor locally with radiowaves. In a third approach, circulation to the cancerous organ is isolated, and the organ is perfused with heated blood and drugs.

Clinical studies of hyperthermia are under way, including two at the National Cancer Institute, employing a combination of heat and chemotherapy. However, it is still too early in the investigations to be able to tell how effective this form of treatment may be.

We hope this information is helpful. Please let us know if we can be of further assistance.

Approved by Dr. Joan Bull, Div. of Cancer Treatment, 1/21/80.

NCI CONTRACT AWARDS

Title: Cell-mediated immunity to rodent tumors
Contractor: Litton Bionetics, $218,962.

Title: Breast Cancer Detection Demonstration Project, one-year contract modification
Contractor: Duke Univ., $175,452.

Title: Study on the value of mammography, continuation
Contractor: Health Insurance Plan of Greater New York, $314,657.

Title: Programming and data entry services in support of the NCI contracts management system

Contractor: Sigma Data Services, $375,790.

NEW PUBLICATIONS

"Evaluation of the Carcinogenic Risk of Chemicals to Humans," first 20 volumes of IARC monographs, evaluations of 442 chemicals. Write for list of titles and prices to WHO Publications Center, 49 Sheridan Ave., Albany, N.Y. 12210, or the Franklin Institute Press, Philadelphia 19103.

"Aspects of Cancer Research, 1971-78," *Journal of the National Cancer Institute* monograph No. 52. $13 U.S., Canada, Mexico. Add 25% for overseas mailing. GPO Stock No. 017-042-00140-4.

"Second Symposium on Epidemiology and Cancer Registries in the Pacific Basin," *JNCI* monograph No. 53. $7.50 U.S., Canada, Mexico. GPO Stock No. 017-042-00142-1. Send orders to Supt. of Documents U.S. Government Printing Office, Washington D.C. 20402. Include title and stock number, make check or money order payable to Supt. of Documents. Payment required in advance. Do not send orders to NCI or ***The Cancer Letter.***

RFPs AVAILABLE

Requests for proposal described here pertain to contracts planned for award by the National Cancer Institute, unless otherwise noted. Write to the Contracting Officer, or Contract Specialist for copies of the RFP, citing the RFP number. Some listings will show the phone number of the Contract Specialist, who will respond to questions. Listings identify the respective sections of the Research Contracts Branch which are issuing the RFPs. Address requests to the contract officer or specialist named, NCI Research Contracts Branch, the appropriate section, as follows:
Biology & Diagnosis Section and Biological Carcinogenesis & Field Studies Section—Landow Building, Bethesda, Md. 20205; Control & Rehabilitation Section, Chemical & Physical Carcinogenesis Section, Treatment Section, Office of the Director Section—Blair Building, Silver Spring, Md. 20910. Deadline date shown for each listing is the final day for receipt of the completed proposal unless otherwise indicated.

RFP NCI-CP-FS-01025-77

Title: *Biomedical computing software services in support of the clinical and diagnostic trials program*

Deadline: *April 25*

NCI is seeking a contractor to provide computer-related support services to the Clinical & Diagnostic Trials Section, Biometry Branch, Field Studies & Statistics Program.

Prospective contractors must have experience and expertise in all phases of software services in support of biomedical research activities. This support includes the analysis of large sets of medical data often involving complex statistical analysis, and requires the contractor to use sophisticated data handling and analytic techniques. The support required is eight person years broken down as follows: Two person years of project management, four person years of programmer/analysts, and two person years of general datatech services. The contractor must have or be willing to establish, at the time of submission of a proposal, permanently established offices within 35 miles of the National Institutes of Health off-campus Landow Bldg., 7910 Woodmont Ave., Bethesda, Md. 20205, in which the Clinical & Diagnostic Trials Section is located.

In accordance with Section 15 of the Small Business Act, it is hereby determined that 100 percent of this procurement will be a Small Business Set Aside. In order to qualify as a small business for this procurement, responders must have gross earnings of $12 million or less over the last three years (average $4 million annually).

Contract Specialist: Patrick Williams
Biological Carcinogenesis & Field Studies
301-496-1781

RFP NCI-CM-07327

Title: *Application of the human tumor stem cell cloning assay to drug screening*

Deadline: *Approximately May 15*

The Drug Evaluation Branch of the Developmental Therapeutics Program, Div. of Cancer Treatment, NCI, is seeking contractors with the expertise to conduct in vitro screening program for drugs with anti-cancer activity. The objective will be to adapt and use the human tumor stem cell cloning assay for drug screening.

The basic assay, which consists of a two-layer soft agar colony system which supports the growth of human tumor stem cells, has been previously described (Hamburger, A.W. and Salmon, S.E., *Science* 197: 461-463, 1977; and Hamburger, A.W. and Salmon, S.E., *J. Clin. Invest.* 60: 846-854, 1977).

Multiple awards are expected. A three year period of performance is projected with the following staff years of effort per contract: 5.0 for the first year, 4.5 for the second year, and 4.0 for the third year.

Contracting Officer: John Palmieri
Cancer Treatment
301-427-8737

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