Oncology in Medicine

The editor interviews B. J. Kennedy, M.D.,
Professor of Medicine and Director,
Section of Oncology, and Masonic Professor
of Oncology, University of Minnesota Medical
School, Minneapolis, Minnesota.

**Dr. Grant:** Dr. Kennedy, you have been interested in the development of medical oncology and you call yourself a medical oncologist. What is medical oncology? Why and how has it developed?

**Dr. Kennedy:** Medical Oncology as a subspecialty of internal medicine has emerged during the past 20 years. It involves the study of the prevention of cancer, its detection, definitive and palliative treatments and care of the patient dying from cancer.

**Dr. Grant:** What has happened in the past 20 years that made it necessary to develop this new subspecialty of internal medicine?

**Dr. Kennedy:** The new hormonal and chemotherapeutic agents and the immunotherapeutic aspects of cancer have made the clinicopharmacological skills of the internist, with his biochemical and physiological knowledge, a necessity in the diagnostic evaluation and aggressive and definitive treatments of the patient with cancer. The systemic reactions and side effects of cytotoxic and antimetabolic agents and the myriad medical complications common to patients with cancer require the internist's range of knowledge and skills.

**Dr. Grant:** No doubt the bizarre paraendocrine syndromes of some neoplasms and the ablative therapeutic procedures used in the treatment of cancer are of great interest to internists.

**Dr. Kennedy:** Almost every aspect of cancer can be of great interest to the internist. The care of the patient with cancer is the practice of internal medicine with the common denominator being the presence of cancer.

**Dr. Grant:** What special training does the internist need to qualify as a medical oncologist?
Dr. Kennedy: A well trained internist with additional training in cancer should have a broad knowledge of and basic interest in molecular biology, mechanisms of cell kinetics, biochemistry of tissue growth, epidemiology, detection and the natural history of cancer. In addition, he must know the worth, indications and applications of definitive therapies of surgery and radiation therapy. He himself is an expert in the pharmacology of chemotherapeutic drugs, the use of radioactive isotopes, the methods of chemical and hormonal treatments and the techniques of supportive care of the far advanced and dying cancer patient.

Dr. Grant: Where will the medical oncologist find a place in medical practice?

Dr. Kennedy: The medical oncologist may serve as a teacher, clinician and investigator in an academic institution, or he may treat patients with cancer in the community and serve as a consultant to the family physician and other specialists.

Dr. Grant: Why is there a need for this subspecialty? Couldn't any of the preexisting subspecialties provide the necessary skills and knowledge to meet the problem?

Dr. Kennedy: Let's take the treatment of metastatic breast cancer as an example. It involves extensive hormonal therapies and the endocrinologist could expertly handle this aspect of the disease, but he has little knowledge of cancer biology, cell kinetics, mechanisms of action of cancer chemotherapeutic agents and a limited concept of how or when to employ cytotoxic agents which would be required at certain phases in the management of breast cancer. The same applies for the other subspecialties of internal medicine such as gastroenterology, hematology and neurology.

Dr. Grant: Does medical oncology invade the "territorial rights" of these other subspecialties? For example, the hematologist has a major interest in hematologic neoplasms, so shouldn't he bear primary responsibility for the diagnosis and management of these neoplasms?

Dr. Kennedy: If the hematologist has not participated in the progress of cancer chemotherapy and other methods of controlling cancer, he lacks the qualifications and competence of the medical oncologist to meet the needs of cancer patients, including those with leukemia, lymphoma and multiple myeloma.

Dr. Grant: Apparently you are not speaking of a so-called cancer chemotherapist when you refer to a medical oncologist.

Dr. Kennedy: By no means are they the same. The cancer chemotherapist might be a surgeon or a radiotherapist or some other specialist. This is not a specialty, but an indication of a special interest.

Dr. Grant: There are many surgeons and some radiotherapists who have adopted major programs of cancer chemotherapy in this country. Do you believe that medical oncologists should take these over?

Dr. Kennedy: Eventually, when there are enough well trained medical oncologists, there would seem to be little need for other specialties to be
intensively involved in cancer chemotherapy. Because of his training and orientation to pharmacology and interest in the systemic manifestations of drugs and other forms of treatment for cancer, the internist is the most logical person to carry out the cancer chemotherapy program.

**Dr. Grant:** Are there enough medical oncologists at this time to meet all the needs?

**Dr. Kennedy:** There is a marked shortage of trained medical oncologists.

**Dr. Grant:** Why?

**Dr. Kennedy:** For many reasons, one of which is that Departments of Medicine failed to recognize the need to establish training programs as the rapid developments of new therapies evolved. Another is the fact that medical advances resulted in the gradual moving of many patients once housed in homes for the incurable to community hospitals or other institutions for active therapy. There is an increasing number of patients with cancer who need the services of medical oncologists. For example, in some major teaching hospitals the medical service may have 40 percent of its beds occupied by patients with cancer.

**Dr. Grant:** How many medical oncologists are necessary?

**Dr. Kennedy:** I have no exact total number in mind, but, relatively speaking, one can say that in communities without major cancer institutions or teaching hospitals, the need for oncologists in internal medicine can be estimated to be about one to every six internists.

**Dr. Grant:** Is medical oncology a recognized subspecialty of the American Board of Internal Medicine?

**Dr. Kennedy:** Not yet, but I anticipate that it will be in the not too distant future. I believe medical oncology should constitute one of the certified subspecialties of the American Board of Internal Medicine, comparable to other subspecialties such as cardiovascular disease, gastroenterology, pulmonary disease and allergy and clinical immunology.

**Dr. Grant:** As a medical oncologist, how do you cooperate with the surgeon or radiotherapist who has played such a dominant role in the past in the management of cancer problems?

**Dr. Kennedy:** The qualified surgeon and radiotherapist have recognized the contributions of the medical oncologist and welcome working with him. The added new techniques of medical management provide improved care of the patient with cancer. These three specialties all need each other.

**Dr. Grant:** You all are in a way sisters under the skin in that the person suffering from cancer is your common interest. The more each of you knows about the disease and the patient, the better you will manage his case.

**Dr. Kennedy:** The surgeon, radiotherapist and medical oncologist are all primarily interested in the well-being of the patient with cancer. All of us have a contribution to make in his care.

**Dr. Grant:** Thank you, Dr. Kennedy.