Editorial...

CLINICAL RESEARCH IN THE COMMUNITY

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The increased number of physicians specializing in medical oncology has resulted in a migration of physicians treating oncology patients from academic institutions into community based practices. It is estimated that greater than 80% of cancer patients are now treated by community based oncologists. This has resulted in a decrease in the number of patients being treated in academic institutions and comprehensive cancer centers and has necessitated a change in the way clinical cancer research is conducted in this country.

The National Cancer Institute, cooperative groups, academic institutions, and comprehensive cancer treatment facilities have begun to encourage community oncologists to participate in clinical trials through programs such as the Community Clinical Oncology Program (CCOP), Cooperative Group Outreach Program (CGOP), and the Community Hospital Oncology Program (CHOP).

Should community oncologists' role in clinical cancer research be limited to participation in clinical trials originated by cooperative groups and large medical facilities or should they also be encouraged to develop and conduct clinical trials within their own practice?

The randomized clinical trial has become the gold standard of "good" cancer research, and single arm studies have been viewed with growing skepticism. However, a randomized clinical trial is not necessary if the results achieved in a single arm study are clearly better than previously tried therapies. In fact, many researchers believe that randomized trials in uniformly fatal conditions are inappropriate. The results learned from small, non-randomized studies have greatly contributed to the management of many malignant diseases. DeVita and Serpick[1] reported on 30 patients with advanced Hodgkin's disease treated with MOPP combination chemotherapy in 1967. Their updated report published in 1970 included an additional 13 patients, and their 81% complete response rate was clearly superior to previously tested single agent and combination chemotherapy.[2]

In 1969, Cooper reported on 60 women with far advanced, hormone resistant breast cancer treated with the five drug combination, CMFVP.[3] The 88% complete response rate and 10 month median duration of survival reported in this trial exceeded previously published reports. Following publication of this abstract, CMFVP became the "standard" to which all subsequent single agents and drug combination have been compared.

More recently, Einhorn and Donohue[4] impacted the treatment of disseminated testicular carcinoma by their report of the effectiveness of cis-platinum, vinblastine, and bleomycin. Their 74% complete response rate in 50 patients was markedly better than the 10 - 20% complete response rate reported utilizing other drug combinations.

These three prospective, non-randomized studies were designed and conducted at a time when standard therapy for these three malignancies produced a complete response in 30% or fewer of treated patients. The results achieved in these three studies were so clearly superior that the combinations were quickly incorporated into the armamentarium of the medical oncologist without the necessity of a large, randomized clinical trial.

Community oncologists see many patients who are desirous of treatment but have malignancies for which standard therapy is poor. Patients with unresectable non-small cell lung carcinoma, advanced renal cell carcinoma, and metastatic colorectal cancer are examples. Standard therapy for these diseases produce very few objective responses and virtually no long-term survivors and, therefore, are appropriate for clinical trials utilizing new combinations of chemotherapeutic agents.

Community initiated research allows the oncologist to develop protocols that fill a void in his or her practice. Development of original protocols at the community level for the treatment of these types of malignancies potentially benefit the patient, the physician, and the field of clinical oncology. The patient may experience a beneficial response and an increased duration of survival, the physician's interest and enthusiasm for treating "routine" oncology patients is enhanced, and important information about efficacy, toxicity, and patient compliance could be learned from the study. Studies designed at the community level may be more cost effective because small studies conducted within one institution involve less overhead. The cost to the patient and third-party payers may also be lower since only tests necessary to determine toxicity and response are included in the protocol design.

All clinical researchers must be careful not to design research projects that are doomed to produce negative or uninterpretable results, and this is especially important for the community based investigator. A careful analysis of the number of patients needed to answer the objectives of the study must be conducted, and projected accrual must be at a rate that the study can be completed within a reasonable time. The study must be prospective, and the data collected must be accurate and complete. Analysis of the data must utilize appropriate statistical tests, and the conclusions drawn must be objective.

Continued participation by community oncologists in cooperative protocols is also necessary. Many questions remaining in clinical oncology will require large numbers of patients to answer them, and questions about rare malignancies can only be quickly answered by cooperative efforts. Additionally, participation in large cooperative endeavors serve an educational role in the areas of protocol design, data collection, statistics, and the important area of institutional review and informed consent.