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GUEST EDITORIAL

Multidisciplinary Cancer Clinics: Their Time Has Come

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Advances in the evaluation and treatment options for patients with a malignancy are increasing at an ever faster pace. Today's clinician is faced with a variety of methods to image tumors, biopsy masses, and stage cancers. Even more complex can be deciding upon the choice of treatment. Neoadjuvant therapy, regional therapy, organ preservation, limb salvage, tissue reconstruction, postoperative adjuvant chemotherapy, biotherapy, and radiation therapy represent examples of multimodal approaches to cancer care. Unlike what existed 10 years ago, there is an increasing array of multimodal therapies to offer the individual cancer patient. Not only is this obvious to the clinician, it is also apparent to patients. With the availability of the Internet, patients have access to enormous amounts of medical information. Most of the time, they do not have the necessary background to evaluate this information, which makes them confused and more inquisitive. This increasingly sophisticated patient population has higher expectations from the medical establishment and is attracted to multidisciplinary clinics to seek information and care.

What constitutes a multidisciplinary clinic varies from place to place. At our institution, we envision a multidisciplinary cancer clinic as providing ''one-stop shopping'' for the patient. In other words, patients come to one outpatient clinic and are seen by the appropriate caregivers from the various disciplines in the same clinic on the same day. Patients are not shuffled from one clinic to another in order to get input from the various disciplines. The focus of these ''intake'' clinics is to evaluate the newly diagnosed cancer patient or individual with a lesion highly suspicious for malignancy. The subsequent follow-up of these patients after treatment recommendations are made is conducted in clinics associated with the individual disciplines involved with the care of the patient. We have established several multidisciplinary clinics at our institution, which are either disease- or organ-specific. Examples of disease-specific clinics include our Multidisciplinary Melanoma and Lymphoma clinics. Examples of organ-specific clinics include the Head and Neck Oncology Clinic and the Breast Care Center (BCC). The latter involves a clinic to evaluate undiagnosed breast problems as well as newly diagnosed breast cancers.

There are certain organizational elements which are critical to the success of a multidisciplinary clinic. These include a physician-director, nurse coordinator, administrator, support staff, members from the clinical disciplines including pathology and radiology, and a tumor board. The ability to have a tumor board convene on the same day of the clinic visit provides timely feedback of information to the patient. Alternatively, if patient evaluations require more detailed review by pathologists or radiologists, a tumor board can be convened on an alternate day and the recommendations subsequently conveyed to the patient. Patient satisfaction associated with either multidisciplinary clinic format is high, as measured by growth in patient activity. In Figure 1, the number of new breast cancer patients seen in our BCC is graphically depicted and demonstrates a dramatic increase over time. We have found that our current constraint on seeing more patients was due to the limited number of caregivers available to staff the clinic. In 1992, there was a radio advertisement campaign that recruited a considerable influx of patients to this clinic, which overburdened the clinic staff and had to be discontinued. Figure 2 illustrates the increased patient activity observed in the Multidisciplinary Melanoma Clinic since its inception. This clinic represents one of the most active melanoma clinics in the United States.

An intuitive reason to develop multidisciplinary clin-

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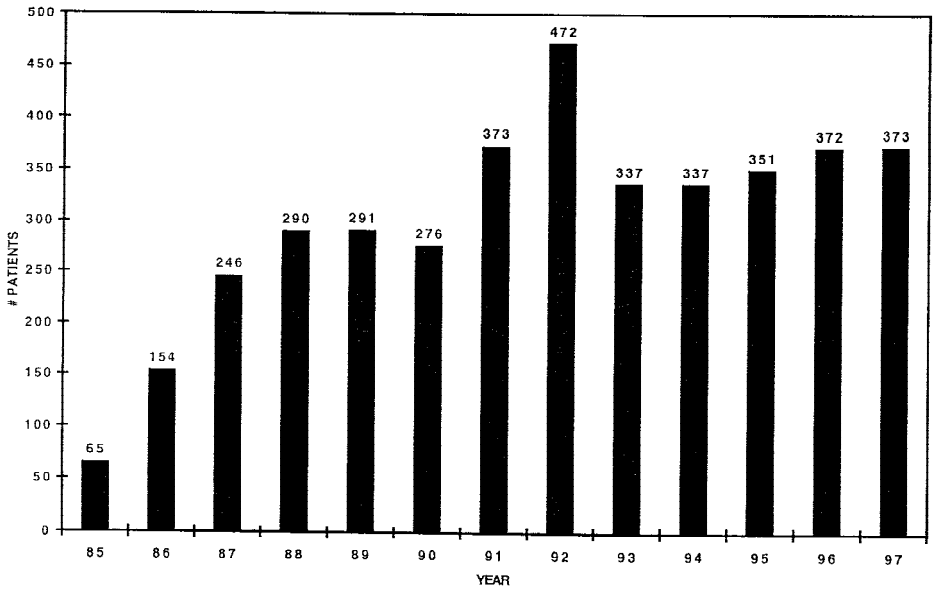

Fig. 1. Number of new breast cancer patients seen in the University of Michigan Breast Care Center per year.

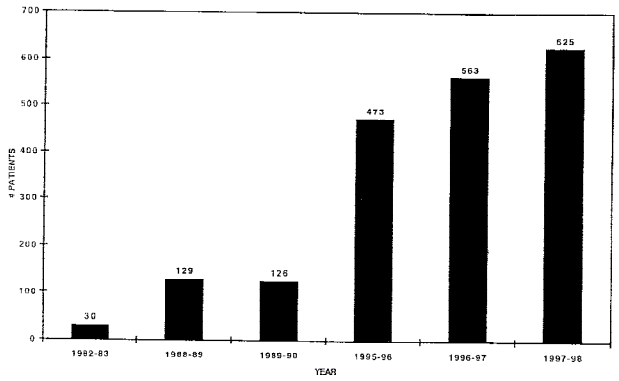

Fig. 2. Number of new melanoma patients seen in the University of Michigan Multidisciplinary Melanoma Clinic.

ics is to optimize the quality of care of the cancer patient. However, there are no studies which have documented that multidisciplinary clinics result in such improved care. Quality of care is difficult to define, and it has become increasingly apparent in this current medical economic environment that outcome measures related to quality of care of the cancer patient need to be identified and analyzed prospectively. An integral part of multidisciplinary clinics is the establishment of practice guidelines as a standardized approach to patient care. This ensures that all patients receive an appropriate work-up and treatment recommendations according to evidence-based, consensus-approved guidelines. An example of how this might improve quality of care is in the care of newly diagnosed patients with operable breast cancer. These patients are routinely seen by both the radiation therapist and the surgical oncologist to determine the feasibility of breast conservation therapy in our BCC. In the early 1990s, we found that approximately 52% of patients with operable breast cancer seen in the BCC were undergoing breast-sparing therapy [1]. This was markedly higher than comparable statistics for the state of Michigan during the same time period, during which approximately $\leqslant$42% of patients were being treated with breast-sparing therapy [2,3]. Although breast-sparing therapy will not alter survival outcome measures, it clearly has an impact on quality of life. Quality-of-life measures have become important factors to assess quality of care of the cancer patient. Again, multidisciplinary clinics should have a major impact in this area. As a team of health-care providers, the multidisciplinary clinic can offer patient education programs, psychosocial support programs, and rehabilitative services. These support programs should be an integral part of any multidisciplinary clinic and require input from nurses, social workers, physical therapists, and dietitians. We have found that the contribution of a psychiatrist as an integral member of the multidisciplinary team can significantly enhance the psychosocial support available to patients. It is the ability of the clinic to meet all of the demands of the newly diagnosed cancer patient which will add significant quality to their care. The comprehensive services a clinic can offer will be extremely attractive to the discerning patient.

Another major reason why multidisciplinary clinics are advantageous for clinic care is their cost effectiveness from the perspective of patients and third-party payers. Multidisciplinary clinics may not be an efficient use of the clinician's time since the time involved in having the patient interact with multiple disciplines will limit the

number of patients who can be seen per examination room per day. On the other hand, there has been a greater emphasis on designing health-care systems which are patient-oriented rather than physician-oriented. In this regard, the multidisciplinary clinic is focused upon the patient's needs and becomes enormously efficient from the patient's perspective, providing multiple consultations in a single visit. If a comprehensive clinic visit fee is charged to the patient, there is a significant reduction in cost for the individual compared to multiple, separate clinic fees. Moreover, by standardizing the evaluation of the patient by evidence-based, consensus-approved practice guidelines, the cost of care can be significantly reduced in a multidisciplinary setting. This was evident in an analysis of patients evaluated in our Multidisciplinary Melanoma Clinic, where a cost savings of $1,600 per patient was realized compared to a similar group treated in the Michigan community [4]. The majority of cost savings were related to a decreased usage of unnecessary health-care studies ordered in the community setting compared to the multidisciplinary clinic. This is a compelling reason why third-party payers should support patient care through these clinics.

Multidisciplinary disease-specific or organ-specific clinics are already a routine portal of entry for patients to academic cancer centers. They are also becoming more prevalent in the community setting, such as multidisciplinary clinics in breast care or breast cancer. Besides being timely and an effective method to evaluate newly diagnosed cancer patients, they are valuable referral sources for research protocols. For the private practitioner, these clinics serve an important role for second opinions as collaborative relationships can be established between the practitioner and the multidisciplinary clinic. The multidisciplinary clinic may offer diagnostic or research-related resources unavailable to the practitioner in the community. The successful multidisciplinary clinics are those which maintain a close interaction with the referring practitioner. Clearly, multidisciplinary cancer clinics have become an important mechanism in the delivery of care. Both patient demand and the medical economic environment will increase their usage in the future. Since surgery remains the primary mode of therapy for the majority of solid malignancies, surgeons need to take a prominent role in the leadership of these clinics.

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