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## CANCER CLINICS AND CANCER SERVICES IN GENERAL HOSPITALS<sup>1</sup>

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FOUR years ago the Board of Regents of the American College of Surgeons announced its approval of plans for the development of special cancer clinics and cancer services in general hospitals. This action was not taken by the Board of Regents without due consideration of the presumed advantages as well as of the possible disadvantages of such a segregation of cancer patients from the general medical and surgical services of hospitals. Time has not yet elapsed sufficient for final judgment as to the value of these special clinics, but it would seem to be appropriate at this time to review some of the opinions which have been expressed in regard to the advantages and disadvantages which may result from their organization, and to consider to what extent their operation during the past 4 years has justified this recommendation of the College.

The report of the Committee on the Treatment of Malignant Diseases which was accepted by the Board of Regents and published in October, 1930, emphasized the fact that cancer institutes in which both clinical service and research were carried on simultaneously required such large endowments for their support as to prevent their establishment in any considerable number of centers throughout the country. It was recognized, however, that such institutes formed the most effective method of providing treatment for cancer patients who could obtain their services.

Special cancer hospitals, with adequate charitable endowment or supported by the state, were acknowledged to be the next most effective method of providing cancer service. Such hospitals may be expected to provide diagnostic and therapeutic facilities of nearly as high a grade as that of the cancer institute. They lack, however, the generous endowment or other support required for the maintenance of laboratories and of the full-time research staff qualified in the several different branches of science which are required to carry on effective cancer research.

The American College of Surgeons is concerned especially with the quality of service which can be supplied to patients with cancer, and its recommendations were designed to improve this service. The vital necessity, however, for the continued laboratory investigation of cancer is acknowledged by surgeons as well as by all other physicians who have to deal with this disease.

The support of cancer research, therefore, both by persons of wealth, who may be able to devote endowments or contributions to this most important field of investigation, and by the use of public funds, should be urged by every member of the medical profession, as one of the most necessary fields for medical investigation. On account of the expense of construction and maintenance of cancer institutes and special cancer hospitals, the fact must be accepted that a sufficient number of such institutions cannot at present be provided to take care of any considerable proportion of the cancer patients in the country.

Special cancer clinics and cancer services in general hospitals were next considered, and because of the small expense involved in their maintenance and the fact that their organization permitted the same group method of approach to the individual cancer patient which has been the essential feature of the service given by the cancer institutes and special cancer hospitals, the development of such special clinics in general hospitals was strongly advocated. As a matter of fact, two forms of cancer clinics in hospitals were recognized: (1) the fully equipped treatment clinic and (2) diagnostic clinics without complete treatment facilities. Both forms of clinics, however, employ the group method of study of cases. It was hoped that diagnostic clinics would be inspired to obtain the necessary professional experience and the material equipment to develop into treatment clinics, and be enabled thereby to give full service. In some instances this development has occurred, and if it were not for the difficulty in securing sufficient funds for the necessary equipment under these conditions of depression, such developments would probably have been possible in many other cases.

The Minimum Standard for Cancer Clinics in General Hospitals which was established by the American College of Surgeons includes six paragraphs dealing respectively with the details of organization, conferences, patients, equipment, records and treatment. The details of these requirements need not be repeated here. They can be secured by anyone who is interested from the office of the College and are already familiar to many who are present.

The situation may be briefly summarized, however, as an attempt on the part of the College to

<sup>1</sup> Presidential Address, presented before the Convocation of the American College of Surgeons, Boston, October 19, 1934.

procure more efficient care for the cancer patient by establishing the following general principle: The patient's interests are best served when the representatives of the several branches of medical science concerned in the study and treatment of cancer, work together in a co-operative manner, instead of arrogating each to himself a limited field in which his own influence is paramount. That such a condition of individualism was almost universal a short time ago, is abundantly proved by the publication in medical literature of many articles dealing with the treatment of cancer by writers who displayed so prejudiced a view in favor of their own special methods as to indicate conclusively their ignorance of the accomplishments of other branches of science in this extensive field. In this narrow attitude the surgeons have been perhaps the chief offenders, but intolerance of the views of others is by no means confined to surgeons; it is a common human failing, but in this instance it may be overcome by the group method of co-operative study and discussion designed to provide for the cancer patient the most effective treatment which contemporaneous medical knowledge will permit.

The advantages to be secured by the establishment of cancer clinics in general hospitals may be listed as follows:

1. The patient receives more complete study and more efficient treatment.

2. More accurate and complete records are secured for subsequent analysis of end-results with a view to the increase of knowledge. The use of the standard abstract record forms of the College assures more accurate recording of data, and a uniform system of classification for cancer in all of its more important situations.

3. The follow-up of cancer cases after treatment is more systematic and contributes to the welfare of the patient as well as to the accumulation of more accurate knowledge.

4. Concentration of the cancer material of the hospital in the hands of a group provides greater experience for the individual members of the group and aids the development of their proficiency and productivity, with resulting benefit to the patient, to the hospital and to the community.

5. The conference meetings of the clinic staff provide opportunity for more adequate undergraduate and postgraduate instruction in the subject of cancer and its treatment, and the reference of patients to the clinic by physicians in private practice permits the extension of this educational influence widely throughout the community.

6. The special cancer clinic provides a convenient and inexpensive method for supplying expert consultation service to aid the general practitioner and his patients in securing the diagnosis of cancer in its early curable stage.

7. Without material extra expense, and by mere rearrangement of services in the hospital in such a way as to entrust the cancer work to those who are more interested in this subject than in other special branches of surgical activity and are qualified to assume these responsibilities, opportunity for more efficient service to the patient is secured.

In order to estimate the extent to which cancer clinics in general hospitals have demonstrated their hoped-for advantages in the brief period since they have been in operation, we must consider these seven items one by one.

1. The first item to be discussed, and the one which is, and always will be, the most important, is the question as to whether the cancer patient does in fact obtain better treatment in the cancer clinic than under the old regimen. It would be indeed surprising if the opportunity provided for more careful study of the cancer patient by the group did not result in more accurate diagnosis of the actual stage of the disease. Cancer in its many situations presents a number of different paths of dissemination and frequently different sites of predilection for metastasis can be recognized. Some of these peculiarities are characteristic of the histological type of tumor under consideration, and others are determined more by its anatomical situation. Thus the more experienced study of the group often discloses remote metastases which are positive contra-indications to the attempt at radical cure of the disease by surgery, and the patient is thereby protected from unnecessary operative measures which would be doomed to failure in any case.

The close association of the surgeon and of the radiotherapist in the cancer clinic permits them also to co-operate in providing more efficient palliative treatment in the advanced cancer case. The combination of radiation therapy and of surgical measures can frequently be effectively employed to bring about relief of distressing symptoms, and even to accomplish temporary "arrest" of the malignant process, with the result that the patient may live for a long period of relative comfort and even die *with*, but not *of*, cancer, as a result of some intercurrent disease.

The early diagnosis of cancer is promoted, first by the greater diagnostic experience of the special staff, and, second, by reason of the possibility of exploratory operations, which can be performed

with safety in many instances only under restricted conditions, with competent frozen section diagnosis available, and with the immediate completion of such radical operative or radiation treatment as may be indicated in the individual case.

Finally, only by consultation, such as is obtained between the surgeon, the radiotherapist and the pathologist in the clinic, can a wise decision be made in the many cases of cancer in which the choice between surgery and radiation treatment, or a combination of the two, is dependent not upon any general rule, but rather upon the conditions existing in the individual case.

Such considerations as have been mentioned are, however, still somewhat theoretical and the real test as to whether the cancer patient obtains more efficient care must be determined by the attitude of patients and of their medical advisers toward the services of the clinics. Everywhere the attendance at cancer clinics is on the increase. In some hospitals in which the reference of patients within the hospital is voluntary and not obligatory, the attendance at the cancer clinic has been steadily increasing year by year. There were 14 cancer clinics in the country in 1920 and they were chiefly in cancer institutes. In October, 1933, there were 158 approved by the College, and some 155 in course of organization or awaiting survey. Such a development must indicate that the belief is widely held that through the organization of a cancer clinic, the patient obtains more efficient treatment.

2. That the establishment of cancer clinics leads to the making of more accurate and complete records of cancer cases can hardly be denied. No one who has looked up hospital records of 10 years ago with the object of studying a group of cancer cases, but has discovered many individual records so lacking in the data now considered essential in the way of history, physical examination, pathology, and details of treatment as to be of no value whatever for classification or analysis. With the interest of the special group composing the clinic staff in preserving accurate and complete records, and with the aid of the standard abstract record forms prepared by the College, the records of cases in the cancer clinics have been greatly improved. The element of uniformity alone, obtained by the use of the standard abstract forms, is a material advantage, since a uniform method of recording and of classifying cases permits the collection of data on a much wider scale than heretofore, by the assembly of records from many different clinics, and makes possible a

justifiable comparison of the end-results of different forms of treatment which we have not had before.

3. Twenty-five years ago no hospitals anywhere had a systematic follow-up system of all their patients, and in only a few institutions in this country—and usually then only at the instigation of some interested member of the staff—was any effort made to maintain a continuous investigation of the long-time end-results of the treatment of cancer. Dr. E. A. Codman's crusade for the more general adoption of end-result studies in hospitals is well remembered by the older generation of surgeons today, and has borne fruit in the widespread development of follow-up clinics in general hospitals all over the country. In spite of the gradual adoption of these principles, however, the long time continuous follow-up of cancer patients has not even yet been universally adopted or vigorously carried on in general hospitals. Such a follow-up, however, is an essential feature of cancer clinic service. The advantages of such a continued interest are readily appreciated by the patient. Appointments for follow-up visits are seldom broken, and only rarely is it necessary to call upon the social service department for home visits and further investigation. The present knowledge of the end-results of the treatment of cancer on a minimum 5 year basis has already made possible the collection by the College of an enormous number of 5 year cures of cancer, a movement which has done much to dispel the pessimism of the public as well as that of the medical profession in regard to the possibilities of the successful treatment of this disease.

4. The concentration of the cancer material of the hospital in the care of a relatively small group gives opportunity for a much richer experience and increased opportunity to the individuals selected for the cancer clinic staff. It is not unreasonable, of course, and rather is it to be expected, that this special assignment of privileges to one group shall be compensated by similar assignments to other groups of other branches of special work, such as fractures, circulatory disease, or similar subjects of special surgical interest, as a *quid pro quo*. Such assignments may be only temporary and a certain amount of rotation of privileges of this sort is often advisable in the case of junior members of the staff.

The surgeon who receives an assignment to a special clinic, whether it be by the direction of the chief surgeon of the hospital or by the decision of an executive staff committee, should accept it as a privilege, which it becomes immediately his duty to justify. Such justification must be dem-

onstrated not only by the increased efficiency of service given to the patient, but by such study and investigation of the hospital clinical material, as will add to the professional reputation of the institution.

5. The essential feature of cancer clinic organization is the group attack upon the cancer problem. The group must include primarily one or more representatives of each of the three special branches of medicine which are most intimately concerned with the study and the treatment of cancer: surgery, pathology, and radiotherapy. Each of these different individuals brings to the group-study of the cancer patient special knowledge and experience which has been acquired only through a long period of study of these special lines of medical science.

Until the group study plan was inaugurated, prejudices and misunderstandings extending even to bitter accusations of violation of the ethical principles of medicine were not uncommon among the representatives of these different specialties concerned with the treatment of the cancer patient. It is extraordinary to observe the readiness with which such biased judgments disappear when free expression of opinion and experience can be secured in personal conference over the problem of the individual case.

Such conferences are first and foremost of advantage to the members of the group on account of their educational effect, but this educational advantage is by no means confined to the individuals participating in the discussion. It extends immediately to the junior attendants, internes, medical students and nurses, who are connected with the clinic, as well as to members of the general hospital staff and to physicians who desire to attend the conference as visitors, in order to keep in touch with progress in the diagnosis and treatment of cancer.

A further extension of the educational influence of the cancer clinic is the practice, prevalent in many clinics, of encouraging the physician who refers his patient for advice to come to the clinic with the patient and share in the group discussion of the case. When this is impossible a letter is usually written to the physician who sends his patient to the clinic giving the full details of diagnosis and of the treatment advised. Such measures not only extend the educational influence of the clinic, but they also procure the co-operation of the physician in the subsequent follow-up of the patient to the advantage of all concerned. In fact the educational advantages of cancer clinics are so readily appreciated as to be hardly open to discussion by anyone familiar with their operation.

A cancer clinic in a general hospital provides expert consultative service at a minimum expense to the medical profession of the community. The difficulties encountered in the diagnosis of cancer in its early and local stages are widely recognized. The general practitioner without the experience or the equipment to solve these problems is further handicapped in dealing with a doubtful case by the fact that he cannot afford to get the reputation of being an "alarmist"; neither does he wish to refer his patients unnecessarily for consultations involving loss of time and travel expenses as well as heavy consultation fees. For reasons such as these, he is tempted to delay. Unfortunately, this delay may be of vital significance in determining the success or failure of treatment in the individual case which actually proves to be cancer. When consultation involves merely a visit to the nearest general hospital with a minimum of expense and loss of time, this occasion for delay is done away with to the advantage of the patient and of his physician as well.

From the point of view of economy, there is no doubt that the cancer clinic in the general hospital has advantages that are not to be gainsaid. It provides within the limitations of the professional ability of the staff and of the equipment of the hospital, a service patterned on that of the major cancer hospitals and institutes. This is accomplished by the simple re-assignment of the services of the hospital staff and a corresponding classification and redistribution of its patients.

In the surgical staff of every hospital, there are some surgeons who are interested in one phase of surgery, and others in another. Such interests are recognized by every chief surgeon in the assignments he makes of the hospital material. The establishment of a cancer clinic is but a slight extension of this plan, involving the participation of the staffs of the surgical, the pathological and the radiotherapy departments, and of suitable representatives of other services, such as medicine, gynecology, genito-urinary surgery, otolaryngology and dermatology. The co-operation of the neurosurgeon, the orthopedic surgeon, and the dentist is also much to be desired. The only extra expense the hospital need consider is the provision of suitable space for examining rooms and for clerical and social service workers, and a convenient conference room. The salaries for clerical and social workers must, of course, be included. Most general hospitals are already equipped with all of the surgical instruments and apparatus required for the diagnosis and treatment of cancer, and many have excellent X-ray equipment for therapy as well as for diagnosis. In some hospitals radium

in sufficient quantity is already available for treatment. Where this is not the case, the greater expense of purchase of radium must be considered or the need may be met by arrangements with other institutions. When such facilities are already available in the hospital, the expense involved in the organization of a cancer clinic is thus a minor consideration.

The principal disadvantage which has been claimed to result from the organization of a cancer clinic in a general hospital, is that the segregation of the cancer cases and their removal from the general medical and surgical services diminishes the interest and the experience of physicians and surgeons on these services and tends to restrict the treatment of cancer to a limited group of specialists. This disadvantage must be admitted, in regard to cancer, as it is admitted also in regard to orthopedic surgery, genito-urinary surgery, gynecology, neurosurgery, and a number of other special branches of surgery and of medicine which have developed and flourished as a result of the rapid advance of medical science and the virtual impossibility for any single human mind to acquire and retain in serviceable form the amount of knowledge which has resulted from the medical progress of the past 50 years. The day when one surgeon or one physician could make himself master of all of the information needed to deal efficiently with every variety of disease which may present itself, has long since passed; and specialization is the answer to this condition. It is through specialization indeed, that many of these same advances in medicine and surgery have been brought about. Specialization is the price we of this generation are obliged to pay for the benefits we have obtained from the progress of medical science in the past 50 years. Not only must we believe that specialization has come to stay, but we must recognize that its further development is imminent. Even in this special subject of cancer further limitations of the general field are already evident in the subdivisions of interest and of experience on the part of the individuals who are united in the cancer clinic staff. The special interests and the special qualifications which determine these subdivisions of the work of the cancer clinic are to the positive advantage of the patient as well as of the staff. It is a form of voluntary division of labor which yields most

desirable results. Such division of the work of the clinic may be only temporary and elastic and rarely need be extended beyond the hospital, but an established reputation along some special line inevitably brings the demand for consultation service from professional colleagues. This subdivision of the work of a cancer clinic is further an economy of time. In clinics which are open every day, one day of the week may be devoted to one group of cases and the next day to another, to the obvious advantage of conservation of the time and energy of the staff and the avoidance of undue delay on the part of the patient.

Another objection which has been raised against the organization of these special clinics is that the term "cancer" creates apprehension and sometimes despair on the part of some of the patients who may be advised to come to the clinic for consultation. This feeling is so strong in certain communities that the alternative term of "tumor clinic" has been employed as an euphemism, although the clinic carries on exactly the same functions under either name. As a matter of fact the progress of public education has already brought about a change of attitude on the part of the public toward the term cancer. The subject is discussed more freely and with far less apprehension than was the case 20 or 30 years ago, and this supposed disadvantage will probably disappear entirely in a few years more. If not, the use of the term "tumor clinic" is an easy remedy.

In conclusion, we may say that the suggested disadvantage involved in the organization of cancer clinics in general hospitals—that it tends to make the treatment of cancer a specialty—must be admitted. It does; and it does so intentionally, but it is a group specialty, not an individual one. There is abundant evidence that under the group method of study and of treatment, the patient, the physician in general practice, the surgeons of the country, and the community itself believe that the cancer patient receives more efficient treatment. We may conclude, therefore, that there is no occasion at this time to alter the policy of the American College of Surgeons of advocating the organization of cancer clinics in general hospitals. Rather should this policy be re-affirmed, and efforts be made to aid these clinics in every way to provide still more efficient service to the cancer patients seeking their help in the years to come.