Questions and Answers on Breast Cancer

The presentations by participants in the Second National Conference on Breast Cancer held in Los Angeles on May 17, 18 and 19, 1971 included a question and answer period. Because time did not allow all questions to be answered during the conference, the unanswered questions were forwarded to the participants. Their answers are published below.*

Questions addressed to
J. Englebert Dunphy, M.D.,
University of California, School of Medicine, San Francisco, California.

How do you define the "average early case" that is suitable for modified radical?

Dr. Dunphy
The criteria for a modified radical versus a standard radical are essentially the same except for local extension of tumor. If there is fixation of the tumor mass of the pectoral fascia a standard radical with excision of the muscle would be necessary.

In my own experience, dissection of the axilla can be just as complete with a modified radical as with the standard radical. It has been our practice that if this is not the case and there are some unusual anatomical difficulties, one should not hesitate to divide the muscle at its attachment to the chest wall and then resuture it, or if necessary, convert the operation to a standard radical with excision of the pectoral muscle.

Do you routinely get frozen sections of the axillary nodes when performing the modified radical? If positive nodes are found, do you then move to radical mastectomy or postoperative irradiation?

Dr. Dunphy
We do not routinely get frozen sections of the axillary nodes when performing the modified radical since we believe that the axillary dissection is in every sense comparable to that of a standard radical. If this is not the case the muscles should be sacrificed but I have not found this necessary.

We do not use postoperative radiation after either radical or modified radical mastectomy. The evidence for the benefit of postoperative irradiation is so equivocal that we believe it preferable to withhold irradiation with the possible exception of patients in whom the lesion is directly in the central portion of the inner quadrant of the breast and nodes are also found in the axilla.

Questions addressed to
Clayton H. Crosby, M.D.,
University Hospital, Saskatoon, Saskatchewan, Canada:
What is the risk of pregnancy contributing to metastatic disease or development of carcinoma of the opposite breast in a patient who has had a radical mastectomy for carcinoma?

*This is the third part of a series of questions and answers. The final section will appear in the July/August issue of Ca—A Cancer Journal for Clinicians.
Dr. Crosby

If you are reasonably sure the first operation has cured the patient or if the first cancer was Stage I, subsequent pregnancy does not adversely affect the prognosis. If the original breast cancer was Stage II, many authorities advocate waiting five years before risking subsequent pregnancies. This is based on sociological as well as medical reasons. Pregnant patients show an increased risk of bilateral breast cancer because of their age group and perhaps because of special biological and endocrine factors. Therefore, subsequent pregnancy does increase the risk of bilateral disease. In our series, this risk was nearly 7 percent as against 4.5 percent for the general female population. Does radical mastectomy offer anything to a patient with cancer of the breast other than Stage I in pregnancy or lactation?

Dr. Crosby

Some authorities, including Haagen-sen, suggest that radical mastectomy offers hope of cure to only those pregnant patients with Stage I disease. However, our figures do not support this view, in that six of 11 five-year survivors and five of nine 10-year survivors had Stage II disease.

Question addressed to

Robert G. Ravdin, M.D.,
University of Pennsylvania,
School of Medicine,
Philadelphia, Pennsylvania:

Please comment on the treatment of advanced cancer of the breast with combined hyperalimentation and chemotherapy.

Dr. Ravdin

There is a demonstrably practical, if limited, role for hyperalimentation in conjunction with chemotherapy. This is in patients in whom a chemotherapeutic trial extending over perhaps three weeks cannot be conducted because of tumor involvement of the gastrointestinal tract. This is substantially more likely in tumors of the gut than in tumors of the breast, but it can occur, and in this situation the ability to sustain a patient long enough to complete a trial course with an agent offering a reasonable expectation of success is clearly desirable.

Although adequate nutrition may well offer a margin of safety when various toxic agents, particularly antimetabolites, are employed, there is at present nothing to suggest that nutrition enhances the antitumor effects of these agents. There are experimental situations in which an increase in nutrition will encourage the growth of tumors more than that of the host. In circumstances where the chemotherapeutic agents do not prove effective, hyperalimentation might be a disadvantage. This matter warrants more investigation.

Questions addressed to

William L. Caldwell, M.D.,
Vanderbilt University, School of Medicine, Nashville, Tennessee:

How long do you wait after biopsy to start preoperative radiation, and specifically what areas do you treat?

Dr. Caldwell

Preoperative irradiation can be commenced immediately after biopsy confirms the presence of carcinoma. The areas treated are individualized, but ordinarily include the entire involved breast, the ipsilateral axilla and supraclavicular area, as well as the internal mammary chains. Five thousand rads in five to five and a half weeks with four to five treatments per week is undoubtedly an adequate dose. At this level of irradiation it is usually necessary to wait approximately four to six weeks before resection is attempted.
Should preoperative radiation therapy be restricted to patients with Grade III malignancy?

Dr. Caldwell
Preoperative irradiation is potentially beneficial for patients with locally advanced disease of the breast. It is primarily given to reduce the likelihood of local recurrence following resection and also to perhaps reduce the likelihood of dissemination at the time of resection. Patients with Grade III malignancy are more likely to have locally advanced disease than lesser grade tumors. At present, however, I believe the utilization of preoperative irradiation should be related to Stage rather than Grade.

Questions addressed to
A. Raventos, M.D.,
University of California, School of Medicine, Davis, California:
In view of your lack of positive feeling about the advantages of postoperative irradiation will you please comment on the point of view that irradiation depresses the patient’s lymphocyte count and her resistance to the tumor.

Dr. Raventos
The suggestion that local irradiation depresses host resistance to tumor, through an effect on lymphocytes or any other mechanisms, is at best a speculative one. On the other hand, there is good evidence, in the reduction of local recurrences, that irradiation sterilizes some residual foci of tumor cells after surgery. If this produces any benefit in terms of survival, it is too small to be demonstrated in clinical trials done to date. Nevertheless, it may be a real benefit—life-saving for a few percent of women. When a physician feels forced to speculate in the choice of treatment, lacking the possibility of absolute knowledge of the best choice, I feel that the hypotheses favoring postoperative irradiation are more reasonable than those opposing it.

Whether or not local recurrence is always associated with development of distant metastases; don’t you consider it so distressing that its prevention by X-ray therapy is worthwhile even if the effect on survival is negligible?

Dr. Raventos
Yes, in most cases. I would exclude those with very favorable tumors, where the probability of recurrence is quite low, and certain others on an individual basis.

Question addressed to
Bernard Fisher, M.D.,
University of Pittsburgh, School of Medicine, Pittsburgh, Pennsylvania:
Is five years a long enough time to truly evaluate the results of any form of treatment of the breast?

Dr. Fisher
This is a frequently asked question, particularly by those who wish to minimize the value of findings which do not particularly coincide with their own opinions and convictions. It is well known that treatment failure (evidence of local or regional recurrence, or distant metastases) rates do continue to increase and survival rates diminish after 5, 10 and 15 years. Consequently, insofar as an individual patient is concerned, it is impossible to absolutely guarantee that she is cured no matter how long a time has elapsed following her treatment. Information is available, however, which can indicate expected rates of recurrence and survival in a group of similar patients year by year following their operations. It has been established that 55 percent of a large number of patients who have more than four positive axillary nodes will have evidence of treatment failure by 18 months, 72 percent by 36 months and 81 percent by five
years. Information about the life history of such a group of patients makes it possible to judge the relative efficacy of a therapeutic agent. If, for example, such a group were to receive chemotherapy in addition to radical mastectomy and, 18 months later the treatment failure rates were only 35 percent and 50 percent at three years, and statistical analysis indicated that the difference between this group and those not given chemotherapy, was significant, then it would not be necessary to refrain from treating all such patients until the 15 or 20 year results are in. The possibility, of course, remains that even though treatment failure rates have been depressed for the first three or four years, they might precipitously increase so that by five or even 10 years, results might be the same or poorer than for patients not given chemotherapy. Even though this becomes increasingly unlikely as time passes, continued follow-up is still necessary to preclude such a possibility.

In summary, intelligent analysis of carefully collected data, as in perspective clinical trials, can provide important information regarding the efficacy of a therapy in a relatively short period of time, even in less than five years following surgery. The notion that only after 10, 15 or 20 years can we be certain about a therapeutic measure in the treatment of breast cancer is, in my opinion, a deterrent to future progress in the management of this disease.

Question addressed to William M. Markel, M.D., American Cancer Society, New York, New York:

Do you teach the American Cancer Society Reach to Recovery Volunteer all about the surgical management of breast cancer, radiation therapy and other medical matters so that she can convey data to the patients she visits?

Dr. Markel

No. Although the Reach to Recovery Volunteer may demonstrate some exercises, her main concern is with the psychological and social rehabilitation of the patient and all questions of a medical nature are referred back to the patient's physician.