THE IMPORTANCE OF LYMPH NODE EVALUATION IN WOMEN WITH BREAST CANCER

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It is well known that women whose breast cancer has spread or metastasized to regional lymph nodes such as those under the arm pit (called axilla) have a worse survival than those who have no spread.

In past days it was felt that larger surgeries could give better results for women with breast carcinoma. Currently, it is known that super-radical, radical or modified radical mastectomies offer similar results. In fact, the trend currently is moving away from mastectomies altogether to leave the woman with her breast intact preferring the use of adjuvant or additional radiation therapy to make up for the surgical absence.

The purpose of lumpectomy/radiation is to maintain the cosmetic integrity of the women and ultimately creating a better psychological outcome. The researchers led by Jatoi in a study published in the JCO evaluated the importance of lymph node metastases in women with breast cancer. The presence of axillary lymph nodes does not dictate the need for more radical surgery approach.

Researchers attempted to correlate lymph node status at the time of diagnosis with outcome after relapse. Meaning if the cancer is diagnosed, treated and recurs what happens to the women who had lymph node negative cancer compared to those who had lymph node positive cancer at the time of re-occurrence of the cancer.

Of course, this excludes many women who are diagnosed with breast carcinoma and who never see their breast cancer again. Technology using radiation, surgery and chemotherapy is minimizing recurrence rate.

Nevertheless there is a group with recurrence. The question is whether women who had lymph node positive cancer at the time of diagnosis indeed have a different cancer nature at the time relapse compared to women with lymph node negative breast carcinoma.

Is it there is a difference in the bias towards the diagnosis of the cancer or is the difference due to the cancer itself?

Patients were analyzed from a data base from those undergoing hormonal receptor status at the University of Texas. Patients had been diagnosed between 1970 and 1991 with breast cancer. They had been treated with either radical, modified radical or lumpectomy and radiation - approaches initially for cancer.

2,156 patients had relapsed either locally, distantly or both. Omitted were 132 patients whose cancer recurred less than 6 months after initial diagnosis. Another 72 patients were omitted who had no follow-up. Survival was judged from the time of relapse to last contact or death. As of June 1988 there were 1207 deaths with a median follow-up after relapse of 2.3 years.

Thirty five patients were alive more than ten years after relapse. Seventy-one percent of women were post-menopausal with 73% having estrogen receptor positive cancers. Estrogen receptors are protein on the cancer's surface that tends to predict prognosis. Presence of these proteins is favorable.

Seventy percent of patients had cancer more than 2 centimeters in size (about 4/5 of an inch). The majority was lymph node positive - 63%. Disease-free interval was 2.2 years. 68% of relapse included distant sites of cancer. Most patients had been diagnosed before 1984 and did not

receive chemotherapy. 62% did not receive chemotherapy and 69% did not receive hormonal therapy. Two year survival after relapse was 51%.

What were significant determinations of prognosis after relapse? Included were sites of relapse, number of axillary lymph nodes and hormonal receptor status.

The likelihood of death after relapse doubled in women who had distant relapse compared to local relapse. Women with four or more lymph nodes and relapsed had nearly twice the death rate compared to lymph node negative women at the time of initial diagnosis.

When the cancer was estrogen receptor positive and progesterone receptor positive, there was half the risk of death compared to estrogen receptor negative cancers. Factors that were not important included primary breast cancer size, menopause state, whether chemotherapy or radiation was administered.

It is well-known that the likelihood of lymph node involvement increases as primary cancer size increases. But this study suggested lymph node status has importance even at time of relapse. This suggests that it is not a delay in diagnosis but rather the cancer is different, that is, more aggressive.

The authors believe that viewing lymph node metastases are related to time as, "too simplistic". Is it that nodal metastases are just a sign of aggression?

Furthermore, they conclude that, "nodal metastases may indicate a highly malignant tumor or serve as a marker of host response. Indeed, one might speculate that a weakened host response results in early metastases to the axillary lymph nodes and poor prognosis. Further studies may clarify these issues and provide important insight into cancer growth and control."

Today, more aggressive treatment is delivered to those with more aggressive cancer. Results show favorable benefit in this regard.