Tamoxifen Therapy for Estrogen Receptor Negative Breast Cancer

Dear OncoLink "Ask the Experts,"

I am a medical student with a parent who is currently undergoing treatment for breast cancer. I understand that tamoxifen is used for breast cancers and is highly effective in preventing recurrence. However, what is the situation when a breast cancer is weakly estrogen receptor positive? What is the action of a hormonal medication when a cancer is not receptive to the hormone? After much debate about the need for chemotherapy (only one lymph node of sixteen, was affected, with no evidence of spread) followed by the burns from radiation therapy, it is hard to encourage my mother to take tamoxifen. Are there any studies of the efficacy of an estrogen sensitive drug on an estrogen receptor negative cancer? Could you point us in the right direction, so we may be informed when we next speak with her doctor?

Carolyn Vachani RN, MSN, AOCN, OncoLink's Nurse Educator responds:

A breast tumor is tested for the sensitivity of the tumor to the hormones estrogen and progesterone. The result is reported as ER+/PR+, ER+/PR-, ER-/PR+, or ER-/PR- (estrogen receptor / progesterone receptor). The result may also contain a percentage of "activity", if this percentage is low, the tumor is called "weakly positive".

Tamoxifen therapy can provide three main benefits: prolonging survival, preventing reoccurrence, and preventing a second breast cancer from developing in the opposite breast from the first cancer. These benefits have been seen in women with ER and/or PR positive tumors even weakly positive, but have not been seen in ER and PR negative tumors, therefore current recommendations are for women with ER or PR positive tumors to take Tamoxifen or another aromatase inhibitor (anastrozole, letrozole, exemestane) for five years. Patients with ER negative tumors should consider the risk of reoccurrence with their oncologist (based on stage, tumor size and histology) and determine whether or not to use chemotherapy based on this risk. You can find more information on current guidelines at the National Comprehensive Cancer Network's website (www.nccn.org)

Carolyn Vachani RN, MSN, AOCN1/10/06

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