NH Rapid Test for Detecting Breast Cancer at Home

Ahmed, Heba

El-Bassyony, Noorhan

Breast cancer is a malignant tumor that starts in the cells of the breast. A malignant tumor is a group of cancer cells that can invade surrounding tissues or metastasize to distant areas of the body. The disease occurs almost entirely in women, but men can get it, too. About 1.2 million cases of breast cancer have been diagnosed this year worldwide, 70% of breast cancers occur in women without family history of the disease. ,90% of breast cancer cases are diagnosed with a palpable tumor size, Large numbers of women are without screening tests until a palpable lesion is felt, Men also get breast cancer but rarely . 96% of patients with local and systemic recurrence have elevated CA15-3, which can be used to predict recurrence earlier than radiological and clinical examination. 25% increase in the serum CA15-3 is associated with progression of carcinoma. 50% decrease in serum CA15-3 is associated with response to treatment. CA15-3 is more sensitive than CEA or any tumor marker in early detection of breast cancer recurrence. In combination with CA125, CA15-3 has been shown to be useful in early detection of relapse of ovarian cancer. CA15-3 levels are also increased in colon, lung and hepatic tumors. NH test is used as an aid for early diagnosis of breast cancer for women. It is a hand held rapid test to be used by women at home. It will be sold to consumers through pharmacy channels and the internet. The retail price will be in the range of 4 $. Importance of NH rapid test: detection of ca15.3 in the blood and give patients positive or negative indication for breast cancer recurrence.

Awards Won: