CLINICAL VIGNETTE

A Presentation of Male Breast Cancer

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A 61-year-old male presented with a lump in his right breast. The lump was first noticed about three years prior but had been ignored. He reported that it had grown recently and caused right-sided nipple retraction. Family history was notable for a maternal aunt with breast cancer.

On physical exam, he was well appearing, in no acute distress, with unremarkable vital signs. A large right-sided breast mass was palpated at the nine o'clock position. It was hard and nontender and right nipple was retracted. There was no nipple discharge, skin changes, or axillary lymphadenopathy. His left breast and axillary exam were normal. The rest of his physical examination was unremarkable.

Diagnostic mammogram and ultrasound revealed an oval mass in the right breast at the 9 o'clock position, which was suspicious. An oval mass was also found in the left breast at the 5 o'clock position, which was also suspicious. Ultrasound-guided biopsies of both masses were performed.

Pathology results of the left breast revealed invasive ductal carcinoma, grade 2.

Pathology results of the right breast revealed detached fragments of invasive ductal carcinoma, grade 2, with prominent mucinous features. Pathology also showed that the masses were estrogen receptor/progesterone receptor (ER/PR) positive and human epidermal growth factor receptor 2 (HER2) negative. Positron emission tomography (PET) scan revealed bilateral breast cancers but no metastatic disease. He was referred to an oncologist and a breast surgeon for further evaluation and treatment.

Discussion

Breast cancer in men is very rare, accounting for less than 0.5 percent of all new cancer diagnoses in men in the United States.¹ Compared to women, men typically present with more advanced disease, including a higher cancer stage, larger tumors, and increased frequency of lymph node involvement.² This may be due to a lack of public awareness of breast cancer in men with no routine breast cancer screening.²

About 90 percent of breast cancers in men are invasive ductal carcinoma.² In women, about 11 percent of breast cancers are lobular carcinomas. This type represents only 1.5 percent in

men.² Male breast cancers have a higher incidence of ER and PR positive compared to women.³

Men with breast cancer typically present with a painless breast mass, with nipple involvement in nearly 50 percent of cases.⁴ Left-sided cancers are slightly more common than right, while bilateral breast cancer is far less common, accounting for less than 1 percent of cases.⁴

While benign causes of breast lumps, such as gynecomastia, are much more prevalent than breast cancer in men, it is essential to keep breast cancer on the differential diagnoses when evaluating a breast mass.⁵ This is especially important because there is no currently recommended breast cancer screening in men. Concerning masses can go undetected. While a physical examination is important as part of the initial evaluation, breast imaging such as mammography and subsequent biopsy are important for evaluation of suspicious masses.

As primary care physicians, it is important for us to educate our male patient population about breast cancer, especially when there is a strong family history, to increase awareness of this disease and prevent delays in diagnosis.

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