Localized itching as a harbinger of breast cancer?

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34-year-old, previously healthy nurse whose mother and maternal aunt had breast cancer presented in January 2003 complaining of itching of her left areola and the area just lateral to it at the 3 o'clock position. The itching had begun 6 months ago, stopped, and recurred. She reported no other symptoms.

Examination yielded normal findings without skin changes, palpable masses, or lymphadenopathy. She was treated with hydrocortisone 1% cream and was asked to return in 2 to 3 weeks to discuss further evaluation if the itching had not resolved. At the time, she was working overseas as a humanitarian aid worker and unable to get a mammogram or other evaluation without leaving the country. She did not return for a follow-up visit, though the itching continued intermittently.

About 2 months later, the patient discovered on self-examination a mass in the left breast lateral to the areola at the 9 o'clock position. She was due to go home to the United States in 2 months and deferred evaluation. In the meantime the breast mass doubled in size. Upon returning home, she had a mammogram (negative finding) followed by ultrasound and a needle biopsy. Pathology examination revealed a 1.8-cm mass positive for ductal carcinoma with local micrometastasis. Results of node biopsies were negative. There was no evidence of Paget's disease.

Since her diagnosis, both her mother and sister have tested positive for the BRCA gene. The

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patient herself declined testing. Initially, the patient underwent lumpectomy followed by chemotherapy. After her lumpectomy, the itching resolved. After counseling concerning the BRCA gene and cancer risk, she elected to undergo bilateral mastectomies in October.

Could itching be a warning sign of possible cancer, especially in a patient at high risk? Pruritis has been well described as a presenting symptom of Paget's disease of the breast, malignant nevi, and of other cancers. ¹⁻³ Itching may be localized to the area of cancer or more generalized. ^{2,3} Both itching and pain involve activation of a peripheral group of C nerve fibers, and itching can originate anywhere along the afferent neural path. I hypothesize that this patient's itching was caused by nerve fibers in the breast being affected by the growth of the breast mass.

Could itching be the presenting symptom of other types of breast cancer as well? Have you observed this phenomenon? If there is indeed a connection between such itching and breast cancer, would a more aggressive evaluation of unexplained itching lead to earlier diagnoses and decreased morbidity and mortality from cancer?

Let me know if you have also seen this in your practice.

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