Breast Cancer, Panic Disorder, and CYP2D6: A Case Study

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When patients with breast cancer also present with mental health issues, the psychiatric–mental health advanced practice RN is an appropriate provider for treatment and medication management. Collaboration with the oncology advanced practice nurse and the rest of the healthcare team can provide personalized, comprehensive care to this patient population. This article describes one example.

Ms. X, a 38-year-old Caucasian woman, presented to the breast center with concerns about a lump she found during a breast self-examination. She was unmarried and worked full-time. Her gynecologic history was gravida 0, para 0, and first menstrual period at age nine. Her periods were regular at the time of her appointment. Her family history revealed that her mother, aged 68 years, was diagnosed with breast cancer at age 38. Her father, aged 72 years, had a history of cardiovascular disease and panic disorder, which both were well managed by medication and therapy. Her maternal grandfather (deceased) was diagnosed with prostate cancer at age 49, and her maternal grandmother (deceased) was diagnosed with ovarian cancer at age 50. Medical history of her paternal grandparents was nonspecific. She had no siblings, aunts, or uncles.

Assessment of Ms. X included a clinical breast examination, a diagnostic mammogram, and an ultrasound followed by biopsy of the lump (Yamamoto & Viale, 2006). Differential diagnoses included benign conditions, such as fibrocystic changes (as seen with a cyst) or fibroadenoma, a malignant condition of breast cancer. Benign fibrocystic changes occur because of the hormone fluctuations women experience throughout their menstrual cycles (Latendresse, McCance, & Morgan, 2010). Cysts, fluid-filled sacs, occur most commonly from age 30–50 years and can be soft but defined if close to the surface and hard if deeper in the breast (Latendresse et al., 2010). A fibroadenoma is a hard ball of epithelial and connective tissue that generally occurs in younger women and is believed to be influenced by estrogen (Latendresse et al., 2010). The pathology of breast cancer presents with heterogeneity in molecular, phenotypic, and pathologic types (Latendresse et al., 2010).

Family history is one of the strongest triggers for a genetic workup for breast cancer (Pruthi, Gostout, & Lindor, 2010), as with Ms. X. Because of mutation in the \textit{BRCA1} or \textit{BRCA2} genes, hereditary breast and ovarian cancer can be passed on through maternal or paternal genes. Children of a \textit{BRCA} carrier have a 50% chance of inheriting the mutation (Pruthi et al., 2010). Genetic counseling is another important part of patient work-up. Specially trained and certified genetic counselors meet with patients individually or with their family. Important emphasis is placed on testing the person with breast or ovarian cancer first, and then subsequent relatives. Finding the mutation on the affected person makes it easier to find in relatives.

Genetic counselors also provide psychological support to the patient and family, particularly surrounding the meaning and ramifications of genetic testing.

Breast cancer was diagnosed from the biopsy, and initial treatment for Ms. X included a lumpectomy along with a sentinel lymph node biopsy. Pathologic results from the surgery revealed a 2.2 cm invasive tumor with 1 cm margins and negative sentinel lymph nodes. The tumor was well-differentiated, estrogen receptor and progesterone receptor positive, and HER2/neu negative. Discovery of receptor status influences treatment decisions and follow-up. Ms. X learned from her surgeon that she had stage IIA breast cancer; her treatment plan included chemotherapy, followed by radiation therapy, and then endocrine therapy because of positive hormone receptors (National Comprehensive Cancer Network, 2012).

When Ms. X came to her first breast cancer postoperative visit, she reported going to a walk-in clinic and an urgent care center for light-headedness, difficulty breathing, a racing heart, and the fear that she was dying. She described her state of mind as, “I live in constant fear right now.” She also admitted experiencing those symptoms twice before in her life during times of extreme stress. Life-altering habits of hypervigilance occurred for at least five months following those attacks. Each time Ms. X experienced those symptoms, she was evaluated for cardiac events or other issues that have been ruled out.

Distress and Anxiety in Patients With Cancer

Patients with breast cancer commonly experience distress (Rosedale & Fu, 2010). Learning to live in a different way with a diagnosis of cancer and the sense of early death impacts the quality of life of survivors.