The discovery of an abnormality in the breast may provoke anxiety for patient and clinician alike. Fortunately, most lesions in the breast are benign. Physical examination and breast imaging, including mammography, ultrasound, and magnetic resonance imaging, assist in the diagnosis of benign breast diseases. Understanding benign breast diseases is important for advanced practice nurses because these diseases are commonly seen in daily clinical practice. AT A GLANCE ■ Many women present to the

- primary care setting with a breast complaint.
- Most breast complaints can be attributed to benign breast disease
- Advanced practice nurses can assist in the diagnosis and treatment of benign breast disease.

## KEYWORDS

benign breast disease; advanced practice nursing; breast complaints

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## Benign Breast **Diseases**

An introduction for the advanced practice nurse

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complaints common in the outpatient clinical setting and warrant careful consideration. Because breast cancer is the most common cancer in women in the United States, nurse practitioners should approach breast complaints judiciously (Smania, 2017). However, most breast complaints stem from benign causes, and one million women are diagnosed with benign breast diseases (BBDs) each year (Figueroa et al., 2016).

BBDs encompass a heterogeneous group of breast lesions that may present with a range of patient symptoms and physical signs or may be detected only on radiologic imaging. These conditions occur across the lifespan because breast tissue is greatly influenced by the hormones estrogen and progesterone. In addition to hormonal status, changes in ductal and glandular breast tissue occur as women age. As a result, BBDs often arise in the second decade of life and peak during the fourth and fifth decades (Guray & Sahin, 2006). This article will describe pathological processes involved in the development of BBDs, examination for BBDs, and treatment strategies.

## **Pathology**

The breasts are comprised of connective, glandular, and fatty tissues. Changes in the breast tissue are associated with age. At the onset of puberty, the levels of estrogen and progesterone rise, and breast development occurs. Estrogen is the hormone that regulates the development of ductal

tissue, whereas progesterone mediates the branching of milk ducts and the development of lobules. With menses, estrogen and progesterone stimulate proliferation of cells, which results in an increase in breast size (Santen, 2018).

From early adolescence to menopause, the ducts and lobules that make up the glandular tissue dominate the composition of the breast. Prior to menopause, in the middle reproductive years, the glandular tissue of the breast may become firm or dense, or of a lumpy consistency (Santen, 2018). This is commonly described as nodularity or thickening, and fibrocystic changes are common.

Changes that occur with menopause often include a decrease in the glandular tissue of the breast and an increase in the fatty tissue. Breasts may decrease in size yet feel lumpier. In addition, the connective tissue may lose elasticity, causing the breasts to appear to sag. These changes in the breast tissue are largely attributable to the reduction in estrogen at the time of menopause (Guray & Sahin, 2006; Santen, 2018).

## **Examination**

Evaluation for BBD begins with a taking of the patient's history and a physical examination. The patient's history may reveal factors that predispose the patient to BBD and malignancy. Age of onset of menses and age of menopause, along with history of pregnancy, provide insight into hormonal influences. Inquiring about the use of oral contraceptives or menopausal hormone therapy is another contributing