Benign Breast Disease

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KEYWORDS

• Benign breast disease • Nurse practitioner • Papilloma • Fibroadenoma • Mastitis

KEY POINTS

- Benign breast conditions are often underdiagnosed.
- Malignancy is not commonly associated with benign conditions.
- Management of benign breast disease depends on accurate diagnosis.
- Knowledge of benign breast pathologic conditions continues to grow.
- Most benign breast conditions can be managed without surgery.

INTRODUCTION

Benign breast diseases includes all nonmalignant conditions of the breast and typically do not convey an increased risk of malignancy. Patients with benign breast conditions are often first seen by their primary care physician or their gynecologist. Benign breast diseases are often misdiagnosed and misunderstood because of their variety in presentation and anxiety about the possibility of malignancy. Physicians that interface with patients with benign breast disease must have a complete understanding of the conditions discussed in this article to competently evaluate these disorders and calm concerns regarding the possibility of breast cancer.

In recent years, breast care has become an established specialty throughout our health care system as evidenced by the existence of breast surgical fellowships and dedicated breast care centers. The care of women who have concerns about their

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breast health or breast abnormalities is a complex process that is best addressed by an interdisciplinary, collaborative model of care.[1] These models of breast care often include surgeons with a practice focused on breast diseases, a dedicated team of imaging specialists, and nurse practitioners. Nurse practitioners can play an important role in helping women with breast concerns by incorporating clinical expertise with teaching and counseling skills.[1] Nurse practitioners with specialized training are well qualified to assess, diagnose, and manage all aspects of benign breast diseases, including breast cysts, masses, nipple discharge, mastitis, abscess, breast pain, and abnormal mammograms. The value of incorporating nurse practitioners in a breast care setting has been well documented to include reduced wait times to consultation, expedited diagnosis, and decreased anxiety for patients.[2] At the Medical College of Wisconsin, 2 of the authors' nurse practitioners (authors A.C.P and J.L.M.) have independent practices that manage most patients who come to their facility with benign breast disorders and serve as a triage for patients with abnormal mammograms.

The following information is organized to allow for easy reference. Diagnoses are grouped by whether or not patients are lactating women, presence or absence of infection/inflammation, and nonproliferative or proliferative disorders.

BREAST INFECTIONS IN LACTATING WOMEN

Mastitis and Abscess

Mastitis is a complication often encountered in primiparous women and develops in 1% to 24% of breastfeeding women. A breast abscess develops as a complication of mastitis in 5% to 11% of cases.[3] The most common bacteria is *Staphylococcus aureus*. Bacteria enter the skin by a small laceration or proliferate in a stagnant lactiferous duct. Common clinical symptoms of breast infection include pain, redness, and heat.[4] Differentiating between mastitis and abscess can be difficult; when there is suspicion for abscess, the woman should be referred for ultrasound evaluation. Mastitis on ultrasound will appear as an ill-defined area of altered echotexture with increased echogenicity in the infiltrated and inflamed fat lobules. The diagnosis of abscess requires identification of a hypoechoic collection, often with a thick echogenic periphery. Ultrasound is the first-line investigation because it is relatively painless and provides guidance for percutaneous drainage. Antibiotics should always be offered in addition to percutaneous drainage for lesions with well-defined fluid collections. A drain may be placed as needed for full evacuation of the cavity. Aspirates should be sent for culture and sensitivity testing with antibiotic therapy directed accordingly. Oral cephalosporins or clindamycin hydrochloride (Cleocin) are excellent choices to cover the most common organisms.

Women should be encouraged to continue to breastfeed throughout the treatment to keep the ducts from becoming engorged. The only reason to cease breastfeeding would be when treatment with an antibiotic is contraindicated for the newborn or after surgical drainage.

Open surgical drainage may be necessary for patients with loculated collections or for those who have failed conservative management with antibiotic therapy and percutaneous drainage. In general, open surgical drainage should be reserved as a last resort in lactating patients to avoid the potential for milk fistula development.

BREAST INFECTIONS IN NONLACTATING INDIVIDUALS

Mastitis and Abscess

Breast abscess not associated with lactation, termed *nonpuerperal*, can be a challenging clinical problem that often recurs despite surgical treatment. They are classified