

Accessory Axillary Breast Tissue

In some women the normal ductal system extends into the subcutaneous tissue of the chest wall or the axillary fossa (the “axillary tail of Spence”), outside of the area clinically identified as breast tissue. Because breast tissue may not be removed in these areas, prophylactic mastectomies markedly reduce, but do not completely eliminate, the risk of breast cancer.

Congenital Nipple Inversion

The failure of the nipple to evert during development is common and may be unilateral. Congenitally inverted nipples are usually of little significance since they correct spontaneously during pregnancy, or can sometimes be everted by simple traction. Acquired nipple retraction is of more concern, since it may indicate the presence of an invasive cancer or an inflammatory nipple disease.

Clinical Presentations of Breast Disease

The most common symptoms reported by women with disorders of the breast are pain, a palpable mass, “lumpiness” (without a discrete mass), or nipple discharge (Fig. 23-3A). All are nonspecific but must be evaluated because of the possibility of malignancy.

- *Pain* (mastalgia or mastodynia) is a common symptom that may be cyclic with menses or noncyclic. Diffuse cyclic pain may be due to premenstrual edema. Noncyclic pain is usually localized to one area of the breast and may be caused by ruptured cysts, physical injury, and infections, but often no specific lesion is identified. Although almost all painful masses are benign, about 10% of breast cancers present with pain.
- *Palpable masses* are also common and must be distinguished from the normal nodularity (or “lumpiness”) of the breast. **The most common palpable lesions are cysts, fibroadenomas, and invasive carcinomas.** Benign

palpable masses are most common in premenopausal women and the likelihood of a malignancy increases with age. Only 10% of breast masses in women younger than age 40 are malignant as compared with 60% of masses in women older than age 50. Approximately 50% of carcinomas are located in the upper outer quadrant, 10% in each of the remaining quadrants, and about 20% in the central or subareolar region. Although about one third of cancers are first detected as a palpable mass, screening by breast examination has little effect on reducing breast cancer mortality. Unfortunately, the majority of cancers that have the capacity to metastasize will have done so by the time they reach a size that can be palpated—generally around 2 to 3 cm.

- *Nipple discharge* is a less common finding that is most worrisome for carcinoma when it is spontaneous and unilateral. A small discharge is often produced by the manipulation of normal breasts. Milky discharges (galactorrhea) are associated with elevated prolactin levels (e.g., by a pituitary adenoma), hypothyroidism, or endocrine anovulatory syndromes, and also occur in patients taking oral contraceptives, tricyclic antidepressants, methyl dopa, or phenothiazines. Repeated nipple stimulation can also induce lactation. Galactorrhea is not associated with malignancy. Bloody or serous discharges are most commonly due to large duct papillomas and cysts. During pregnancy, a bloody discharge can result from the rapid growth and remodeling of the breast. The risk of malignancy in a woman with nipple discharge increases with age; it is associated with carcinoma in 7% of women younger than age 60 but in 30% of older women.

Mammographic screening was introduced in the 1980s as a means to detect small, nonpalpable, asymptomatic breast carcinomas and is currently the most common means to detect breast cancer (Fig 23-3B). The sensitivity and specificity of mammography increase with age, as a result of replacement of the fibrous, radiodense tissue of youth with the fatty, radiolucent tissue of older women (Fig. 23-2). At age 40, the probability that a mammographic

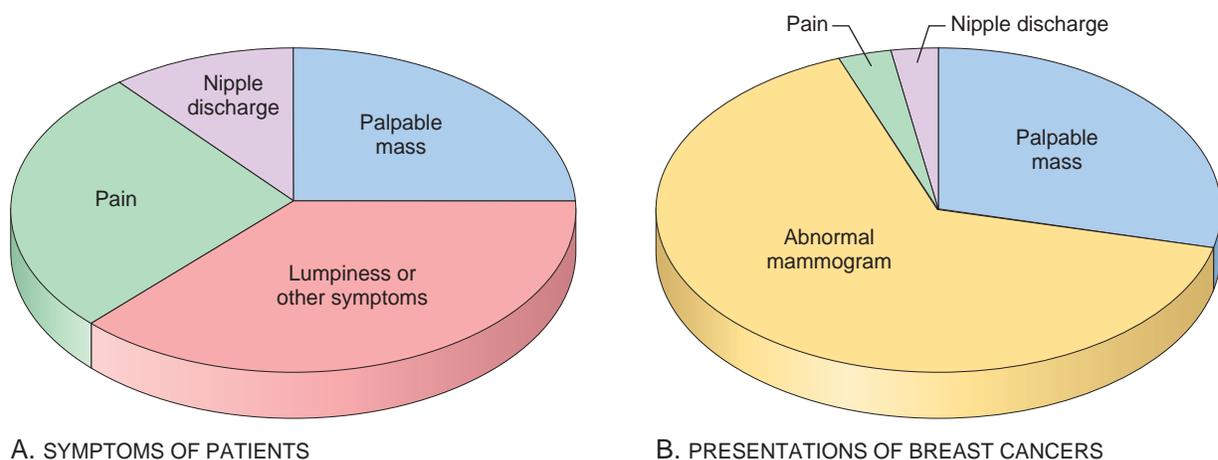


Figure 23-3 Symptoms of breast disease and presentations of breast cancer. **A**, Common symptoms of breast disease. Although pain, “lumpiness,” and nipple discharge often cause concern, these symptoms are associated with cancer in less than 10% of affected women. **B**, Presentations of breast cancer. In the United States, more than half of cancers are asymptomatic and are detected by mammographic screening and about another one third present as palpable masses—almost all discovered by the patient.