Case Study: Ms. L was 56 years old when she was first diagnosed with left breast cancer in 1998. During a routine examination, a 0.9 cm, hard, fixed, nontender mass was palpated below her left nipple in the areola. Ms. L previously had refused to have a mammogram because of a history of “mastitis” and felt that the clinician was concerned needlessly; nevertheless, she was referred to a surgery clinic where a fine needle aspiration (FNA) was performed. The FNA was positive for infiltrating ductal carcinoma; Ms. L underwent a modified radical mastectomy and was staged with a grade I (T1b N0 M0) malignancy.

In 2001, Ms. L experienced a recurrence of the cancer to her left breast at the mastectomy site and underwent excision of the mass followed by radiation and hormone therapy. In 2003, an abnormal mammogram of the right breast prompted her clinician to order an FNA, and the results were negative. During a routine breast examination in January 2005, a 5 mm, firm, nontender mass was palpated below the nipple in the areola. A mammogram was negative; however, a biopsy of the mass revealed acute inflammatory cells, histiocytes, and multinucleated cells compatible with a subareolar abscess. No further interventions were done because the patient was asymptomatic.

One year later, Ms. L indicated that, over the past two months, her right breast mass had enlarged; she was concerned about its rapidly increasing size and tenderness (see Figure 1). Although she was afebrile, she was taking prednisone and leflunomide for rheumatoid arthritis, glipizide for diabetes, isoniazid for tuberculosis exposure, and gabapentin for chronic postherpetic neuralgia, as well as hormone therapy. The patient was referred for an urgent FNA and surgery consultation, but a mammogram was not reordered because the test had been negative three months earlier.

Discussion

Pathophysiology

Two types of clinical breast infections exist: those associated with breast-feeding and childbirth, known as lactational or puerperal, and those identified as nonlactational (Vaidyanathan, Barnard, & Elinicki, 2002). Periareolar abscesses are the classic manifestation of nonlactational mastitis, with 90% of the infections causing subareolar breast abscesses (Vaidyanathan et al.; Versluijs-Ossewaarde, Roumen, & Goris, 2005).

Figure 1. Clinical Breast Infection

Deanna Sanchez Yamamoto, RN, MS, CS, ANP, AOCNP, is an oncology/rheumatology nurse practitioner at the Santa Clara Valley Medical Center in San Jose and Pamela Hallquist Viale, RN, MS, CS, ANP, AOCNP, is an oncology nurse practitioner at the Camino Medical Group in Sunnyvale, both in California.