Introduction: IGM (Idiopathic Granulomatous Mastitis) is a rare, chronic, non-malignant and non life-threatening breast disease. Clinically and radiologically, it mimics carcinoma of the breast. The most common complaints of patients are unilaterally emerging breast pain or painless masses. This case highlights the possibility that chronic granulomatous mastitis could be a precursor for malignancy and the difficulty in distinguishing one from the other.

Case report: A 77-year-old female was admitted to us with complaints of breast pain, accompanied by edema and thickening of the skin at 9 o'clock of the right breast, close to the areola. Initial physical examination revealed axillary lymphadenopathy approximately 2 cm in diameter. The ultrasonography revealed a fibroglandular tissue increase with no distinctive borders and an inflammatory appearance and right axillary 2x2 cm non-reactive lymphadenopathy. An excisional biopsy of the right breast was then done. Microscopic examination displayed chronic inflammation and macrophage, giant histiocyte and epithelioid-like cellular infiltration, with cytologic features suggestive of a granulomatous process. Further histopathological analysis showed an evidence of invasive ductal carcinoma 5 mm in diameter and extensive high grade in situ ductal carcinoma foci. The invasive tumor was ER and PR negative; e-cadherin and c-erb positive (+++). All culture and stains (AARB, EZN, PAS) for infectious organisms remained negative for the investigation of fungal infections. Afterwards, modified radical mastectomy + axillary lymph node dissection was performed. High grade carcinoma in situ foci and granulomatous mastitis in the non-tumor areas were detected. 19 axillary lymph nodes were present in the axillary dissection specimen, ductal carcinoma metastasis was reported in 1 lymph node which was 2.3 cm in diameter. No granulomatous structures were observed in the axillary lymph nodes. The patient is being followed in an adjuvant chemotherapy program.

Conclusion: We must be careful in identifying and diagnosing breast cancer in a patient with a background history of IGM. Clinical, radiological and pathological investigations have to be performed together for breast cancer developing due to the chronological progresses of IGM or concurrent breast cancer.

Anahtar Kelimeler: granulomatous, mastitis, cancer, concurrence