Erin Boudoin L3 Louisiana State University Health Sciences Center, New Orleans, LA

Agustin A Garcia MD LSUHSC-NO Section of Hematology and Oncology

"A Rare Case of Granulomatous Mastitis"

Purpose: Case report of a rare case of self-limiting Granulomatous Mastitis in a 47-year-old female

Methods: Review of Electronic Health Records and Literature Review

Results: A 47-year-old Spanish speaking female with a past medical history of endometriosis, ovarian cysts with right oophorectomy, hyperlipidemia and obesity presented to the emergency department with complaints of acute worsening pain in her left breast. The patient first noticed the pain 3 months prior. She reported that the pain occurred in a cyclic pattern, beginning 2 weeks before her menstrual period each month. The physical exam showed a 4x6 cm fixed, lobulated, tender left breast mass with nipple enlargement, concerning for malignancy. Mammography revealed a large mass-like focal asymmetry in the outer left breast with irregular spiculated margins. Ultrasound showed an irregular hypoechoic mass with spiculated margins. A biopsy of the mass showed non-caseating granulomatous inflammation and occasional binucleated atypical plasma cells consistent with Granulomatous Mastitis. The left axillary node biopsy showed benign lymph node tissue. The patient's disease was self-limiting. Her pain was managed conservatively with NSAIDs. The patient recovered well over the course of 12 months with monitoring via serial mammography and ultrasonography.

Granulomatous mastitis (GM) is a rare chronic inflammatory breast condition that causes granulomatous changes to occur around the lobules and ducts of the breast. It has been associated with Hispanic ethnicity. It typically presents with an inflammatory breast mass located in the periphery. Clinical presentation can be confused with breast cancer. Ultrasound is the imaging of choice for the initial diagnosis of GM. The diagnosis must be confirmed with a core needle biopsy of the mass. GM is known to be self-limiting, as in our patient's case. Complete resolution usually occurs between 5 and 20 months depending on severity. Surgical excision is typically not indicated. Most complications of GM arise from secondary infections which may be treated empirically with antibiotics or drainage. Localized pain can be managed with NSAIDs. Steroids and methotrexate are indicated in refractory cases, but they must follow a tapering regiment to avoid flares.

Conclusion: This case highlights the importance of biopsy in distinguishing between malignancy and inflammation even in cases where clinical and radiological findings are highly suspicious. Presently, there is scarce literature to explain the etiology of disease. Core needle biopsy helps to rule out common infectious causes of mastitis such as tuberculous mastitis and Corynebacterium. Clinicians should be aware of this entity that can be confused with breast cancer.