

Granulomatous Mastitis: A rare or an underdiagnosed disease?

Shadi Jafari-Esfahani MD¹, Juan Naranjo¹ MD, Christine Loftis¹ MD, Emilia Dulgheru² MD

University of Texas Rio Grande Valley- Department of Internal Medicine

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Introduction:

Granulomatous mastitis (GM) is a benign chronic inflammatory breast disease that is poorly understood, with no universal agreement on underlying etiologies and treatment protocol. The proposed etiologies include trauma, metabolic processes, hormonal changes, autoimmune disorders, and infections. This entity commonly presents with unilateral painful firm and erythematous breast mass, and less frequently with areolar retraction, fistula formation and ulceration. The disease is more common in Hispanic and Asian population. Due to its inflammatory nature, the mainstay of treatment includes a tapered course of high-dose corticosteroid, and methotrexate has proven to be effective in some cases.

Case Presentation:

A 47-year-old Hispanic woman presents to the office with a chief complaint of left tender red breast mass. She reports a similar episode in 2016, after a miscarriage, for which she was diagnosed with mastitis and underwent incision and drainage with subsequent resolution. She also reports one episode of breast mass associated with high fevers that resolved spontaneously. She denied fever, chills, weight loss, or breast discharge. The physical exam was remarkable for a 5 cm indurated tender left breast mass with surrounding erythema. Based on presentation, history, and physical examination the differential diagnosis included infectious mastitis, breast cancer, and granulomatous mastitis. Labs were remarkable for ESR of 51, RF 53. Mammogram demonstrated focal asymmetries of the left breast and ultrasound revealed one focus suspicious of abscess formation and another representing a resolving abscess with granulation tissue formation. A core needle biopsy of the mass was consistent with granulomatous inflammation. Patient was diagnosed with granulomatous mastitis and started on a course of antibiotic therapy with doxycycline and anti-inflammatory with celecoxib. On follow up, she reported significant improvement in her symptoms.

Conclusion:

The early diagnosis of GM may be challenging due to its clinical presentation and imaging findings mimicking other etiologies such as infectious or neoplastic causes. Therefore, it is important for physicians to keep a high index of clinical suspicion when evaluating a patient with such clinical presentations to make an early accurate diagnosis. The ultimate goal is to avoid unnecessary investigations and procedures which can cause emotional, physical, and financial burdens to the patient.