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Idiopathic Granulomatous Mastitis: the Role of Rheumatologists in Treating This Rare Cause of Breast Pain

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Keywords

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Abstract

Background/Purpose

Idiopathic granulomatous mastitis (IGM) is an inflammatory breast disease occurring primarily in young women (1, 2). The diagnosis of IGM is made by breast biopsy showing non-caseating granuloma after other causes of granulomatous mastitis have been excluded (1, 4). IGM is a poorly understood disease; there is no consensus regarding underlying cause, risk factors, and optimal treatment of this condition (3).

Methods

IGM patients were identified via the OHSU Cohort Discovery tool who carried a diagnosis of "granulomatous mastitis". 30 patients seen between 2007-2018 where identified. Retrospective chart review was used to verify that IGM diagnosis was accurate, collect data on baseline characteristics, clinical features and treatment course/outcomes. 2 patients were excluded (1 diagnosed with alternative condition and 1 without adequate follow-up).

Results

Of the 28 IGM patients, all were female, the mean age was 32, the majority (60.7%) were Hispanic. Mean follow-up was 27 months and 17% were treated by rheumatologists. 92.9% and 92% has history of pregnancy and breastfeeding, respectively. Four patients had inflammatory arthritis/arthralgias and 5 had erythema nodosum. In 23 patients with adequate follow-up data, treatment groups were divided into surgery plus high dose steroids (n=3), high dose steroids (n=12), methotrexate (MTX) and high dose steroids (n=3) and other (n=5). 7 patients (30%) had disease relapse and 4 patients (17%) had persistent disease. The highest rates of relapse were in the steroids alone group (42%) and lowest rate of relapse was in the methotrexate group (0%). Overall, 83% of patients achieved a disease free remission with post-remission follow-up of over 1 year in 74%.

Conclusions

This case series of 28 IGM patients suggests that MTX in combination with high dose steroids may successfully treat IGM, although larger prospective studies are needed. We also report a higher incidence of arthritis/arthralgia and erythema nodosum than previously described.