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RESEARCH ARTICLE

CLINICAL EXPERIENCE IN THE TREATMENT OF IDIOPATHIC GRANULOMATOUS MASTITIS

***Yavuz PIRHAN**

Department of General Surgery, Sabuncuoğlu Şerefeddin Research and Training Hospital, Amasya University, Amasya, Turkey,

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ABSTRACT

Background: Idiopathic granulomatous mastitis (IGM) is a rare inflammatory disease of the breast. Although the etiology is unknown, some risk factors have been identified. The disease begins as an inflammatory mass in the breast and it is important to differentiate the breast from malignant disease. Since the disease is rare, there is no consensus on its treatment, but immunosuppressive drugs and surgery are recommended for its treatment. In this study, we wanted to share with you our clinical experience in the treatment of idiopathic granulomatous mastitis, which is difficult to diagnose and treat. **Material and methods:** Between 2017-2018, 263 female patients aged 22-52 years who presented to the general surgery outpatient clinic with complaints of swelling, pain and redness of the breast were treated with the diagnosis of inflammatory disease of the breast. Twenty-two patients with granulomatous mastitis were included in the study. **Results:** The mastitis diagnosis of patients with medical treatment given to patients without clinical improvement tru-cut biopsy diagnosis of granulomatous mastitis performed. Corticosteroid treatment was started primarily to patients without the contraindication. Surgical treatment was performed in 5 patients without clinical improvement. Approximately15-month follow-up clinical recurrence was detected in any patient with clinical and imaging. **Conclusion:** We suggest that corticosteroid therapy should be considered as the primary treatment for idiopathic granulomatous mastitis, but it should be considered as the primary treatment in patients with resistant IGM.

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INTRODUCTION

Idiopathic granulomatous mastitis (IGM) is a rare inflammatory disease in the breast (Al-Khaffaf, 2008). The disease is important for two reasons; someone may resemble breast carcinoma in terms of clinical and radiological findings, definitive diagnosis is made only by histopathology. The other one is the treatment of IGM in the presence of fistula and abscess. Since its etiology is uncertain and the disease is rare, there are difficulties in its diagnosis and treatment (Sakurai, 2011). There is no established optimal treatment approach yet. However, medical treatment, wide local excision and abscess drainage are among the preferred approaches (Özel, 2012). Our aim in this study is to examine the clinical and radiological findings, treatment approach, clinical course and recurrence rates in patients treated for IGM.

MATERIALS AND METHODS

263 female patients who applied to general surgery outpatient clinics with complaints of swelling, pain and redness in their breasts between 2017-2018 were evaluated from retrospective patient files.

Corresponding author:** ***Yavuz PIRHAN,
Department of General Surgery, Sabuncuoğlu Şerefeddin Research and Training Hospital, Amasya University, Amasya, Turkey.

As the study was a retrospective file scan, approval was obtained from the Non-Interventional Local Ethics Committee with the approval number 2020-3-19. Informed consent was obtained from the patients. Our study was conducted in accordance with the Helsinki Declaration.

RESULTS

The patients were between 22-52 years old. After the ultrasound(Usg) performed to all patients, prophylactic antibiotics were started with the diagnosis of bacterial mastitis, and culture was taken before treatment was started. Those with bacterial reproduction in cultures were continued with empirical antibiotic treatment appropriate to the antibiogram. There was no reproduction in the culture of 22 patients. However, prophylactic treatment of broad-spectrum antibiotics was continued for 14 days. However, after the treatment, the full clinical and radiological response was obtained from other patients, while 22 patients did not. Even 6 patients had skin fistulization. These patients were between the ages of 36-44. Therefore, a tru-cut biopsy was applied to the patients for differential diagnosis. The results were reported as granulomatous mastitis.

There were no patients diagnosed with cancer. It was recommended to start the 3-month corticosteroid treatment by interviewing the patients. After 3 months of treatment, 22 patients who started steroids did not recover in 5 patients (Tabble 1). Other treatment options were explained to these patients. But they wanted surgical treatment. Segmental mastectomy was performed with surgical margins. Clinical and radiological recurrence was not observed in any patient after approximately 15 months of follow-up. Patients are still being followed.

Table 1. Diagnostic dataes

	N	%
Diagnosed with IGM	22	8.36
skin fistulization	6	27.27
steroid treatment	22	100
relapsing after steroid	5	22.72
methotrexate or azothiopurine treatment	0	0
surgical treatment	5	2.72

DISCUSSION

IGM is a benign, inflammatory disease of the breast that mostly affects women of childbearing age (Özel, 2012). The age range of patients in our study was between 26-44. However, it was noteworthy that the age range of 18 patients was 35-40. The diagnosis of the disease is generally diagnosed after the antibiotic treatment is given considering bacterial mastitis, as a result of the absence of bacterial reproduction, clinical features and radiological findings. In our study, 22 of 263 inflammatory breast patients considered bacterial mastitis had no clinical improvement and IGM came to mind and different treatment methods were applied after histopathological diagnosis was made with tru-cut biopsy. IGM most commonly occurs in a painless or painful mass style in the breast. It can be seen in the form of redness, temperature increase, tenderness that occurs in a short time, which suggests acute inflammation, as well as with symptoms that suggest breast cancer such as fistula, abscess, ulceration, nipple retraction, and nipple discharge in more chronic processes (Gürleyik, 2012; Memis, 2002). IGM often presents as a rigid mass with uncertain pain in unilateral breast. This lesion can be located in any quadrant of the breast. In our study, the disease was seen in the left breast in 12 patients. Granulomatous inflammation in IGM can lead to skin thickening, sinus and abscess formation, axillary lymphadenopathy and breast retraction. Therefore, it can be confused with breast carcinoma (Patel, 2009).

In all of our patients, the lesions were in one breast and generally periareolar approximately 4-5 cm mass. Six patients had fistulization on the skin. Already 5 of these patients could be completed with surgery. The diagnosis of the disease is made primarily by suspicion. If IMG is not suspected, physical examination findings suggest advanced breast carcinoma, while the presence of parenchymal heterogeneity and abscess formation, especially the presence of enlarged reactive axillary lymph nodes, supports the presence of inflammatory granulomatous process. However, these findings are non-specific and do not rule out carcinoma. Therefore, histopathology is indispensable in differential diagnosis (Azlina, 2003). Breast usg is one of the auxiliary diagnostic methods. Usg can be supplemented with breast MR. However, since the lesion is painful and patients are under the age of forty, mammography has no place in diagnosis. There is no accepted consensus in the treatment of IGM, but patients have been found to benefit from steroid treatment. Immunosuppressive agents such as *methotrexate* or *azothiopurine* can be used in treatment-resistant patients, even if the clinical response is limited. Although the development of fistula and recurrence is common after excision of the lesion, wide local excision or mastectomy can be performed in patients who are resistant to medical treatment (Patel, 2010).
We started *corticosteroids*in our patients diagnosed with IGM. We applied surgery to 5 patients who did not improve despite the treatment. It was observed that these 5 patients actually responded to steroid treatment, but the exact response was not obtained like other patients. Therefore, segmental mastectomy with a surgical margin was preferred as the surgical option for the patients. We did not have a patient who underwent mastectomy. *Methotrexate or azothiopurine* treatments were recommended to patients, but patients did not accept this treatment option. In approximately 18 months of clinical and radiological follow-up, no clinical or radiological recurrence was observed in any patient. Follow-up stillcontinues.

Conclusion

In our study, it is shown that although IGM, which is one of the benign diseases of the breast, is rare, its diagnosis is difficult at the beginning. First of all, IGM should not be ignored in patients presenting with mastitis clinic. We should be skeptical in terms of IGM. We should take a biopsy from patients without clinical improvement after the given mastitis treatment, and we recommend that patients should be started on steroid treatment before surgical treatment after the diagnosis of IGM.

- Manuscript wasn't presented as part at a meeting, the organization, place, and exact date on
- Author meet the ICMJE authorship criteria
- My work was done in accordance with helsinki declationa. Patients included in the study were informed about the patient before and after the study.

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REFERENCES

Al-Khaffaf B, Knox F, Bundred NJ. 2008. Idiopathic granulomatous mastitis: a 25-year experience. *J Am Coll Surg.,* 206:269-73.

Azlina AF, Ariza A, Arni T, *et al*. 2003. Chronic granulomatous mastitis: diagnostic and therapeutic consideration. *World J Surg.,* 27:515–8

Gürleyik G, Aktekin A, Aker F, *et al*. 2012. Medical and surgical treatment of ıdiopathic granulomatous lobular mastitis: a benign ınflammatory disease mimicking ınvasive carcinoma. *J Breast Cancer.,* 15:119–23.

Memis A, Bilgen I, Üstün EE, *et al*., 2002. Granulomatous mastitis: imaging findings with histopathologic correlaton. *Clin Radiol*. 57:1001–6.

Özel L, Ünal A, Ünal E, *et al*. 2012. Granulomatous mastitis: is it autoimmune disease? diagnostic and therapeutic dilemmas. Surg Today. 42:729–33.

Patel RA, Strickland P, Sankara IR, *et al*., 2009. Idiopathic granulomatous mastitis: case reports and review of literature. *J Gen Intern Med.*,25:270–3.

Patel, R.A., *et al*., 2010. Idiopathic granulomatous mastitis: case reports and review of literature. *J Gen Intern Med*., 25(3): p. 270-3.

Sakurai K, Fuhsaki S, Enomoto K, *et al*. 2011. Evaluation of follow-up strategies for corticosteroid therapy of idiopathic granulomatous mastitis. *Surg Today*. 41:333–7.

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