

**DIAGNOSTIC CHALLENGES AND TREATMENT OPTIONS IN GRANULOMATOUS
MASTITIS**

***¹Dr. C.Raj Prakash, ²Prof.G.Ambujam and ³Dr.R.Bharathidasan**

^{*1}Post Graduate, Vinayaka Mission Medical College and Hospital, Karaikal

²HOD, Dept Of General Surgery, Vinayaka Mission Medical College and Hospital, Karaikal

³Associate Professor, Vinayaka Mission Medical College and Hospital, Karaikal

Article History: Received 4th July,2016, Accepted 30th July,2016, Published 31st July,2016

ABSTRACT

Aim:The clinical manifestations ,imaging and pathological findings though typical are closely mimicking other specific granulomatous types like tuberculosis, mycotic the treatment for this condition needs to be carefully planned in the initial stage itself . This will resolve the psychological issues and prevent recurrence.The study includes 30 cases of granulomatous mastitis belonging to varying age groups, social status, parity and menopausal status. The diagnostic workup is mainly in the form of imaging and histopathological in close correlation with clinical findings, helped us to treat the patients effectively. The treatment modalities offered, results and follow up are tabulated. Purpose : To present the authors experience by their critical clinical analysis based on aetiopathological and imaging modalities and to formulate effective treatment modalities in Granulomatous Mastitis.**Methods:** 30 patients diagnosed as granulomatous mastitis were divided into 4 groups based on the treatment modalities offered to them .conservative antimicrobial therapy for 3 cases. Surgical drainage and or Surgical wide local excision in 27 cases

Keywords: *Granulomatous mastitis, conservative antimicrobial therapy*

1.INTRODUCTION

Granulomatous mastitis is an uncommon benign lesion of the breast and has distinct clinical , imaging and pathological characters (Kim et al., 2005; Wilson et al., 2007). Most of the times if not critically analysed and observed ,it may even lead to a disastrous decision of malignancy since imaging and pathology closely mimics malignancy(Lee et al., 2006; Kim et al., 2003; Bani-Hani et al., 2004; Heer et al., 2003).

The condition is thought to be autoimmune and ill understood and so labelled also as idiopathic granulomatous mastitis by some authors(DeHertogh et al., 1980; Raj et al., 2004;). Treatment options are observation after cytology, antimicrobial therapy after antibiogram which is unsatisfactory in 90% of occasions and residual lesions need surgical intervention to rule out malignancy and if it is confirmed 100% as benign beyond doubt then the patient has to be reassured. So effective treatment modality depends upon the skill and experience of the surgeon, time of onset of the problem and presentation to the consultant and previous treatments given.

METHODS

The present study includes 30 female patients in the age group of 20 to 53 years tabulated as follows

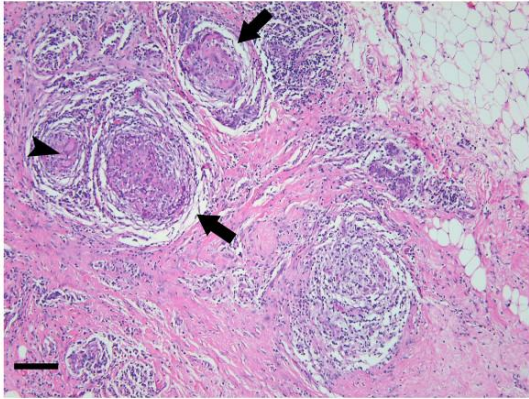
AGE	NO OF CASES	PRIOR TREATMENT		MARITAL STATUS	
		YES	NO	YES	NO
20-30	5	3	2	5	
31-40	17	12	5	17	
41-53	8	7	1	8	

All the 30 cases were treated by the authors personally in their private or teaching institution from 2009 to march 2015 and the diagnostic and treatment protocols analysed individually after careful clinical examination, imaging modalities like ultrasonogram ,mammogram and in difficult cases MRI to delineate the lesion prior to surgery to avoid mastectomy.

All the thirty cases had histological confirmation as granulomatous mastitis before instituting definitive treatment.

**Corresponding author:Dr. C.Raj Prakash, Post Graduate, Vinayaka Mission Medical College and Hospital, Karaikal*

Patients were labelled as cured of the disease after a disease free interval of minimum one year . Follow up period ranges from 1 to 7 years .



Arrows indicate granulomatous inflammation centered on breast lobules, while arrowhead indicates the presence of multinucleated giant cells within non-caseating granulomatous inflammation
Out of 30 female patients 26 were in reproductive age and 4 were in menopausal age group.



DIAGNOSTIC CRITERIA FOR GRANULAMATOUS MASTITIS:

S.NO	TYPES	NO: OF CASES
1.	Non specific or idiopathic	17
2.	Pyogenic granulomatous mastitis clinically diagnosed as antibioma	13

CLINICAL PRESENTATION :

S.NO	PRESENTATION	NO: of cases
1.	Breast mass	30
2.	Painful discharging lesions	27
3.	Recurrent mass	22
4.	Multiple sinuses with undiagnosed mass after initial treatment	15

DIAGNOSTIC METHODS:

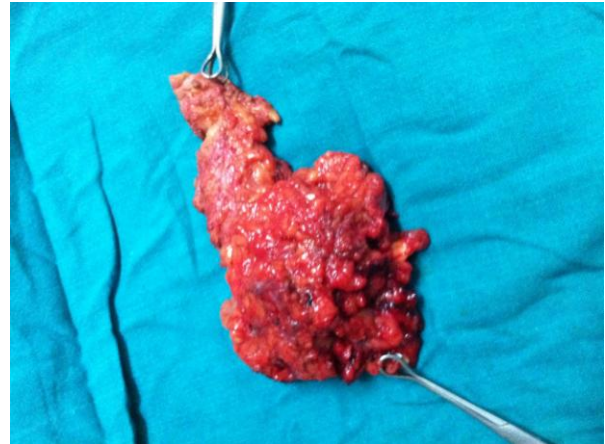
S.NO	MODALITIES	NO OF CASES
1	Mammogram with USG	30
2	Core needle biopsy	30
3	MRI	3

3.TREATMENT PROTOCOLS AND RESULTS

1. Antimicrobial therapy after culture and sensitivity was given for 3 cases . out of which 1 case had improvement and drainage procedure was carried out in another case followed by excision for antibioma and the other case was lost to follow up .

Steroid and immunosuppression therapy were not contemplated in this series due to its limitation for success as per authors experience .

2.EXCISION BIOPSY :



This modality was instituted in all 27 patients since 24 patients have had earlier conservative treatment or incision drainage elsewhere but presented with residual or recurrent lesion mostly with multiple discharging sinuses in the breast

WIDE LOCAL EXCISION :

Wide local excision was carried out in 27 patients out of which 24 were cured ,2 patients had delayed healing and 1 patient was lost during follow up



4.DISCUSSION

Granulomatous mastitis although less common, its etiology , definite and concrete management protocol is yet to be answered. Originally described by Tae et al., (2009);Kessler and Wolloch (1972), it is characterized by the presence of

epitheloid and multinucleated giant cell granulomas limited to the mammary lobules with microabscesses in the absence of obvious etiology . undoubtedly it is a benign problem but if not treated effectively and adequately life would be miserable with a chronic non healing and multiple sinuses .It is an autoimmune disease and has distinct pathological picture. Surgical wide local excision is the gold standard treatment of choice and offers complete cure . On no occasion the authors here encountered malignancy in this series .

Accurate delineation of the mass is paramount importance before contemplating surgery to give complete cure after wide local excision. 98% cure rate was possible in the present study .

5. REFERENCES

- Bani-Hani KE, Yaghan RJ, Matalka II, Shatnawi NJ, Idiopathic granulomatous mastitis : time to avoid unnecessary mastectomies. *breast J* 2004;10:318-22
- DeHertogh DA, Rossof AH, Harris AA, Economou SG 1980. Prednisone management of granulomatous mastitis. *N Engl J Med* 1980;303:799-800
- Heer R, shrimankar J, Griffith CD. 2003. Granulomatous mastitis can mimics breast cancer on clinical, radiological or cytological examination a cautionary tale. *breast*, 12:283-6
- Kim JTynns KE, Buckingham JM. 2003. Methotrexate in the management of granulomatous mastitis. *ANZ J surg*, 73:247-9
- Kim YJ, Choi YJ, kim YJ, kim HJ, park YS, hong SW, et al. clinicopathological features of granulomatous mastitis. *korean J pathol* 2005;319:181-6
- Lee JH, Oh KK, Kim EK, Kwack KS, Jung WH, lee HK, Radiologic and clinical features of idiopathic granulomatous lobular mastitis mimicking advanced breast cancer. *younsei Med J*:84
- Raj N, Macmillan RD, Ellis IO, Deighton CM, 2004. Rheumatologists and breast-immunosuppressive therapy for granulomatous mastitis . *rheumatology* 2004;43:1055-6
- Sato N, Yamashita H, Kozaki N, Watanabe Y, Ohtsuka T, Kuroki S. granulomatous mastitis diagnosed and followed up by fine needle aspiration cytology, and successfully treated by corticosteroid therapy; report a case. *surg today*, 26;730-3
- Tae SY, Lee SW, Han SU, Woo HD, Son DM, Kim SY, 2009. Surgical treatment for idiopathic granulomatous mastitis. *J Korean surg soc* 2009;77;153-60
- Wilson JP, Massoll N, Marshall J, Foss RM, Copeland EM, Grobmyer SR. 2007. Idiopathic granulomatous mastitis; in search of a therapeutic paradigm . *am sarg*, 73:798-802
