Clinical Characteristics and Treatment Patterns in Idiopathic Granulomatous Mastitis

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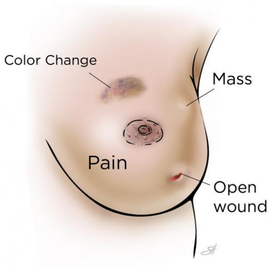
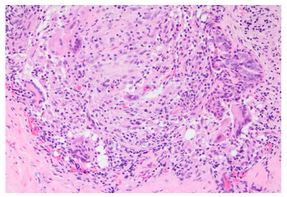
Introduction

- Idiopathic granulomatous mastitis (IGM) is a rare, benign inflammatory breast condition.
- The pathogenesis behind IGM is not well characterized.
- Typical symptoms of IGM include unilateral breast mass, overlying skin inflammation, sinus formation, and nipple retraction.[1]
- Diagnosing IGM remains a challenge as this condition typically presents with findings similar to a breast malignancy.
- Histological confirmation with a biopsy of the area is essential for the diagnosis of IGM.
- Management of this disease varies widely.
- Due to variability in presentation and etiology, management strategies for IGM differ widely, and there are no widely accepted treatment guidelines.



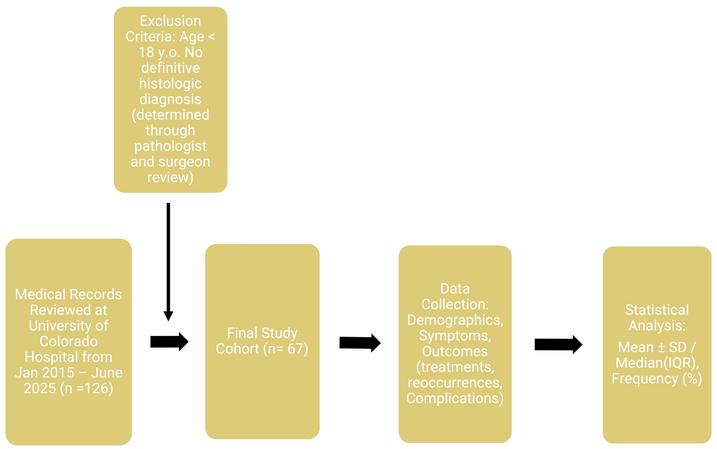


Granulomatous inflammation with multinucleated giant cells involving a breast lobule[3].

Aims

We aimed to use a retrospective chart review to summarize and characterize treatment of IGM at the University of Colorado Anschutz Medical Center.

Methods



Results

Table 1. Demographic and Past Medical History of IGM Cohort	Overall %(N) or median (IQR) n=67
Age (at time of diagnosis)	34.0 (29.0-42.5)
Race	
Asian	6.1% (4)
Black or African American	13.6% (9)
White	54.5% (36)
Other	25.8% (17)
Ethnicity	
Hispanic or latino	**58.2% (39)**
Not Hispanic or latino	**41.8% (28)**
Diameter of Breast Mass (cm)	3.4 (1.9-4.9)
Prior Surgical Intervention Involving Breasts	
Yes	1.5% (1)
No	98.5% (66)
History of Breast Malignancy	
Yes	1.5% (1)
No	98.5% (66)
Rheumatologic Condition	
Yes	6.1% (4)
No	93.9% (62)
History of sarcoidosis	
Yes	4.5% (3)
No	95.5% (63)
History of TB	
Yes	3.0% (2)
No	95.5% (64)
Unknown	1.5% (1)
History of diabetes	
Yes	9.0% (6)
No	91.0% (61)
History of Smoking	
Yes	25.4% (17)
No	70.1% (47)
Unknown	4.5% (3)
History of Oral Contraceptive Use	
Yes	20.9% (14)
No	28.4% (19)
Unknown	50.7% (34)
History of Breastfeeding	
Yes	44.8% (30)
No	3.0% (2)
Unknown	52.2% (35)

Table 2. Treatment Characteristics of IGM Cohort	Overall %(N) or median (IQR) n=67
Oral Medication?	
No	26.2% (17)
Yes	73.8% (48)
Antibiotics	
No	**18.8% (9)**
Yes	**81.3% (39)**
Number of antibiotics	3.0 (1.0-3.0)
Number of antibiotics	
0	**10.3% (4)**
1	**38.5% (15)**
3	**30.8% (12)**
4	**20.5% (8)**
Steroids	
No	**56.3% (27)**
Yes	**43.8% (21)**
Number of steroids	
1	95.2% (20)
2	4.8% (1)
Methotrexate	
No	91.7% (44)
Yes	8.3% (4)
Naltrexone Use?	
Yes	10.8% (7)
No	89.2% (58)
Injection?	
Yes	**20.9% (14)**
No	**79.1% (53)**
Number of Injections	2.0 (1.0-3.0)
Number of Injections	
1	38.5% (5)
2	23.1% (3)
3	15.4% (2)
7	7.7% (1)
8	7.7% (1)
10	7.7% (1)
Surgical excision?	
No	97.0% (65)
Yes	3.0% (2)

Discussion

- Over half of our cohort developed disease reoccurrence.
- Most of our patients received oral medications, and antibiotic use was common despite limited evidence supporting their efficacy in treating the underlying inflammatory process.
- A majority of our cohort received steroidal treatment or IGM, either oral or through local steroidal administration. Steroids remain one of the cornerstone treatment modalities.

Complications Summary

Table 3. Summary of Complications	Overall %(N) or median (IQR) n=67
Disease relapse?	
No	**42.2% (27)**
Yes	**57.8% (37)**
Disease relapse location category	
Same site only	70.3% (26)
Different site only	21.6% (8)
Same site + different site	5.4% (2)
Cellulitis?	
No	50.8% (31)
Yes	49.2% (30)
Abscess?	
No	50.0% (33)
Yes	50.0% (33)
Drainage?	
No	27.3% (9)
Yes	72.7% (24)

Conclusion

- Treatment strategies for IGM were heterogenous.
- A majority of patients suffered a reoccurrence of disease
- This study highlights the importance of optimizing and standardizing treatment modalities for IGM[4].
- Future direction includes developing a prospective cohort to further characterize patient reported outcomes and better define treatment effectiveness.

Acknowledgements

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Works Cited

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