

Chronic Granulomatous Mastitis: Management Challenge in Breast and Endocrine Centre of North Borneo Malaysia

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INTRODUCTION

Chronic Granulomatous mastitis (CGM) is a rare, chronic inflammatory condition of the breast with unknown etiology.

The clinical presentation often mimics inflammatory breast cancer. Due to lack of data including randomized controlled studies, management of CGM is challenging. Its treatment has always been controversial.

This study aims to analyze the cases of CGM in our center and addressing the challenge that limit the optimum outcome of our patients.

MATERIALS & METHODS

We performed a retrospective review of 120 patients with histologically proven CGM that was managed at Breast and Endocrine unit of Hospital Queen Elizabeth II, Kota Kinabalu, Sabah, from 2019 to 2022. Demographic, clinical, treatment and outcomes data were collected and analyzed.

RESULTS

A total of 120 cases were diagnosed with CGM. The median age at time of diagnosis was 34 years old. All patients had palpable breast mass during presentation and majority of them (92.5%) had painful breast mass. 15% of patients had nipple discharge.

Tissue diagnosis was obtained from all patients. They were followed-up for an average duration of 12 months after initiating treatment.

84 (70%) patients received antibiotics as initial treatment, whereas 33 (27.5%) underwent surgical procedures. Most of the patient received steroid therapy with a mean duration of 4.3 months.

We encountered 24 (20%) patients who resistant with steroid treatment. Small percentage of them 2 (1.67%) were started on Methotrexate.

Overall recurrence rate was 5% (6 patients) and majority of them were those who underwent surgical procedure.

DISCUSSION/ CONCLUSION

Managing CGM in Sabah is challenging due to vast distances and limited transportation infrastructure. Many patients live in remote areas, making regular follow-up visits difficult and costly, particularly for those on steroid and immunomodulator therapies, which require frequent monitoring. The inconvenience of frequent travel can result in non-compliance with treatment regimens and follow-up appointments.

Most patients received steroid therapy for an average duration of 4.3 months. However, 24 patients (20%) were resistant to steroid treatment, complicating management. In certain cases, Methotrexate was used, requiring even closer monitoring due to its potential side effects and toxicity. Two patients have started Methotrexate: one due to intolerance to prednisolone side effects, achieving complete resolution via ultrasound after 10 months on Methotrexate, and another who was steroid-resistant and subsequently underwent incision and drainage, and then started on Methotrexate, currently ongoing for 5 months. No Methotrexate toxicity was observed in either patient during follow-up.

Surgical treatment, though helpful in reducing the need for frequent follow-ups, has a higher recurrence rate, observed at 5% in our study. This highlights the need to balance immediate relief with long-term outcomes.

To address these challenges, telemedicine can provide remote consultations, reducing the need for travel. Mobile clinics can bring medical services closer to rural patients, ensuring timely care. Additionally, enhancing patient education on self-monitoring and medication adherence can improve outcomes and reduce hospital dependency.

In conclusion, a multifaceted approach, including telemedicine, mobile clinics, and patient education, is essential to improve CGM management and patient outcomes in Sabah.

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Table 1. District of Sabah

| Location | N | % |
|----------------------|----|------|
| Kota Kinabalu | 37 | 30.8 |
| Tuaran (32 km) | 14 | 11.6 |
| Papar (38 km) | 9 | 7.5 |
| Kota Belud (67 km) | 10 | 8.3 |
| Membakut (72 km) | 1 | 0.8 |
| Beaufort (97 km) | 9 | 7.5 |
| Ranau (105 km) | 8 | 6.6 |
| Kuala Penyu (107 km) | 9 | 7.5 |
| Kota Marudu (117 km) | 10 | 8.3 |
| Sipitang (138 km) | 1 | 0.8 |
| Tambunan (165 km) | 1 | 0.8 |
| Kudat (178 km) | 10 | 8.3 |
| Tawau (450 km) | 1 | 0.8 |

