



# Visceral Crisis of Breast Cancer and Clinical Outcome in Sarawak: One-Year Single-Centre Retrospective Review

Fu JH<sup>1,3</sup>, Loke SN<sup>2,3</sup>, Yee WH<sup>1,3</sup>, Tan SS<sup>3</sup>, Noornajwa NY<sup>3</sup>, Aisah MW<sup>3</sup>

<sup>1</sup> University of Malaya, Kuala Lumpur, Malaysia

<sup>2</sup> Universiti Sains Malaysia, Kubang Kerian, Malaysia

<sup>3</sup> Sarawak General Hospital, Kuching, Malaysia

## Introduction

Visceral crisis (VC) is a form of advanced breast cancer that implies poor prognosis but was previously not well defined. In 2020, ESO-ESMO International Consensus has defined it as 'severe organ dysfunction, as assessed by signs and symptoms, laboratory studies and rapid progression of disease'.<sup>1</sup> It is a life-threatening condition when visceral metastases with heavy tumour burden have led to severe organ compromise requiring immediate efficacious management.<sup>1,2</sup> However, this condition is not widely understood and there is little data for reference. This study aims to study the demographics, clinical characteristics and outcome of patients who presented with visceral crisis in Sarawak.

## Materials and Methodology

This is a single-centre, observational, cross-sectional study carried out in Sarawak General Hospital from October 2022 to October 2023.

Inclusion criteria are patients who presented with VC in emergency setting. Exclusion criteria are patients who had previously received chemotherapy. Medical records, radiological and pathological reports were reviewed retrospectively. Patient's biodata and clinical outcome are tabulated in descriptive data.

### VISCERAL CRISIS CLINICAL OUTCOME

LATE PRESENTATION DUE TO FEAR  
OR LACK OF AWARENESS

NONE ABLE TO RECEIVE  
CHEMOTHERAPY

2 TERMINAL DISCHARGE

MORTALITY < 1 WEEK

## Results

A total of 11 patients were included over the one-year period. All are female with presenting ECOG 3-4 and average BMI 23.

2 patients (18.2%) have previously undergone unilateral mastectomy and axillary clearance for locally advanced breast cancer, 3 weeks and 10 months respectively before VC. Both did not receive chemotherapy because one was recently operated, while another had high risk of cardiotoxicity.

For the remaining 9 patients (81.8%), VC was their first presentation. They were diagnosed with breast cancer upon admission. 7 of them had clinically palpable breast masses and axillary lymphadenopathy, predominantly with T3-T4 diseases. 1 presented with pathological femur fracture with T3 breast cancer. Another patient presented with lung, brain metastasis with clinically impalpable breast mass that was CT-proven.

Lung VC was the predominant presentation (54.5%). 2 patients had hepatic VC (18.2%), another 2 combined lung and liver VC (18.2%). The remaining 1 had lung VC with pericardial involvement and passed away from cardiac tamponade despite pericardiocentesis.

All patients received ventilatory support and/or drainage but did not respond to treatment. 2 patients, upon learning their imminent death, opted for terminal discharge (18.2%). The rest passed away within a week of VC and breast cancer diagnosis. None were able to receive chemotherapy either due to hemodynamic instability or pending tissue diagnosis

Their histopathological examination showed 7 hormone receptor positive cancer (63.6%), 1 HER2 enriched (9.1%) and 3 triple-negative disease (27.3%).

Besides the 2 patients who previous history of breast cancer, all remaining 9 patients cited the fear of treatment and the lack of awareness about the disease as the main reason for late presentation.

## Discussion and Conclusion

Although early staged breast cancer is easily curable, visceral crisis is a late presentation that is poorly understood and often challenging to manage for both surgeons and oncologists.<sup>2,3</sup> While the distribution of breast cancer subtype is similar across literature, in our study, lung VC is a predominant presentation in our population, comparing to the more prevalent liver VC across literature.<sup>2</sup>

It is critical to recognize that local population tend to present at late stage due to fear or lack of awareness and none were able to receive chemotherapy. While our small sample size may have attributed to these differences, this indicates the need for stronger and more widespread breast cancer awareness programs in our local setting. More local data are required to study the presentation and prognosis of VC in Malaysia.

## References

- 1) 5th ESO-ESMO international consensus guidelines for advanced breast cancer (ABC 5) (2020). *Annals of Oncology*, 31(12), 1623–1649. <https://doi.org/10.1016/j.annonc.2020.09.010>
- 2) Benvenuti, C, Gaudio, M., Jacobs, F., Saltalamacchia, G., De Sanctis, R., Torrisi, R., Santoro, A., & Zambelli, A. (2023). Clinical Review on the Management of Breast Cancer Visceral Crisis. *Biomedicines*, 11(4), 1083. <https://doi.org/10.3390/biomedicines11041083>
- 3) Yang, R., Lu, G., Lv, Z., Jia, L., & Cui, J. (2022). Different treatment regimens in breast cancer visceral crisis: A retrospective cohort study. *Frontiers in Oncology*, 12. <https://doi.org/10.3389/fonc.2022.1048781>