Short term recurrence and survival rate of breast cancer patients post surgical treatment; north Borneo experience

ABSTRACT

Introduction: Breast cancer is the most common cancer among women and one of the major causes of mortality and morbidity worldwide. The aim of this study is to determine two-year cumulative recurrence rates and survival rates and their influential factors among women with breast cancer after surgical treatment. Methods: The breast cancer registry with focus on patient's outcome after treatment was retrospectively review for relevant data. The study was started on 2019. All breast cancer patients who underwent surgical procedure between 2016 and 2019 were identified and recruited in this study and was follow up for two year. We performed Kaplan Meier method to determine 2-year recurrence rates and survival rates and compared unadjusted survival statistics using Log-rank test between baseline variables and outcomes. Result: From 2016 to 2019, a total of 482 breast cancer patients underwent surgical procedure. The overall observed 2-year recurrence rate among breast cancer patients after surgical treatment was 11.8% (95% CI:8.5,16.4) while for the survival rate was 94.8% (95% CI:91.8,96.7). Log rank test showed that lymph node involvement ($p < 0.001$) and high lymph node ratio ($p < 0.001$) were associated with higher cumulative recurrence rates. Meanwhile, stage 4 breast cancer ($p = 0.001$), higher grade tumour ($p = 0.011$), larger tumour size (>5 cm) ($P = 0.005$) and type of tumour ($p = 0.018$) were demonstrated to have lower survival rates. Conclusion: Recurrence rate were significant predictor among patient with lymph node involvement and higher lymph node ratio, while stages of tumour, tumour grade, size of tumour and type of tumour were all highly significant predictor for survival rate. Therefore, the aim for early diagnosis and management of breast cancer is crucial in improving the treatment outcome.