

Retrospective Study Evaluating the Possible Causes for Early Mortality after Breast Cancer Surgery

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Introduction. In recent years there has been made a great progress in the treatment of primary breast cancer. Nevertheless, the development of metastasis is not clearly understood and the mortality rate is still high.

Aim, Material and Methods. In a retrospective study we examined possible causes for early mortality after breast cancer surgery. On request, we received data on 1143 patients from the National Cancer Registry diagnosed with breast cancer from January 2008 to March 2015 at Pauls Stradins Clinical University Hospital in Latvia. For 164 of these, the date of death was documented. We excluded 52 patients that did not meet the criteria of our research (no surgery or stage IV).

Results. That gave us a group of 112 patients with stage IA to IIIC with a known date of death and date of diagnosis that underwent surgery without proven distant metastasis. 81/112 patients died of breast cancer. 45/81 patients who died of breast cancer survived for less than two years. 36/81 patients survived longer than two years. Median survival in both groups was 10 month and 33 month, respectively. Further evaluation was continued only with the two groups who died due to breast cancer. Following data were compared: type of surgery, age, reproductive status, cancer type, TNM, stage (I to III), hormonal receptors, molecular subtypes. At the time of diagnosis the average age for the patients with less than two years survival was 70.3 years in comparison to 63.6 years in the group of patients with more than two years survival. Older aged patients are at a higher risk to die within less than two years. In both respective groups no significant difference was found when the stage at the time of diagnosis was compared. TNM classification shows patients diagnosed with T4 are at a higher risk for early mortality. The lymph node involvement was not predictive for the survival in both examined groups. No significant difference in the type of breast cancer, hormonal receptors and surgical approach was found.

Conclusions. It can be concluded that the general prognostic markers are of limited value to predict early mortality, and further research is necessary to the selected group of patients of very poor prognosis to improve their management.

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