Survival analysis of patients with 10 or more axillary lymph nodes compromised by breast cancer

Débora Medeiros de Carvalho¹, Josielly Ferreira Bacelar¹, Joarla Ayres de Morais Estevão¹, Emanuelle de Lima Barros¹, Mariana de Souza Arêa Leão¹, Josie Haydée Lima Ferreira Paranaguá¹, Carlos Eduardo Moura de Lima¹, Sabas Carlos Vieira²

¹Centro Universitário UniFacid – Teresina (PI), Brazil.
²Universidade Estadual de Campinas – Teresina (PI), Brazil.

Objective: The objective of this study was to evaluate survival in patients with 10 or more compromised axillary lymph nodes. Methodology: This is a retrospective cohort study conducted in a private oncology clinic in Teresina, Piauí, Brazil, in the period 1999–2023, where medical records of 12 patients with breast cancer who had 10 or more compromised axillary lymph nodes were analyzed. The following variables were observed: patient age, histological type of tumor, tumor size, lymphatic invasion, vascular invasion, perineural invasion, number of lymph nodes dissected, number of axillary lymph nodes compromised, treatment with radiotherapy and/or chemotherapy, occurrence of recurrence and/or metastasis, and patient survival. Survival functions were calculated using the Kaplan-Meier method. This study was approved by the Research Ethics Committee of the Universidade Estadual do Piauí (CEP-UESPI), Teresina, Piauí, Brazil, opinion number 4.311.835. Results: The mean age of the patients was 58.66 years. The mean tumor size was 4.6 cm. There was a predominance of invasive carcinoma of the non-special histological type (10–83.33%), followed by invasive lobular carcinoma (1–8.33%) and invasive tubular carcinoma (1–8.33%). As for lymphovascular invasion, 6 (50%) patients had vascular invasion, 7 (58.33%) had lymphatic invasion, and 3 (25%) had perineural invasion. The mean number of LAX compromised was 13.17, while the mean number of lymph nodes dissected was 20.25. Of the 12 patients, 9 were treated with radiotherapy (75%) and 10 were treated with chemotherapy (83.33%). Of the total, 6 (50%) patients had some form of recurrence, of whom 4 progressed to death. Distant metastasis occurred in 4 (30%) patients. Conclusion: The survival rate in a time interval of 5 years for patients with 10 or more compromised axillary lymph nodes was 51.6%.

Keywords: survival analysis; lymph nodes; breast cancer.