TUMOR SIZE AS THE BEST PREDICTOR FOR THE PRESENCE OF BREAST CANCER METASTASES IN AXILLARY LYMPH NODES

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The metastasis of breast cancer to the axillary lymph nodes represents a crucial aspect of disease progression and prognostic evaluation. The presence of metastases in the axillary lymph nodes is a key indicator that breast cancer is in an advanced stage, which can influence the therapeutic approach and the patient's prognosis. For this reason, we conducted a study aimed at examining the factors that contribute to the presence of metastases in lymph nodes in our female population. This research represents a prospective study conducted at the Institute of Oncology of Vojvodina in Sremska Kamenica. The study included 72 female participants diagnosed with breast cancer who underwent surgery at the Institute of Oncology of Vojvodina and had not received preoperative chemotherapy or radiation therapy. Initially, anamnestic data were collected from the participants, followed by a pathohistological analysis of the tumor tissue samples, including immunohistochemical analysis. We examined the influence of age, tumor size, activity of estrogen, progesterone, and HER2 receptors (human epidermal growth factor receptor-2) in tumors, as well as the occurrence of menarche and breastfeeding duration, on the presence of metastases in axillary lymph nodes. The results of binary logistic regression showed that the only significant predictor for the presence of metastases in axillary lymph nodes was tumor size (p=0.01, Wald=6.57, and Exp(B)=1.11), while the other examined predictors were not statistically significant (p>0.05). In our study population, the size of the breast cancer was crucial for the presence of metastases in the axillary lymph nodes.