ABSTRACT

Previous studies have demonstrated right or left lateralization of some paired organ cancers and left-sided asymmetry of different lymph nodes. We investigated left–right asymmetry lateralization of breast cancer and distribution of involved/ non-involved axillary lymph nodes following metastatic invasion in patients with breast cancer. One hundred and sixty five women who underwent axillary lymphadenectomy during the study period were included. Right or left axillary nodal regions were removed and sent for pathologic examination. Lymph nodes were palpatorily identified, isolated from fat tissue, counted and macroscopically examined. Pathological examination was performed on formalin fixed specimens. We found left-sided lateralization for breast cancer in this study group. Both total number as well as the number of axillary lymph nodes involved by metastatic breast cancer cells were higher on right side in patients with breast cancer on the right side. Although the mechanism is not known, and further investigation is needed, this phenomenon may be the result of stronger cell-mediated immune activity in the left sides of humans.