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RELATIONSHIP BETWEEN IMMUNOHISTOCHEMICAL CHARACTERIZATION AND FORM OF DIAGNOSIS OF BREAST CANCER

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Introduction: Breast cancer is the most incident neoplasia among Brazilian women. According to immunogenetic characteristics, it is possible to verify that malignant breast neoplasms with greater biological activity would be those classified as luminary B, HER2+ and triple-negative, and that the one with the lowest biological activity would be the luminal subtype A. Thus, a mammography would be more likely to detect cancers with a low degree of biological characteristics such as “luminal A”. On the other hand, mammary carcinomas with greater potential for systemic dissemination show faster growth in the breast parenchyma and are detected predominantly by self-examination. Knowledge of this difference in the clinical behavior of mammary malignant neoplasms is important for the diagnosis of “interval” breast cancers, that is, breast cancer that appears in the period between the performance of annual screening mammograms. **Objectives:** Verify the relationship between immunohistochemical characterization of malignant breast neoplasms and the finding that motivated the medical consultation, in women with breast cancer and residents of Western Santa Catarina, Brazil. **Methods:** Observational, cross-sectional study, which included women diagnosed with breast cancer and treated at an oncology referral center in the city of Chapecó, state of Santa Catarina, Brazil, from January 2000 to December 2016. Patients that presented medical records whose main complaint was towards the diagnosis of breast cancer were included (example: nodule diagnosed by imaging exams, self-examination, clinical examination). Besides this, the breast injury related to this complaint should have been breast cancer diagnosed by an anatomopathological examination and an immunohistochemistry study. The project was developed in accordance to CEP/UNOCHAPECO no. 1819869. **Results:** Data from 209 patients were analyzed, from which 83 (39.7%) cases of breast cancer were detected by a mammography examination; 115 (55%) cases by breast self-examination and 11 (5.2%) cases by other forms of examination, which included clinical breast examination done by a doctor, magnetic resonance imaging and ultrasound. The luminal A immunohistochemical profile was more prevalent among patients who underwent breast cancer detection through mammography (62.6%). There was a correlation between lymph node invasion and the screening method, in which 78.6% of cancers detected by self-examination showed expansion to lymph nodes, while those detected by mammography presented an invasion rate of 45.7% ($p=0.002$). **Conclusions:** Breast cancer with immunohistochemical characterization, related to greater biological activity, were most often detected by self-examination, while neoplasms with indolent development were diagnosed predominantly by mammography.