CLINICAL EOIDEMIOLOGICAL ASSESSMENT OF TAXONOMIC CHARACTERISTICS OF BREAST CANCER

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Background:
Clinical characteristics of the course of breast cancer related to taxonomic types are widely studied in the literature. Taxonomic structure of breast cancer and related prognostic indicators have not been studied in Georgia.
Methods:
In order to determine characteristics of the taxonomic structure of cancer, a retrospective epidemiological study, based on the database of 1,985 patients with breast cancer was conducted at the Institute of Clinical Oncology in 2012-2022. For taxonomic subtyping of breast cancer, the method of immunohistochemical study of tumor was used. The dBase of clinical-laboratory data of patients with breast cancer for epidemiological assessment was processed with the SPSS statistical software.
Results:
More than 1/3 of the cases of breast cancer were Luminal A taxonomic subtype (36.0%), 1/3 - Luminal-B + HER2-negative taxonomic subtype (33.9%), and less than 1/3 - other taxonomic subtypes: Luminal-B + HER2-positive (7.9%), HER2-positive (5.6%), Triple negative (6. 9%) and unknown taxonomic subtype (9.7%).
According to Kaplan-Maier curves, the highest 5-year survival rate (92.0%) was observed in the Luminal A subtype of breast cancer. Compared to the average survival level (80.8%), a higher rate was observed for Luminal B (84.7%), and slightly lower - for HER2 Positive (79.5%).
Compared to Luminal A taxonomic type, 5-year risk of breast cancer recurrence is 14.9 times higher in Triple Negative type, 12.9 times in HER2 Positive type and 7.2 times in Luminal B taxonomic type (p<0.001).
Conclusion:
Georgian Population Cancer Registry needs to add to its electronic database a variable denoting taxonomic type of breast cancer to improve cancer management and patient health advocacy for this site cancer.
Key messages: It would be interesting to study the peculiarities of oncogene expression in taxonomic types of breast cancer.
Key words: breast cancer taxonomy, Georgia