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1184 – Epidemiological profile of breast cancer in young women with hormone receptor-negative tumors: analysis of the number of surgical procedures and lesion size

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Introduction: Breast cancer (BC) accounted for approximately 6.6% of global cases occurring in patients under 40 years of age. In this population, the risk of incidence is associated with aggressive pathological features, such as negativity for hormone receptors and HER2 overexpression, or the presence of the triple-negative molecular subtype. Furthermore, genetic factors exhibit a significant impact, linked to high-penetrance genes such as the classic BRCA1 and BRCA2, as well as the TP53 and PTEN, among others. Regarding treatment, the surgical approach is the most common, including procedures such as simple mastectomy (SM), radical mastectomy (RM), and segmental resection with or without axillary dissection (SRWD and SRWoD).

Methods: An ecological study using data collected from the DATASUS secondary database, from the Cancer Information System, based on breast histopathological examinations. The number of surgical procedures and lesion size were collected from 2016 to 2025, nationwide, in patients under 40 years of age with negative estrogen and progesterone hormone receptors.

Results: A total of 33 SM, 35 RM, 19 SRWoD, and 12 SRWD procedures were recorded. Over time, there was an increasing trend in the number of surgical procedures, reaching a peak in 2024. As for the lesions, in ascending order of size, the following was obtained: 136 (<2 cm), 162 (2–5 cm), 61 (5–10 cm), 26 (>10 cm) and 18 were not palpable. Due to limitations in the database, it was not possible to determine whether HER2 expression was present in tumor cells, although the literature indicates that overexpression is common.

Conclusion: An increase in surgical procedures over time was observed, with a predominance of mastectomies, possibly related to the more aggressive profile of BC in young women. These findings reinforce the importance of early diagnosis and individualized treatment, combined with genetic testing, especially in these cases.

Ethics: Public data.

Keywords: young adult; oncogenetics; genetic predisposition to disease; surgical procedures; breast cancer.