

QUADRANTECTOMY PROCEDURE FOR THE TREATMENT OF BREAST NEOPLASIA IN BRAZIL: TEMPORAL ANALYSIS FROM 2014 TO 2024

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Introduction: Breast cancer is the most diagnosed neoplasm worldwide and one of the main causes of female morbidity and mortality. Quadrantectomy, indicated in early stages, is a conservative surgery that removes the tumor and the affected breast quadrant, and can be performed in a standard way—with resection of breast tissue, skin, and subcutaneous tissue—or subcutaneously, preserving these structures with a discreet periareolar incision. This approach maintains oncologic radicality while offering better aesthetic outcomes and reduced need for oncoplastic interventions. **Objectives:** To analyze the performance of quadrantectomies for the treatment of breast neoplasms in Brazil between 2014 and 2024. **Methods:** This is an epidemiological, descriptive, and quantitative study using data from the SUS Hospital Information System (SIH-SUS), available on DATASUS. Oncologic quadrantectomy procedures performed in Brazil between 2014 and 2024 were analyzed, considering variables such as year of hospitalization, regions, care regimen, deaths, average hospitalization cost, and average length of stay. **Results:** A total of 77,359 oncologic quadrantectomies were recorded in the period, with a significant drop in 2020 (5,595 cases, -24.4% compared to 2019). The North Region accounted for 4.3% of procedures (3,364 cases), while the Southeast accounted for 51.7% (40,019 cases), with the North showing the highest proportional growth of 380% (from 124 to 596 cases). Regarding the care regimen, 81.7% of records (63,541) were classified as “ignored,” and among the identified, 13.3% were in the private sector (10,350) and 5.0% in the public (3,880). The mortality rate was 0.08% (61 deaths), with no records in the North and 45.9% in the Southeast (28 deaths). The national average cost per hospitalization was R\$ 2,372.03, ranging from R\$ 2,401.00 in the North to R\$ 2,329.92 in the Midwest, with the South showing the fourth highest cost (R\$ 2,365.33). The average length of stay was 1,4 days, ranging from 2,8 days in the North to 1 day in the South. **Conclusion:** The drop in 2020 suggests the impact of the COVID-19 pandemic on cancer care, possibly due to the suspension of elective surgeries and resource reallocation. Although the North showed expressive proportional growth, its absolute numbers remain low, while the Southeast concentrated over half of the procedures, reflecting historical inequalities in access to primary care, early diagnosis, and technology. The high proportion of “ignored” records hinders the analysis between SUS and private sector, evidences reporting failures, and complicates evidence-based

policies. The low mortality rate suggests procedural safety, but the concentration of deaths in the Southeast may reflect underreporting or higher population density. The stability in costs and average stay, with slight disparity in the North, suggests the consolidation of quadrantectomy as a standardized SUS practice, despite regional limitations. It is concluded that the performance of quadrantectomies in Brazil reflects regional disparities in access to breast cancer treatment, highlighting the need for further studies to explore these gaps and guide more effective public policies.

Keywords: Quadrantectomy; oncology; breast neoplasms.