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Epidemiology of male breast cancer in Brazil

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Introduction: Male breast cancer is a rare disease, accounting for less than 1% of all breast cancer cases. In Brazil, data on its epidemiology and treatment patterns remain limited. **Objectives:** This study aimed to analyze the clinical and epidemiological characteristics of male breast cancer patients diagnosed in Brazil between 2000 and 2022. **Methods:** Data were extracted from the Brazilian Hospital Cancer Registries via the National Cancer Institute (INCA) database, covering 239 cancer centers across all regions. Variables analyzed included age, race, education, tumor characteristics, clinical stage, histology, treatment modalities, and geographic disparities. Only microscopically confirmed in situ and invasive tumors (ICD-10 C50) were included; non-epithelial neoplasms were excluded. Data analysis was conducted using R software. **Results:** A total of 4,918 cases of male breast cancer were identified. The highest number of cases occurred between 2015 and 2019. The mean age at diagnosis was above 60, with 75.7% of patients aged ≥50 years. Most were white (38.7%) or brown (30%), and 43% had ≤8 years of schooling. Southeast and Northeast accounted for the majority of cases. Tumor staging revealed a predominance of stage II (26.6%) and stage III (24.3%) disease. The most frequent tumor location was in the upper outer quadrant. Surgery was the most common initial treatment, followed by chemotherapy, radiotherapy, and hormone therapy. Only 3% of patients received no oncological treatment. A significant proportion of patients (60.8%) traveled to another city for treatment. **Conclusion:** This study presents one of the most comprehensive national overviews of male breast cancer in Brazil, revealing significant disparities in diagnosis and access to care. The data highlight the need for improved awareness and earlier detection. Further research is crucial to support evidence-based care for this underserved population.

Keywords: male breast neoplasms; clinical epidemiology; Brazil.