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COMPARATIVE ANALYSIS BETWEEN SCREENING MAMMOGRAPHY PERFORMED IN PATIENTS AT USUAL RISK AND PATIENTS AT HIGH RISK FOR BREAST CANCER

Gabriel Duque Pannain¹, Marcelo Antonini¹, Odair Ferraro¹, Andre Mattar^{2,} Reginaldo Guedes Coelho Lopes¹, Juliana Monte Real³

¹Instituto de Assistência Médica ao Servidor Público Estadual – São Paulo (SP), Brazil. ²Universidade Federal de São Paulo – São Paulo (SP), Brazil. ³Hospital Sírio-Libanês – São Paulo (SP), Brazil.

Objective: The aim of this study was to analyze the incidence of reports highly suggestive of malignancy in patients undergoing mammography in Brazil between 2013 and 2021. Methods: This is a retrospective and analytical cross-sectional study. A retrospective analysis of the reports available in the cancer information system (SISCAN) was performed, comparing the incidence of BI-RADS 4 (B4) and BI-RADS 5 (B5) reports between high-risk women (HRW) and women at risk (WAR) for breast cancer. Those women who registered in the system as high-risk with a positive family history or personal history of breast cancer were considered HRW. The B6 reports were excluded from the analysis since they are not a screening test but a follow-up test. Results: Of the total, 31,045 HRW had B4 on mammography, 76,329 WAR had B4 on mammography, 6,484 HRW had B5, and 12,757 WAR had B5. Using the SPSS Statistics software, the difference in proportion between them was calculated, and it was observed that being a WAR is a protective factor when compared to HRW for the diagnosis of B4, with the relative risk (RR) being 0.5412 (95%CI 0.5341-0.5483) for B4 and RR 0.433 (95%CI 0.4203-0.4462) for B5. The number needed to cause harm was also evaluated and showed that 203 (95%CI 198–209) mammograms with B4 in HRW are needed to diagnose a B4 in WAR and that 788 mammograms with B5 in HRW (95%CI 754-825) are needed to diagnose a B5 in WAR. Conclusion: This study showed an increased prevalence of reports suggestive of malignancy in high-risk patients when compared to usual-risk patients. Such findings may mean that high-risk patients have a higher prevalence of malignancy, but also that physicians analyze high-risk patient examinations more carefully, potentially increasing the rate of reports suggestive of malignancy in these patients.

Keywords: Mammography. Screening. Breast cancer.