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Epidemiological and immunohistochemical analysis of young women with breast cancer in a public hospital of the Unified Health System of the Federal District

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Objective: To outline the epidemiological and immunohistochemical profile of young women with breast cancer treated at a hospital of the Brazilian Unified Health System. **Methods:** This is a cross-sectional, retrospective study that analyzed women with breast cancer under 40 years of age in a public hospital in the Federal District from January 2017 to January 2023, using the Trakcare[®] platform. The study was approved by the ethics committee (CAAE: 66697522300005553; Opinion 5907638). **Results:** Of 383 women with breast cancer, 62 (16%) were under 40 years of age. Among them, 2.3% were aged 20–24 years, 7.2% were between 25–29 years, 32.3% were 30–34 years, and 58.1% were 35–39 years. The subjects were 46.2% brown, 27.6% white, and 9.5% black. Regarding parity, 21% were nulliparous and 79% had one or more pregnancies. The mean age at menarche was 13 years. Approximately 36.7% used oral hormonal contraception; 19% had a positive family history for breast cancer; 8.1% were smokers; and 12.9% were alcoholics. The histopathological results in 38 (61.29%) patients were infiltrating ductal carcinoma, infiltrating lobular carcinoma in 14 (22.58%), and ductal in situ in 10 (16.12%). The most prevalent molecular subtype was luminal B in 19 (30.64%) patients and non-basal triple negative in 18 (29.03%), followed by luminal A in 13 (20.96%), human epidermal growth factor receptor-type 2 (HER2) in 7 (11.29%), and hybrid luminal in 5 (8.06%). **Conclusion:** Young women with breast cancer had a median age of 35 years. Those with a positive family history and who used combined hormonal contraceptives had a higher incidence of the disease. Non-specific invasive carcinoma, luminal B, and triple negative predominated, attesting to the higher prevalence of more aggressive tumors. The analysis outlined the profile of young women who deserve attention regarding early screening for breast cancer.

Keywords: breast cancer; clinical epidemiology; immunohistochemistry.