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## 537 - SYNCHRONOUS BILATERAL CARCINOMA IN SITU: A CASE REPORT

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Synchronous bilateral breast carcinoma (SBBC) is defined as the simultaneous presence of two primary tumors at diagnosis, one in each breast. It is also considered synchronous when the ipsilateral cancer is diagnosed within 12 months of the first diagnosis. No consensus has been reached on the origin of SBBC, as it can be interpreted as either a metastasis or a new primary tumor, and its prognosis is controversial. As this tumor is rare and requires further investigation, this study aims to report the case of a patient with SBBC with different biological characteristics. A woman, 63 years old, white, was referred to a private clinic in Rio de Janeiro, in June 2021 because her mammography was classified as BI-RADS IV. Menarche at 13 years, gravida 1 para 1. Menopause: 48 years, oral hormone therapy for 5 years. She has two maternal cousins with breast cancer who were diagnosed after the age of 50 years. She receives treatment for depression and denies other diseases. Physical examination: small breasts, no swelling or retraction. Palpation: left breast (LB) was more diffusely dense in the junction of outer quadrants. Negative papillary expression was found on both sides and axillae without suspicious lymph nodes. Mammography — June 2021: LB with amorphous calcifications with a 20 mm length in the 1/3 depth of the left lower quadrant (category IV). Right breast (RB): benign calcifications (category II). Breast ultrasound (June 2021): Category I. LB mammotomy: ductal carcinoma in situ (DCIS). Immunohistochemistry: estrogen receptor positive, progesterone receptor negative, and positive CREB-B2. She underwent stereotactic excision of the LB lesion and sentinel lymph node biopsy. Result: Negative sentinel lymph node, ductal carcinoma "in situ" with comedo, cribriform, micropapillary, and solid patterns; nuclear grade 3; presence of necrosis; and lobular cancerization. Positive superior, inferior, and anterior surgical margins were observed. Extent of margin involvement: moderate. Pathological staging: pT1mi pN0. Given the positive margins in the small volume breast and the extensive intraductal component, the treatment given to the patient was bilateral skin and nipple-sparing mastectomy with prosthesis implantation. Histopathological results of the skin and nipple-sparing mastectomy were as follows: LB: (micro)invasive breast carcinoma of no special type, with four foci of microinvasion. Presence of ductal carcinoma in situ with comedocarcinoma, cribriform, micropapillary, and solid architectural patterns; nuclear grade 3. Surgical margins were free of neoplasia. Nipple-areola complex with a focus on ductal carcinoma in situ, solid pattern, and intermediate-grade lobular cancerization were observed. The surgical margin was free of neoplasia. Pathological classification (AJCC/8aed): pT1mi (m) pN0. RB: ductal carcinoma in situ, cribriform architectural pattern, and nuclear grade 1; absence of necrosis and microcalcifications; and good cosmetic surgical result. Although SBBC is rare (ranges from 0.3% to 12% of breast cancer cases), it must always be remembered and investigated in screening tests and physical examinations, especially in patients at high risk of developing breast cancer, in order to contribute to timely diagnosis and treatment and to improve the woman's prognosis. In this case, the findings of carcinoma in situ of the LB associated with comedonecrosis, high nuclear grade, HER2 positive, and microinvasions justify the warning for investigating lesions in the contralateral breast. The surgical choice may vary according to the optimal referral for the treatment of each lesion — mastectomy is not mandatory — providing similar survival.