

Synchronous bilateral breast carcinoma. A case report

Carcinoma de mama bilateral sincrónico. Presentación de un caso

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Summary

Introduction: Synchronous bilateral breast cancer is defined by some authors as the simultaneous appearance of tumors in both breasts. Studies indicate that the frequency of these carcinomas range from 1.4 to 11.8%. Currently, breast ultrasound and mammography are the recommended screening methods to detect initial lesions. **Objective:** To describe a rare simultaneous bilateral breast carcinoma case. **Case report:** We present the case of a 67-year-old woman, with no personal or family history of breast cancer, who attended a mastology consultation due to focal volume increase in the right breast. Digital mammography was performed, identifying high-density spiculated nodular images in both breasts with BIRADS-5 classification. A study was completed with fine-needle cytology and postoperative biopsy, obtaining the result of bilateral ductal carcinoma with metastasis to the right axillary node. **Conclusions:** Bilateral breast carcinoma, despite being an entity of exceptional appearance, can be identified in advanced clinical stages in patients with no family history, so it is important to evaluate both breasts in imaging studies, to rule out synchronous lesions, requesting the relevant bilateral biopsies for histopathological conclusion.

Resumen

Introducción: El carcinoma de mama bilateral sincrónico se define por la aparición de tumores simultáneos en ambas mamas. Estudios indican que la frecuencia de estos carcinomas oscila entre 1,4 y 11,8 %. Actualmente, la ecografía mamaria y la mamografía constituyen los métodos de cribado aconsejables para detectar lesiones iniciales. **Objetivo:** Presentar un caso infrecuente de carcinoma bilateral simultáneo. **Presentación de caso:** Se trata de una mujer de 67 años de edad, sin antecedentes personales ni familiares de cáncer de mama, que acude a consulta de mastología por aumento de volumen focal en la mama derecha. En mamografía digital se identifican imágenes nodulares espiculadas de alta densidad en ambas mamas, con clasificación BIRADS-5. Se completó el estudio con citología por aguja fina y biopsia posoperatoria con el resultado de carcinoma ductal bilateral con metástasis al ganglio axilar derecho. **Conclusiones:** El carcinoma bilateral de mama, a pesar de ser una entidad de aparición excepcional, se puede identificar en estadios clínicos avanzados en pacientes sin antecedentes familiares, por lo que es importante la evaluación de ambas mamas en los estudios de imagen, para descartar lesiones sincrónicas con las pertinentes biopsias bilaterales para su conclusión histopatológica.

Introduction

Infiltrating ductal carcinoma comprises 50-90% of breast carcinomas, prone to be intermediate to high grade. It arises within the terminal duct of the terminal ductolobulillar unit and has extensive intraductal components (1).

Synchronous bilateral breast carcinoma is defined by the occurrence of a simultaneous tumor in each breast. However, at present there is still a diversity of concepts, for example, for some, contralateral cancer diagnosed within three, six or twelve months is called synchronous and outside these periods, metachronous. Studies indicate that the frequency of simultaneous bilateral carcinoma ranges between 1.4 and 11.8% (2-4).

Currently, breast ultrasound and mammography are the recommended screening methods to detect

initial lesions, complemented by core needle biopsy which allows a better identification and evaluation of the lesions, based on histology (5).

Case presentation

A 67-year-old female patient with a history of two childbirths, breastfeeding in both cases for 6 months of duration, who comes to the mastology office for presenting focal enlargement of the right breast. There was no family history of breast cancer and no previous breast ultrasound or mammography studies. Digital mammography was performed with CC and MLO projections of the right breast (Figure 1) and left breast (Figure 2), with findings of ACRA fibroadipose breast pattern, bilateral vascular calcifications and BIRADS-5 lesions in both breasts.

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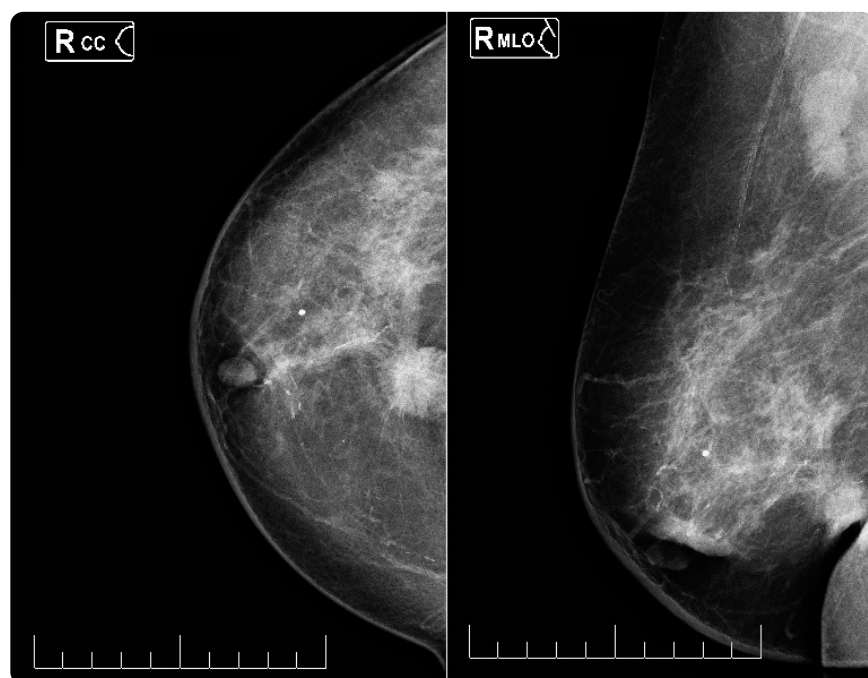


Figure 1. Mammography, CC and MLO projections of the right breast. In the lower inner quadrant an irregular nodule of spiculated margins with high density, 2.3 × 2.1 cm in diameter, with associated pleomorphic microcalcifications (BIRADS-5) is observed. In addition, two pathological lymph nodes are observed in the right axilla, with rounded morphology, without fatty hilum and with high density.

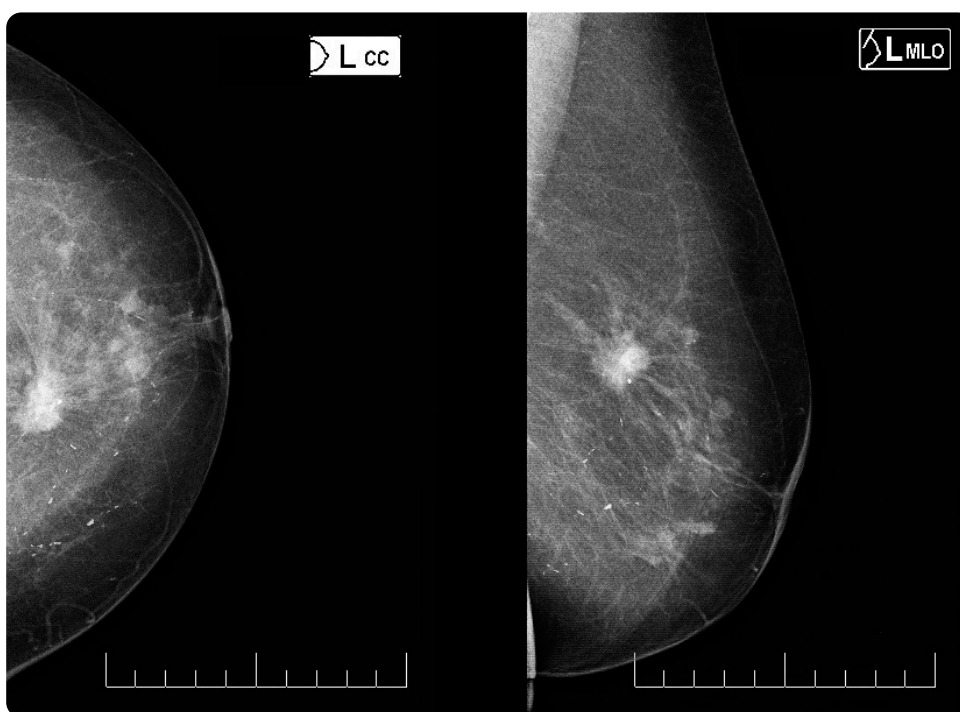


Figure 2. Mammography, CC and MLO projections of the left breast. In the superointernal quadrant there is a second irregular, spiculated, hyperdense nodule measuring 1.0 × 2.1 cm, also BIRADS-5 category. No pathologic nodes were found in the left axilla.

Bilateral fine needle aspiration cytology (FNAC) was performed with positive result of neoplastic cells and the study was completed with postoperative biopsy (histopathological analysis), which confirmed the diagnosis of bilateral ductal carcinoma with metastasis to right axillary nodes.

Discussion

Among the risk factors for bilateral breast cancer, age has been identified, as young patients with breast cancer are 10 to 14 times

more likely to develop contralateral breast cancer. On the other hand, among the family history, the early age of onset in the family member is important, as well as a history of bilaterality in the mother. Recently, BRAC-1 germline mutations have been published in patients with a history of bilateral breast cancer, and it has also been proposed that exposure to ionizing radiation may confer some risk for developing a second contralateral primary; however, this point is highly controversial. Other factors related to bilaterality have been advanced clinical stages, multicentricity, atypical hyperplasia and the presence of lobular streaks (6, 7). Orea et al. identified that 75% of synchronous tumors

corresponded to advanced clinical stages (4). In the case described, the patient lacked most of the risk factors for bilaterality exposed, since she was an older adult patient with no relevant family history; however, her detection is attributed to the advanced stage at which the diagnosis was made.

Regarding histology, infiltrating ductal carcinoma is the most frequent (4, 5), which coincides with the histopathological diagnosis of both lesions in the patient. Several studies support that regardless of whether detection is in early stages, mastectomy is the approach of choice in most patients (7). The clinical significance of bilateral breast cancer is not clear and its influence on prognosis is controversial; some authors support that it has a worse prognosis, which is attributed to the combined effect of having two cancerous lesions simultaneously, and others consider that the prognosis is similar to that of patients with unilateral carcinomas (7, 8). The patient received surgical treatment and later adjuvant treatment with chemotherapy and radiotherapy. She was followed up with ultrasound controls every three months during the first year after completion of adjuvant therapy, with no evidence of local recurrence. At present, it is followed up every six months with imaging results without recurrences.

Conclusions

Bilateral breast carcinoma, despite being an entity of exceptional occurrence, can be identified in advanced clinical stages in patients with no family history, so it is important to evaluate both breasts in imaging studies, to rule out synchronous lesions with the relevant bilateral biopsies for histopathological conclusion.

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