

Metaplastic breast carcinoma with extensive osseous differentiation: a report of two cases and review of the literature

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ABSTRACT

Invasive breast cancer with osseous metaplasia is rare. Here we report two cases of metaplastic breast carcinoma with extensive osseous differentiation. Case 1: The patient was a 60-year-old woman with a right breast tumor, about 4 cm in diameter. Mammogram and ultrasound presented an irregular-shaped mass suspected for malignancy. Core needle biopsy confirmed invasive carcinoma and the patient underwent a modified radical mastectomy. Case 2: The patient was a 48-year-old woman with a left breast tumor, about 3 cm in diameter. Mammogram demonstrated a well-circumscribed mass with extensive dense calcifications. Frozen section biopsy confirmed invasive carcinoma and a modified radical mastectomy was performed. The two patients had no metastatic carcinoma in the axillary lymph nodes and remained free of recurrence and systemic metastases in a 13- and 4-month follow-up period, respectively. Histopathologically, patient 1 had an adenocarcinoma with prominent sarcomatous (osteosarcomatous) differentiation with intervening spindle cells. The sarcomatous areas showed high nuclear atypia, pleomorphism and a high Ki-67 index. In Case 2, the neoplasm consisted of invasive ductal carcinoma of no special type with an osseous metaplasia component and showed a direct transition from the carcinoma to the osseous elements. The distinction between the different types of metaplastic carcinomas, specifically the distinction between benign and malignant metaplastic (osteoid) elements, should be taken into consideration.

Key words: metaplastic breast carcinoma, osseous differentiation.

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