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## PRIMARY ANGIOSARCOMA OF THE BREAST: A CASE REPORT

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A 39-year-old woman presented to our mastology session with complaints of a right breast lump in 2014, which had grown very slowly and changed in color over the past year (purple). On physical examination, the breast was found in a 12-1 o'clock position, bruise-like, and soft-to-firm in consistency. On mammography, the lump presented diffuse-dense and ultrasonography showed an ill-defined mass and poor-delimited hyperechogenic infiltration in the upper inner portion of the right breast that measured about 7 cm in size. A core biopsy was performed on the suspicious lesion. The pathological result was necrotic breast tissue. A second core biopsy was performed with the diagnosis of malignant neoplasia, poorly differentiated. The immunohistochemistry was diagnosed with moderate-differentiated angiosarcoma. A modified mastectomy was performed and the initial diagnosis was confirmed. After that, she received adjuvant chemotherapy, but the treatment was interrupted due to epístaxis, hematemesis, and body paresthesia. After this, the progression of the disease was observed with metastasis in the lungs, stomach, mouth, gum, and brain. She was subjected to palliative treatment and died in November 2015. Discussion: Primary angiosarcoma of the breast is a very rare disease and corresponds to less than 1% of breast malignancies. Mammary angiosarcoma should be differentially diagnosed from benign hemangiomas, phyllodes sarcomas, stromal sarcomas, metaplastic carcinomas, fibrosarcomas, liposarcomas, squamous cell carcinomas with sarcomatoid features, myoepitheliomas, fibromatoses, and reactive spindle cell proliferative lesions. CD31 is a sensitive marker for this class of cancers, and CD34 positively ranges from 40% to 100%. These markers could help with the accurate diagnosis of angiosarcoma. Pathologically, these tumors are divided into three groups according to the classification proposed. Well-differentiated (grade I) tumors consist of anastomosing vascular channels that invade the surrounding breast tissue. Moderately differentiated (grade II) tumors have more solid neoplastic vascular growth and an increased mitotic rate. Poorly differentiated (grade III) lesions have obvious sarcomatous areas and areas of necrosis, hemorrhage, and infarction. In conclusion, primary mammary angiosarcoma is a rare neoplasm of the breast that affects a younger female population, compared to breast carcinomas, and has aggressive clinical behavior. Difficult differential diagnoses, due to atypical characteristics, can delay management.

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