https://doi.org/10.29289/259453942024V34S1102

Radio-induced breast angiosarcoma: case report

Maria Luiza Bessa de Paula[1], Luiz de Paula Silveira Júnior[2], Luiz de Paula Silveira Neto[3], Sebastião Alves Pinto[4]

[1]Centro Universitário de Center.
[2]Institute of Mastology and Oncology Ltd.
[3]Centro Universitário do Planalto Central Apparecido dos Santos, Universidade do Distrito Federal.
[4]Goiano Institute of Oncology and Hematology.

Objective: This study aimed to describe a case of radio-induced angiosarcoma after conservative surgery of the right breast, as, due to the low incidence of this neoplasm, experience in the different services is limited. Therefore, the authors call for strict follow-up, especially due to the appearance of skin changes after radiotherapy, with the aim of making an early diagnosis of the disease. **Methodology:** To write the following case report, the authors carried out a literature review in the following databases: PubMed, LILACS, VHL, NICE, Cochrane Library, and Scielo. **Results:** The authors describe the case of a 79-year-old female patient with a history of the appearance 2 months ago of an erythematous-violaceous spot, with a brownish halo, painless, measuring approximately 1.5×2.0 cm in its largest axes, with irregular edges and hardened consistency, located at the junction of the upper quadrants of the right breast and over the surgical scar. The aforementioned patient had undergone quadrantectomy and study of the sentinel lymph node (negative) 20 years ago for invasive ductal carcinoma, followed by 30 sessions of radiotherapy (5040 cGy) and endocrinotherapy with tamoxifen citrate (5 years) and letrozole (1 year). **Conclusion:** After incisional biopsy, the pathological anatomy revealed that it was an atypical vascular lesion. Immunohistochemistry demonstrated positivity for antigens related to CD31 and CD34, the absence of estrogen receptors, and amplification of the C-MYC oncogene, which confirmed the diagnosis of radiotherapy-induced angiosarcoma, in addition to grade III anaplasia. The mammogram only demonstrated skin thickening in the upper quadrants of the right breast (BI-RADS 2) and the breast ultrasound showed well-defined subcutaneous nodular formations, parallel to the skin, with parietal calcifications suggestive of steatonecrosis (BI-RADS 3). Subsequently, the patient underwent a modified Madden radical mastectomy and a study of the thoracic-lateral sentinel and parasentinel lymph nodes, which were negative for malignancy. The patient is well and is being followed up.

Keywords: radio-induced; angiossarcoma; breast.