High-grade breast sarcoma in a young patient: Case report

Deborah Branco Ferreira Perilo¹, Fernanda José de Toledo⁰, Paulo Victor Monteiro Quinan¹, Mariana Abrahão Helou Kaluf¹

¹Hospital das Clínicas, Universidade Federal de Goiás – Goiânia (GO), Brazil.

Introduction: Primary breast sarcoma is a rare type of cancer, accounting for less than 1% of breast cancers. They originate from mesenchymal tissue, and the mean age of patients varies between 51 and 75 years, with most being poorly differentiated. However, it can present as an invasive disease with high metastatic potential and resistance to conventional treatments.

Objective: The objective of this was to report a case of breast sarcoma in a young patient.

Methodology: This is a case report about a patient followed throughout her treatment from diagnosis, with detailed anamnesis and physical examination being performed, as well as complementary tests for diagnosis confirmation and appropriate treatment.

Case report: Female, 25 years old, presented in December 2016 with an 18×15 cm mass in the right breast. She underwent ipsilateral mastectomy, lymphadenectomy, and thoracectomy. Histopathology revealed high-grade sarcoma, staged pT3N0. Chemotherapy with ifosfamide and doxorubicin, 4 cycles, and radiotherapy, 30 fractions, were proposed, ending in August 2017. In November 2019, she presented with pulmonary progressive disease (PD) and was treated with docetaxel and gemcitabine, 6 cycles, with a partial response, until it was suspended due to toxicity. Started maintenance therapy with gemcitabine, 3 cycles, and presented with new pulmonary PD in November 2020. Second-line therapy with 2 cycles of epirubicin was initiated. After the third pulmonary PD in January 2021, she underwent oral cyclophosphamide for 3 cycles. In June 2021, after a new PD in the lungs, fourth-line palliative therapy with pazopanib was proposed and started in August 2021, maintaining treatment until death in September 2021.

Conclusion: Surgery is the preferred modality for curative treatment of sarcoma, and adjuvant radiotherapy is typically added to surgery as standard treatment for high-grade lesions. Adjuvant chemotherapy is considered a treatment option, especially for large tumors or those with lymph node involvement. Palliative chemotherapy should follow protocols used in soft tissue sarcoma and can help reduce tumor size, relieve symptoms, and improve life quality.

Keywords: breast cancer; sarcomas.