Primary cardiac sarcoma: case report

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Introduction: Primary cardiac tumors are very rare, with just 25% being malignant and 65% being sarcomas.[1] The clinical expression of the disease is mostly determined by the tumor's location; therefore, the range of symptoms is wide. The diagnosis is often established between the ages of 40 and 50[2], with a median survival time of 6 to 12 months[3].

Case report: The purpose is to present the case of a healthy 35-year-old woman who was diagnosed with cardiac sarcoma in April of this year. The patient was admitted to the hospital for treatment of suspected pericarditis, and an echocardiogram was performed to identify the suspicious tumor in the right ventricle. In the context of the observations, a radiological examination was undertaken, which verified the tumor mass in the right ventricle, which is pushed into the lumen of the right atrium and shows no distant indications of the disease. A biopsy of the tumor reveals changes consistent with sarcoma. Considering the size of the formation, chemotherapy is initiated, with surgical treatment excluded as a possibility. Following three cycles of chemotherapy and repeated discussion of surgical treatment, the patient underwent a cardioectomy in June, with two HeartMate3 devices implanted in the configuration of a total artificial heart. After a complex surgery, the patient required prolonged mechanical ventilation due to respiratory complications and failed extubation attempts on the 5th and 7th postoperative days (POD). To facilitate long-term ventilation, a percutaneous tracheotomy was performed on the 13th POD, and bilateral pleural drains were placed to manage substantial pleural effusions. In the early stages, the patient was heavily dependent on ventilatory support, experiencing severe chest pain (VAS 10), cachexia, and left peroneal nerve paresis. Her physical condition was notably limited, with the ability to perform only active-assisted movements and sitting at the bed's edge with support. Early mobilization and intensive respiratory physiotherapy were initiated to counteract muscle atrophy and improve respiratory function. Throughout July and August, the patient underwent a slow weaning process from mechanical ventilation, supported by CPAP and high-flow oxygen therapy, which provided crucial respiratory support and reduced the work of breathing. By the end of August, she was fully weaned from mechanical ventilation, marking a significant milestone in her recovery. By the 62nd POD, the patient was independently active within bed, could stand with walker support, and had achieved a 150-meter walking distance. With no evidence of residual or relapsing malignant disease, the patient was scheduled for ongoing oncological monitoring. Discharge occurred in early September, with partial dependence on assistance for daily activities and a continued need for home-based care.

Conclusion: This case emphasizes the importance of a comprehensive, multidisciplinary approach in managing rare malignancies with complex postoperative needs. Early mobilization and targeted rehabilitation were pivotal in the patient's recovery, and nursing care played a vital role in supporting device maintenance, wound care, and psychological well-being. Long-term outcomes remain uncertain due to the unique nature of the diagnosis, reinforcing the need for individualized care and lifetime follow-up.

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LITERATURE

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