

Surgery of left atrial myxoma as a second primary tumor in a patient previously treated for breast cancer

Tedavi edilmiş meme kanserli bir hastada ikinci primer tümör olarak sol atriyal miksonma cerrahisi

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A rising level of experience and advances in cardiac surgery are leading to more operations being performed on elderly patients with other complicated diseases. But cardiac surgery in patients with malignant diseases remains a problem. Although most malignant diseases are curable, surgeons are usually reluctant to perform open heart surgery in patients with advanced tumors and a short life expectancy. Among patients undergoing open heart surgery, the incidence of malignancy is 1.2%. In this article, we present a successful atrial myxoma excision in an elderly patient with treated breast cancer using cardiopulmonary bypass and cardiac arrest.

Key words: Comorbidity; myxoma; perioperative care; tumor, breast.

Aging populations, early cancer diagnosis, and new therapies that increase the survival of patients with malignant neoplastic disease have favored the increasingly frequent appearance of cancer patients who simultaneously have a cardiac disease requiring surgery.^[1] The unknown but presumably reduced life expectancy of patients with malignant neoplasms may dissuade surgeons from performing necessary open heart surgery.^[2] When it is performed, the incidence of malignancy is 1.2%.^[3] In articles written about performing cardiac surgery with complications involving malignant neoplasms, breast cancer is the most common malignancy.^[1,4] No article about performing open heart surgery on cardiac tumors as a second primary tumor was found in the literature.

CASE REPORT

A 69-year-old female patient with previously treated for breast cancer consulted at the oncology department

Kalp cerrahisinde deneyim düzeyinin giderek yükselmesi ve kaydedilen ilerlemeler diğer komplike hastalıkları olan yaşlı hastalarda daha fazla ameliyatın yapılmasına olanak tanımaktadır. Ancak malign hastalığı bulunan hastalarda kalp cerrahisi sorun olmaya devam etmektedir. Birçok malign hastalık tedavi edilebilir olmasına rağmen, cerrahlar, ilerlemiş tümörlü ve kısa yaşam beklentili hastalarda açık kalp cerrahisi yapmaya genellikle isteksizdir. Açık kalp cerrahisine alınan hastalarda malignensi sıklığı %1.2'dir. Bu yazıda, tedavi edilmiş meme kanserli bir yaşlı hastada, kardiyopulmoner baypas ve kalp durdurma yöntemi kullanılarak gerçekleştirilmiş olan başarılı bir atriyal miksonma eksizyonu sunuldu.

Anahtar sözcükler: Eşlik eden hastalık; miksonma; ameliyat sırası bakım; tümör, meme.

with dyspnea. After echocardiographic evaluation, a left atrial myxoma was detected. After consultation with the oncology and cardiology departments, she was admitted to our department for surgery due to the risk of embolization and reduced life expectancy. She had no complaint except for dyspnea. In her history, she had undergone a left mastectomy for breast cancer eight years earlier but had no cardiologic examination during that period. She had also been diagnosed with Parkinson's disease two years previously. Physical examination revealed an incision scar on the chest and 1-2/6 systolic ejection murmur at the mesocardiac point. A chest X-ray showed a prominent aortic knob. Rhythm was sinus on electrocardiography, and an echocardiographic evaluation revealed a mobile mass image in the basal side of the interatrial septum in the left atrium (Figure 1). Coronary angiography was normal, and her ejection fraction was 65%. Before the operation, consultations were held with

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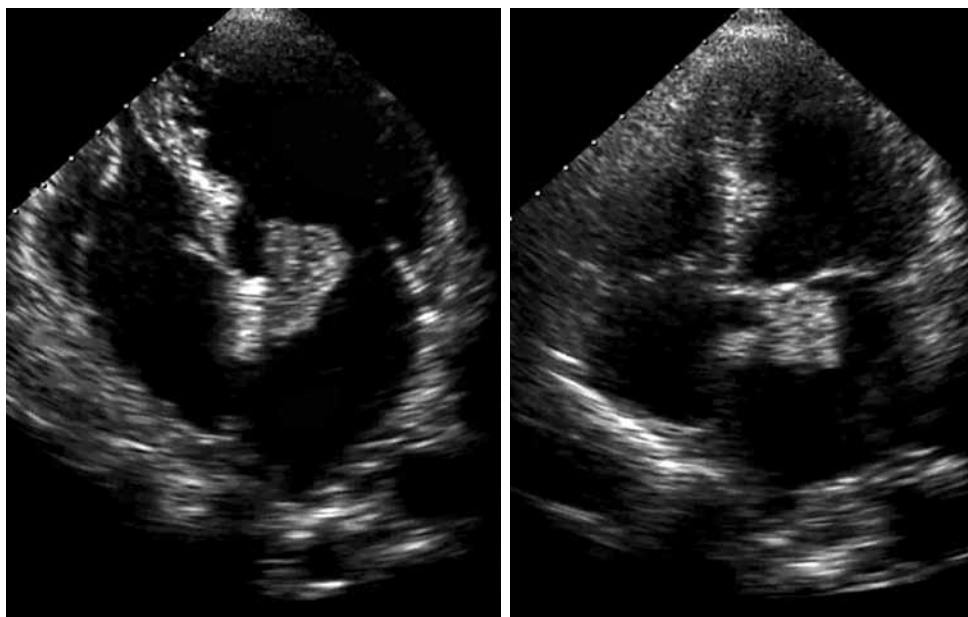


Figure 1. Echocardiography shows a myxoma in the left atrium which is prone to move toward the left ventricle.

the oncology, neurology, pulmonary medicine, and infectious diseases departments. Chemotherapeutic drugs for breast cancer were used until the day of the operation with a plan for their continued use in the early postoperative period. The patient's Parkinson's disease presented no inconveniences for the surgery. For the postoperative period, the infectious diseases department recommended the use of intravenous cefazolin sodium as a prophylactic antibiotic as well as the monitoring of infection markers, such as white blood cells, sedimentation rate, and C-reactive protein. Surgery was performed using median sternotomy. After aortic and bicaval cannulation, cardiopulmonary bypass (CPB) was established, and aortic cross-clamping was done. Cold blood cardioplegia was used, and the patient was cooled down to 32 °C. Left and right atriotomies were carried out. Myxoma was seen on the part of the interatrial septum near the mitral valve, and there was an invasion into the interatrial septum (Figure 2). The myxoma and invasion site of the atrial septum were excised, and the atrial defect was closed using primary sutures through the right atrium. The patient was uneventfully weaned from CPB and taken to the intensive care unit. She was extubated on the eighth postoperative hour. On the first postoperative day, she was mobilized and her chest tubes were removed. During the postoperative period, the oncology, neurology, pulmonary medicine, and infectious diseases departments were again consulted, and her medical treatment was reorganized. When control echocardiography was performed, the left atrium was clear. There was no pathology on the mitral

valve, and cardiac functions were normal. The patient was discharged on the sixth postoperative day without any complications. On her 12-month follow-up, she was asymptomatic, and an echocardiography revealed normal cardiac function.

DISCUSSION

Cardiac surgery in selected patients with previously treated cancer is safe and offers clinical improvement at a reasonable operative risk.^[2] Carrascal et al.^[1] reported no significant increase in morbidity or mortality from heart surgery with extracorporeal circulation in cancer patients. As a specific group, cardiac surgery can be performed with acceptable mortality, but there are

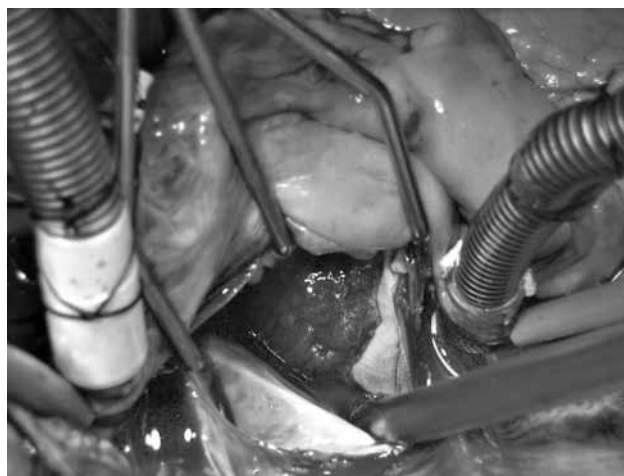


Figure 2. Intraoperative view of the myxoma of the left atrium.

significant morbidity rates in patients with hematologic malignancies.^[5] Patients with a malignant tumor which was treated less than two years previously, advanced age, pulmonary disease, or impaired left ventricular function should be made aware of the limited survival potential. A decision to perform cardiac surgery in patients with a potentially curable malignant tumor found coincidentally must be made with care.^[4]

In the literature, most open heart surgeries on patients with malignant tumors are performed for coronary revascularization and valve replacement.^[2,4] There is also concern about the recurrence of cancer as a result of impaired immune system function after CPB.^[2] Therefore, off-pump cardiac surgery is both very effective and greatly advantageous for patients with a malignancy who require cardiac surgery.^[6] Fatal progression of the tumor is seen if the time interval between the occurrence of the malignant tumor and cardiac surgery is short.^[4]

Most patients with a malignant neoplastic disease are prone to infection and bleeding due to the bone marrow's suppressive effects of either the malignant disease or anticancer treatment.^[7] In patients undergoing coronary artery operations after breast cancer, sternal wound infection and noncardiac chest pain are significantly higher than in the normal population.^[8] Neither of these were seen in our patient.

Among patients undergoing open heart surgery, the incidence of patients with malignancy is 1.2%.^[3] In articles about cardiac surgery with complications involving malignant neoplasms, breast cancer is the most common malignancy.^[1,4]

No link between treated breast cancer and left atrial myxoma was considered. We believe this state was merely coincidental in a patient with two primary tumors.

In conclusion, cardiac surgery in patients with previously treated cancer remains a challenging problem. Using less invasive methods, such as off-pump cardiac

surgery, and actively consulting with other related departments about such patients play an important role in the surgery's success. Wider-ranging studies are needed to demonstrate the results of cardiac surgery in patients with malignant disease.

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