De novo right atrial myxoma detected nine months after atrial septal defect closure

Atriyal septal defekt kapatılmasından dokuz ay sonra saptanan de novo sağ atriyal miksoması

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Primary tumors of the heart are rare and atrial myxoma is the most common primary tumor of the heart. In this article, we present a 21-year-old male case with the history of atrial septal defect closure in another clinic who developed de novo right atrial myxoma nine months after surgery.

Key words: Atrial septal defect; de novo right atrial myxoma; rapid growth.

Primary cardiac tumors have been reported in autopsy series with an incidence rate from 0.001-0.03%, with 75% of these being benign. Half of these benign tumors are myxomas that usually occur between the third and sixth decades of life. The growth speed of myxomas has been sporadically reported. Our case was a 21-year-old male patient who applied to our clinic with the diagnosis of a right atrial mass which had been coincidentally found on a routine examination nine months earlier after open heart surgery for a secundum-type atrial septal defect. Our research indicated that this case is the fastest growing right atrial myxoma in an adult patient detected after surgical atrial septal defect closure, and this finding led us to share this knowledge with the cardiovascular community.

CASE REPORT

A 21-year-old male patient was referred to our clinic with the diagnosis of a right atrial mass. He had undergone open heart surgery for closure of a secundum-type atrial septal defect nine months prior to his referral. However, no right atrial mass was discovered during the operation. The tumor had been coincidentally detected by transthoracic echocardiography during a routine health check-up by his insurance company.

The patient was asymptomatic at the time of admission, and his laboratory findings were within normal limits. His transthoracic echocardiogram revealed a pedunculated, clearly delineated mass of 2.3x2.46 cm in diameter adjoining the superior vena cava.

He was operated on using femoral artery-femoral vein cannulation and a subsequent median sternotomy and selective superior vena cava cannulation. The right atrium was opened carefully after cardiac arrest.
Our patient was asymptomatic, and his diagnosis was coincidental but also consequential. Myxomas, when diagnosed, are best cured by surgery and have a very low recurrence rate of only 1-3%.[6]

In the English literature, there are cases of left atrial myxoma recurrences as early as five months after excision for myxoma,[7] de novo left atrial development of myxoma eight months after previous coronary bypass surgery when no evidence of myxoma was present,[8] and de novo right atrial myxoma detection in a child who had been diagnosed with a double outlet right ventricle six months earlier.[9] There is also a report of a patient who was accidentally found to have a right atrial mass that was later diagnosed as myxoma after surgery.[10] The patient had no signs of myxoma a few months previously when she had been treated via the transcatheter method for atrial fibrillation, and she had undergone no previous surgical procedures. In addition, there is a report of a right atrial myxoma that developed four years after patch closure of an atrial septal defect.[11]

In conclusion, we believe that our case is the first adult patient who rapidly developed a right atrial myxoma nine months after open heart surgery for an atrial septal defect. We hope that sharing this information will benefit the medical community at large and promote further study.

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**REFERENCES**