



Case report

Incidentally detected aorto-right atrial fistula in asymptomatic patient with operated aortic dissection☆

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ABSTRACT

There are many complications that can occur after aortic dissection surgery. Also these complications arise in unstable clinical conditions. Development of fistula between aorta and right atrium is rare. These patients often present with cardiogenic shock. Our purpose in presenting this case, unlike other cases in the literature, the patient was found to be completely asymptomatic and incidental rather than an urgent clinic.

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Introduction

Aorta-right atrial fistulas are abnormal connections between the aorta and the right atrium. Fistulas can be congenital or passed as to cardiac and aortic surgery or may be secondary to infective endocarditis.^{1–4}

Case report

A forty years male patient without any complaint admitted to our clinic for testing purpose. It was learned that he was operated for aortic dissection 3 years ago. Physical examination was unremarkable. Electrocardiogram was normal sinus rhythm. He was evaluated with transthoracic echocardiography during routine outpatient clinic follow up. Moderate aortic regurgitation and fistula development between aorta and right atrium were seen (Video 1). Transesophageal echocardiography was performed and fistula was clearly seen (Fig. 1, Video 2). The patient was asymptomatic and hemodynamically stable, thus, he was followed clinically without further interventions.

Discussion

Common complications occurring in the setting of acute aortic dissection include occlusion of the vessels originating from aorta, hemopericardium, pleural effusion and aortic regurgitation. A potential rare complication is the development of fistula between aorta and right

atrium as a result of rupture of a hematoma in interatrial septum into right atrium.^{5,6}

Development of a fistula is more common in patients who had a prior cardiac surgery or sinus valsalva aneurysm.⁶ It usually presents with cardiogenic shock.³ Although computed tomography (CT) is the gold standard for diagnosis, lack of hemodynamic stability in these patients at diagnosis limits its use as a diagnostic tool. Therefore, transthoracic and transesophageal echocardiography are used for diagnosis.⁷

Fistulas between aorta and right atrium which are usually detected during follow up of patients with aortic dissection, cause left to right shunts and cardiogenic shocks. Therefore, rapid detection and surgical treatment are necessary.⁸

Conclusion

Development of fistula between aorta and right atrium is a rare complication after aortic dissection operation. These patients are usually present with cardiogenic shock, as maybe presented with asymptomatic. Careful echocardiographic diagnosis is vital in these cases. In asymptomatic patient, we should clinically monitor the patient for the development of heart failure symptoms. When these symptoms occur it will be life threatening. And urgent surgery is necessary.

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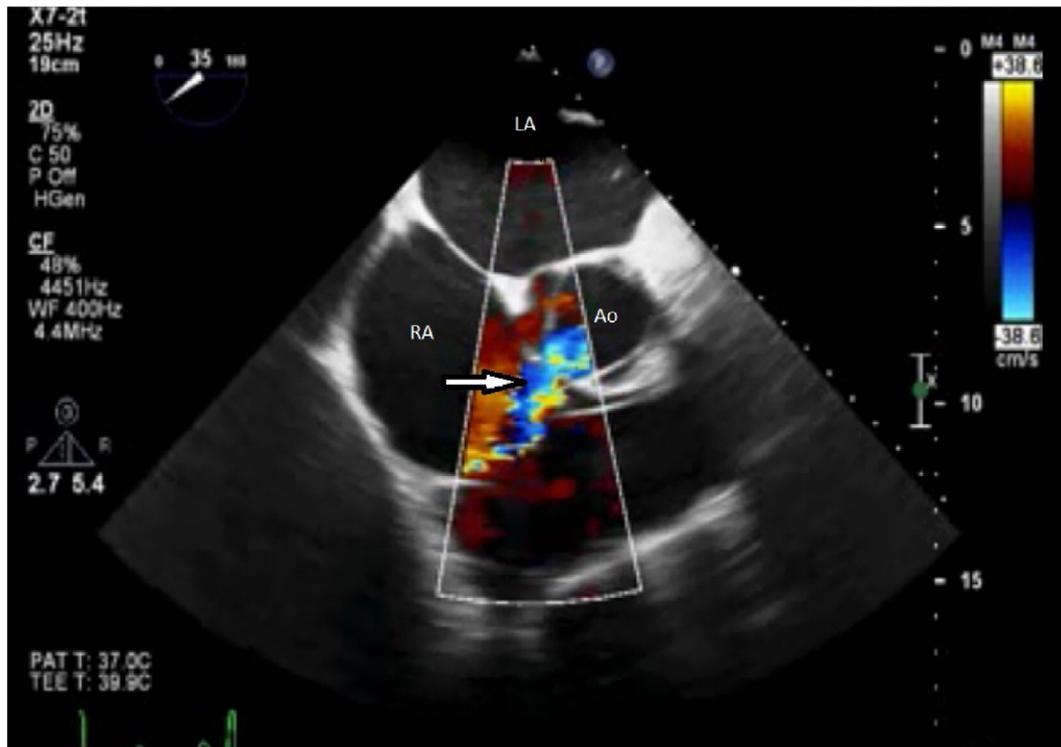


Fig. 1. A fistula was observed between aortic noncoronary cusp and right atrium in transesophageal echocardiography.

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