

## Aortic Insufficiency due to Quadricuspid Aortic Valve

### Dört Yapraklı Aort Kapağına Bağlı Aort Yetersizliği

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#### ABSTRACT

Quadricuspid aortic valve is an extremely rare congenital anomaly. Although it has a benign clinical features, some patients may present as with symptoms of severe aortic regurgitation. Herein, we showed an excellent view of a quadricuspid aortic valve with moderate aortic regurgitation in a young woman.

**Key Words:** Aortic valve, Quadricuspid aortic valve, Anomaly

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#### ÖZET

Quadriküspit aort kapağı oldukça nadir görülen konjenital bir anomalidir. İyi huylu bir klinik özelliğe sahip olmasına rağmen, bazı hastalar ciddi aort yetmezliği belirtileriyle kendini gösterebilir. Burada, genç bir kadında orta aort yetmezliğine neden olan kuadrisüspit aort kapakçığının mükemmel bir görünümünü sunulmuştur.

**Anahtar Sözcükler :** Aort kapak, Quadricuspid aort kapak, Anomali

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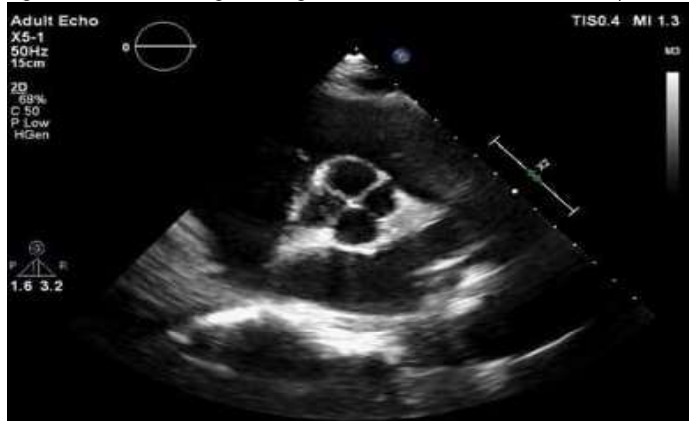
**INTRODUCTION**

Quadricuspid aortic valve is an extremely rare congenital anomaly. Although it has a benign clinical features, some patients may present as with symptoms of severe aortic regurgitation. Herein, we showed an excellent view of a quadricuspid aortic valve with moderate aortic regurgitation in a young woman.

**CASE REPORT**

A 42-year-old woman was admitted to our clinic with atypical chest pain. Cardiac auscultation revealed a diastolic murmur of grade 2/6 in the second right intercostal space. No pathology was detected in the examination of other systems. Electrocardiography showed normal sinus rhythm without any abnormalities. Transthoracic echocardiogram was performed for the evaluation of diastolic murmur and it showed a normal left ventricular chambers size with a normal ejection fraction of 60%. Parasternal long axis and short axis images showed moderate aortic regurgitation with a quadricuspid aortic valve (Figure 1-2). Ascendan aorta size was measured 33 mm. So, we decided to clinical and echocardiographic follow up for aortic insufficiency and possible aortic aneurysm.

**Figure 1:** Parasternal long axis image shows moderate aortic insufficiency



**Figure 2:** Parasternal short axis view demonstrate the quatricuspid aortic valve

**DISCUSSION**

Quadricuspid aortic valve (QAV) is a rare congenital heart disease with an incidence of 0.00028-0.00033% in autopsy series(1), and 0.0059-0.0065% for patients who undergoing transthoracic echocardiographic examinations(2). The importance of diagnosing this congenital anomaly in asymptomatic adults lies in the fact that more than half of the patients of these people will require valve repair/replacement in the fifth or sixth decade of life because of worsening aortic regurgitation or ascending aortic dilatation. For that reason, early diagnosis and follow-up are critical in these patients (3).

**Conflict of interest**

No conflict of interest was declared by the authors.

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