

## Görüntülü olgu örnekleri

## Case images

## A rare cause of severe aortic valve regurgitation: isolated aortic valve prolapse

## Ciddi aort kapak yetersizliğinin nadir bir nedeni: İzole aort kapak prolapsusu

Zeki Yüksel Günaydın

Osman Bektaş

Ahmet Karagöz#

Ahmet Kaya

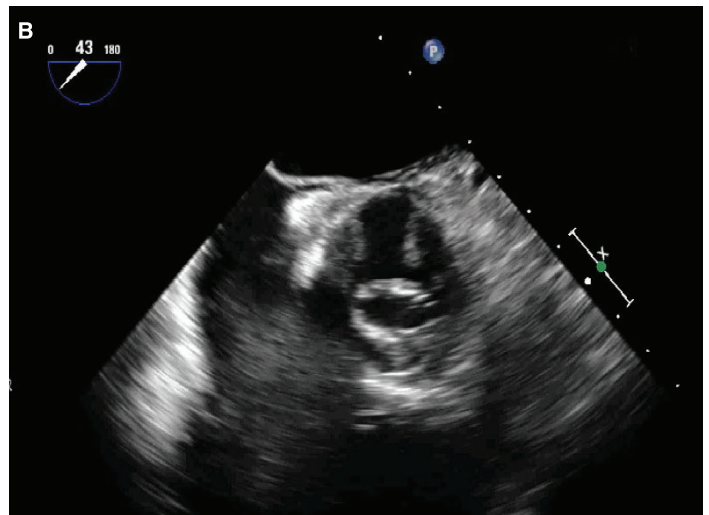
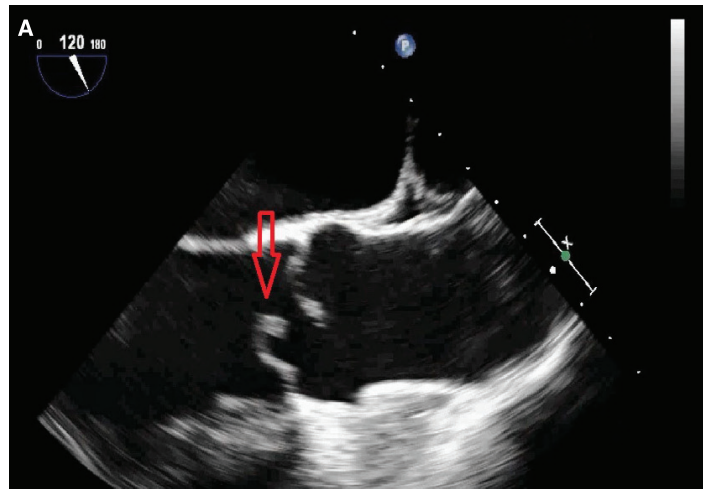
Department of Cardiology,  
Ordu University Faculty of  
Medicine, Ordu;#Department of Cardiology,  
Giresun University Faculty of  
Medicine, Giresun

Aortic regurgitation is caused by aortic valve pathologies or aortic root diseases. Common causes of aortic regurgitation are a bicuspid aortic valve, and calcific and rheumatic aortic valve disease. Aortic valve prolapse is defined as displacement of the aortic valve

aortic valve with prolapse of the right coronary leaflet and severe aortic regurgitation (Figure B, Video 2-3-4\*) was detected and the patient was referred to surgery.



structures downstream of a line connecting the attachment points of the valvula. The incidence of aortic valve prolapse is about 1%. It is more common in women, and in patients with a bicuspid aortic valve. Nearly 30% of patients with aortic valve prolapse have a bicuspid aortic valve. Non-bicuspid aortic valve prolapse is mostly seen with concomitant mitral valve prolapse. However, to our knowledge, isolated severe aortic regurgitation due to aortic valve prolapse in the absence of mitral valve prolapse or a bicuspid aortic valve has not been reported. A 28-year-old male patient was admitted to our clinic with complaints of shortness of breath and palpitations. There was no history of rheumatic fever, trauma and valvular heart disease. In addition, he did not have a Marfanoid phenotype. The ascending aorta was of normal width. On physical examination, a 3/6 grade diastolic murmur was detected on the aortic focus. Arterial blood pressure was 120/50 mmHg. An electrocardiogram revealed normal sinus rhythm with a heart rate of 90/min. Transthoracic echocardiography demonstrated isolated severe aortic regurgitation and a normal mitral valve with no evidence of mitral valve prolapse (Figure A, Video 1\*). Transesophageal echocardiography was planned to better assess the valve structures. A tricuspid



**Figures– (A)** Transesophageal echocardiographic evaluation in the mid-esophageal 120 degrees long-axis view shows prolapse of the right coronary cusp (see arrow). **(B)** Transesophageal echocardiographic evaluation in the mid-esophageal 40 degrees short-axis view shows prolapse of the right coronary cusp. \*Supplementary video files associated with this presentation can be found in the online version of the journal.