We report the case of a 53 years old patient, without medical history, who was admitted in our department of cardiology for exertional dyspnea since 4 months. Physical examination demonstrated wide pulse pressure with diastolic murmur. The transthoracic echocardiography (TTE) revealed severe aortic valve regurgitation due to a quadricuspid aortic valve (QAV) (Figure 1A, 1B), dilated left ventricle with global systolic dysfunction, left ventricle ejection fraction (LVEF) was of 35% and moderate rheumatic mitral stenosis. We proceeded with transesophageal echocardiography that confirmed a QAV with severe regurgitation from incomplete coaptation of the valve leaflets (Figure 1C, 1D, video 1 and 2). Coronary angiography showed normal coronary arteries. The patient underwent successful aortic valve replacement, mitral commissurotomy and had uneventful postoperative courses. Control TTE, 3 months after surgery, showed an improvement of LVEF with a normal size of left ventricle.

QAV is a rare variant of aortic semilunar valve, often diagnosed incidentally [1, 2]. It usually presents as an isolated congenital anomaly but sometimes may be associated with other malformations including aortic root dilatation, tetralogy of Fallot, patent ductus arteriosus, atrial and ventricular septal defects, and anomalous origin of the coronary arteries [2,3]. QAV frequently progresses to aortic regurgitation, which can manifest in adulthood and may require surgical treatment [3].

Conflict of interest:

All authors declare that they have no competing interests.
References: