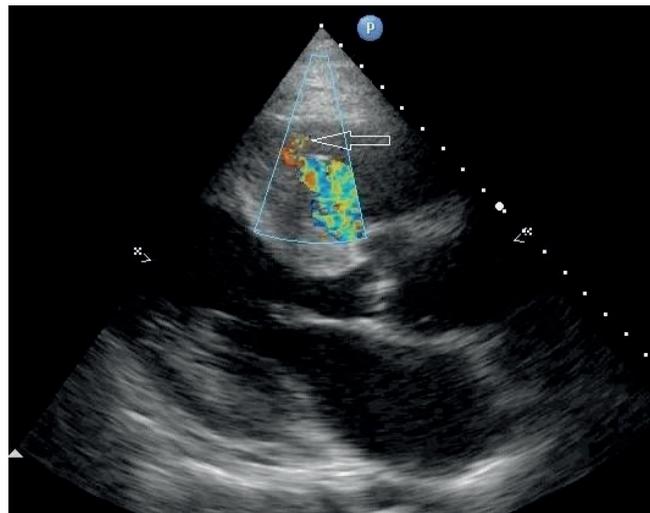


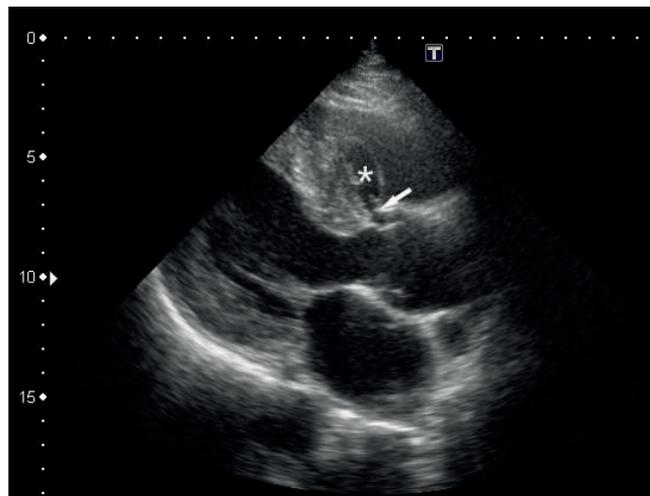
## A patient with heart failure symptoms and continuous murmur

A 65-year-old man was admitted to hospital having dyspnea, fatigue, edema of both legs. Heart failure symptoms worsened during the last couple of weeks. He had long-standing arterial hypertension with poor control of arterial pressure without symptoms of coronary artery disease. Electrocardiogram showed sinus rhythm and left bundle branch block. Precordial auscultation revealed

a loud continuous murmur. Laboratory findings were unremarkable. Images (Fig. 1-4) were recorded during transthoracic echocardiography. Echocardiography showed left ventricular walls hypertrophy, normal systolic ventricular function, and moderate right ventricular dilatation.



**Figure 1. Echocardiography. Parasternal long-axis view. Colour Doppler echocardiography of turbulent flow in the right ventricle**



**Figure 2. Echocardiography. Parasternal long-axis view. Echo-lucent cavity close to the right side of the interventricular septum**

**Address for Correspondence:** Yuriy Ivaniv, Department of Diagnostic Radiology Danylo Halytsky National Medical University, Lviv, Ukraine

**Email:** yivaniv@gmail.com

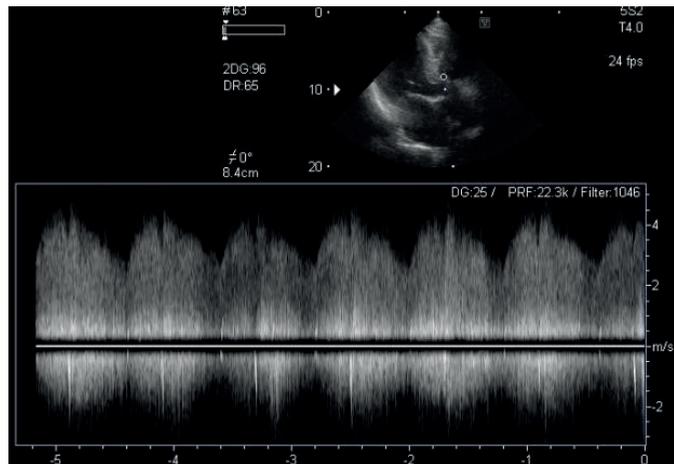
**Received:** 31.07.2022 **Revised:** 18.08.2022 **Accepted:** 18.08.2022

**Copyright ©2022 Heart, Vessels and Transplantation**

**doi:** 10.24969/hvt.2022.333



**Figure 3. Echocardiography. Parasternal short-axis view. Color Doppler echocardiography of the turbulent flow**



**Figure 4. Continuous-wave Doppler of the turbulent flow in the right ventricle The differential diagnosis and which of the following is the correct answer:**

1. Congenital ventricular septal defect with interventricular septum aneurysm
2. Postinfarction ventricular septal rupture
3. Ruptured sinus of Valsalva aneurysm,
4. Right coronary artery aneurysm
5. Coronary artery-right ventricular fistula

Nelya Oryshchyn, Yuriy Ivaniv Department of Diagnostic Radiology  
Danylo Halytsky National Medical University, Lviv, Ukraine

**Ethics:** Informed consent was obtained from patient before procedures

**Peer-review:** Internal and external

**Conflict of interest:** None to declare

**Authorship:** N.O. and Y.I. equally contributed to case management and preparation of manuscript

**Acknowledgement and Funding:** None to declare