Ostium primum atrial septal defect and cleft-mitral valve in a 32-year-old female patient

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KEYWORDS: atrial septal defect ostium primum, mitral valve cleft, mitral valve regurgitation, echocardiography.

CITATION: Cardiol Croat. 2023;18(5-6):152-3. | https://doi.org/10.15836/ccar2023.152

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Introduction: Ostium primum atrial septal defect (ASD) is a congenital cardiac malformation involving atrial septum contiguous with atrioventricular valve annulus, often resulting in associated atrioventricular valves malformations. It is typically repaired in the first years of life[1,2].

Case report: 32-year-old female asked for cardiology examination after she started to feel chest pain and dyspnea during mild activity. We found out that she is a child from an identical twin pregnancy and has been knowing for heart murmur since childhood. Except Arnold-Chiari malformation type 1, she had no other medical history. On transthoracic echocardiography (TTE) we found normal left ventricular size and function, enlarged right ventricle and significant primum ASD with possible cleft mitral valve leaflet (CMVL) as a cause of mitral regurgitation (MR) (**Figure 1**). Due to additional evaluation transesophageal echocardiography (TEE) was done and ASD was measured about 22-24 mm long with Qp:Qs ratio of 1,9 and a cleft of posterior mitral valve leaflet was confirmed (**Figure 2** and **Figure 3**). Right heart catheterization showed mildly increased pressures in pulmonary circulation, increased cardiac output with sinus tachycardia and significant left-to-right shunt. She was referred to a cardiac surgeon and operated; CMVL was repaired and ASD was closed with an autologous pericardial patch. Postoperative recovery was doing well and control TTE shows mild mitral regurgitation and no signs of shunt over good positioned interatrial patch.

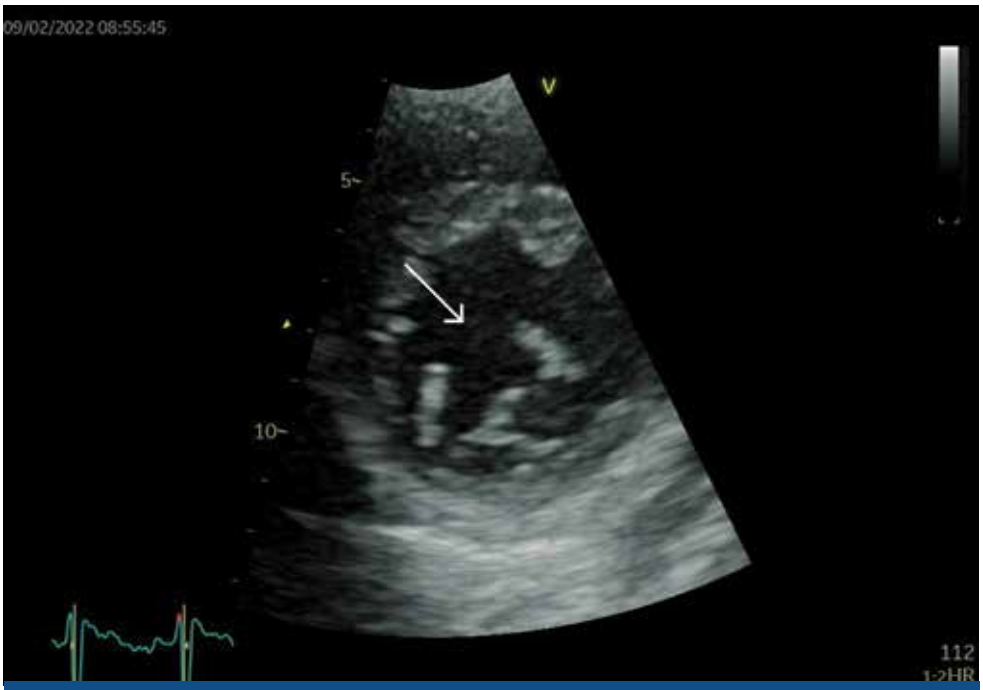

FIGURE 1. Parasternal short axis view. Mitral valve; white arrow is pointing at the cleft of the posterior mitral valve leaflet.

RECEIVED:
March 15 2023
ACCEPTED:
March 29, 2023

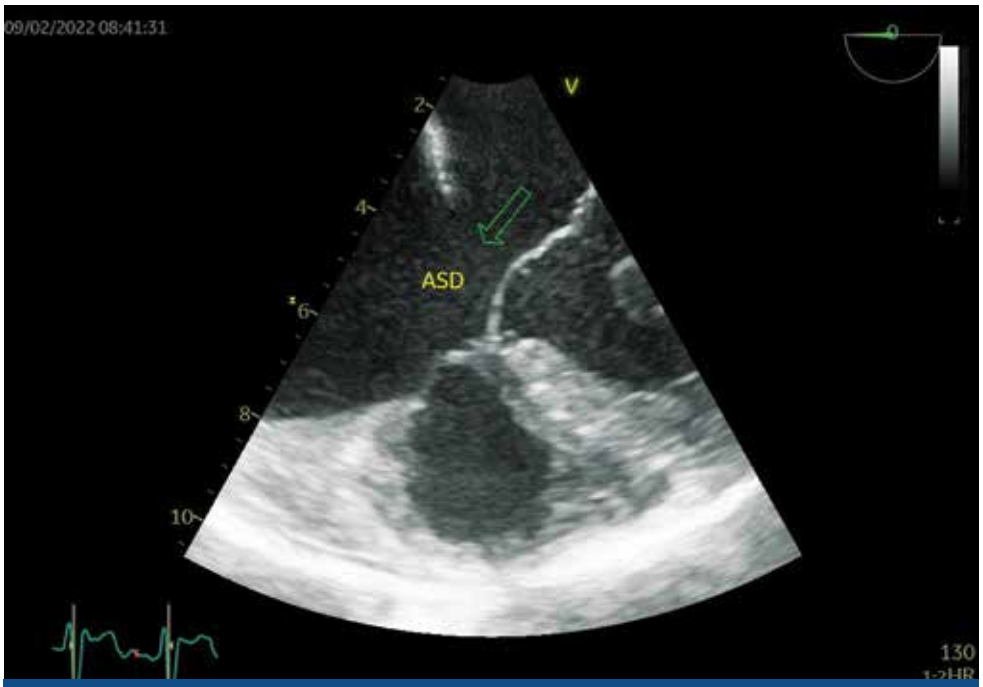

FIGURE 2. Transesophageal 2D echocardiography. Ostium primum atrial septal defect.

FIGURE 3. Transesophageal 3D echocardiography. Ostium primum atrial septal defect and cleft of posterior mitral valve leaflet.

Conclusion: The diagnoses of ostium primum atrial septal defect and cleft mitral valve can easily and successfully be made by echocardiography. The long-term results with this congenital anomalies repair are excellent.

LITERATURE

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