

Section: CLINICAL CASE REPORT

Abstract: CCR-02

Peripartum cardiomyopathy complicated by a right ventricular thrombus

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INTRODUCTION: Peripartum cardiomyopathy (PPCM) is an uncommon and potentially fatal condition that causes heart failure (HF) with reduced ejection fraction (EF) in the absence of another cause that explains ventricular dysfunction in women during the peripartum period. In the following case, a patient with PPCM developed a right ventricular (RV) thrombus. **CASE REPORT:** A previously healthy 21-year-old White primiparous woman with normal prenatal care presented to the emergency department on postpartum day 18 with dyspnea on minimal exertion and lower-limb edema. On admission, she was tachycardic and normotensive and had diffuse bilateral crackles, a regular cardiac rhythm with an S3, jugular venous distention, and edema extending to the upper thighs. Electrocardiography showed sinus tachycardia and nonspecific ventricular repolarization abnormalities. Chest radiography showed an enlarged cardiac silhouette and increased vascular markings. Transthoracic echocardiography showed severe dilation and hypokinesia of all four chambers, apical akinesia, left ventricular (LV) systolic dysfunction, an LV EF of 40%, RV systolic dysfunction, a tricuspid annular plane systolic excursion of 13 mm, and two 20-mm structures in the RV consistent with sessile thrombi; the vena cava showed less than 50% collapse. NT-proBNP was >1,000 pg/mL. Computed tomography angiography was normal. Profile B HF was diagnosed. Breastfeeding was contraindicated, and the patient received intravenous furosemide, enalapril, carvedilol, spironolactone, and rivaroxaban, with clinical and LVEF improvement. **DISCUSSION:** Peripartum cardiomyopathy has a variable incidence, and its pathophysiology is not fully understood. Genetic predisposition and the production of prolactin and placental angiogenic factors, together with endothelial dysfunction and cardiomyocyte apoptosis, appear to be involved in disease development. Diagnostic criteria for PPCM are HF secondary to ventricular dysfunction and LVEF <45%, occurrence at the end of pregnancy or in the months surrounding delivery, and no other identifiable cause of HF. The patient met all criteria. She received HF treatment and oral anticoagulation because of the right ventricular thrombi, with clear clinical improvement. Although studies differ regarding its incidence, PPCM is rare. It may nevertheless have an unfavorable outcome; early diagnosis and treatment should therefore be pursued to minimize complications.

KEYWORDS: Peripartum cardiomyopathy; Heart failure.