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**Biventricular intracardiac thrombi in acute myocarditis: case report**

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Introduction: Myocarditis is an inflammatory disease of the myocardium, presenting unusually with LV systolic dysfunction and dilatation. Although ventricular thrombus formation is rare, it carries the risk of serious complications.

Clinical Case: A previously healthy 17-year-old boy, with no relevant familiar history or medications, was admitted to the emergency department due to one-week history of acute gastroenteritis (AGE) and severe asthenia. Clinically, he presented unwell, with tachycardia and tachypnoea, normal blood pressure, tender abdomen, normal cardiac auscultation and decreased respiratory sounds. The blood samples revealed hyperlactacidemia, no leukocytosis, CRP 200mg/L, acute kidney injury, cholestatic hepatitis, elevated d-dimers as well as myocardial necrosis markers and Pro-BNP 14585pg/mL. The diagnosis of acute myocarditis in the setting of AGE was confirmed. The echocardiogram showed a severe biventricular systolic dysfunction, with moderate mitral regurgitation, several echogenic masses adhering to the walls and apex of both ventricles, suggestive of thrombi, and no signs of vegetations or pulmonary hypertension. He was admitted in the PICU and anticoagulation therapy was started. Genetic predisposition of hypercoagulability and rheumatologic disorders were ruled out. Stool sample was positive for *Campylobacter jejuni.* Thoracic CT excluded pulmonary thromboembolism. Despite the anticoagulation institution, a gradual and dramatic growth of the LV thrombi with LVOT extension and none cardiac function improvement were observed in the following echocardiograms. At this point, the patient presented with multiple limb arterial embolism. He was submitted to surgical thrombectomy and mitral restrictive annuloplasty with subsequent need of VA-ECMO support. Eleven days after being listed, he underwent an orthotopic heart transplant with favourable surgical and postoperative course. Endomyocardial biopsies and histologic examination diagnosed a lymphocytic myocarditis. The patient was discharged with normal LV contractility, no new thrombi formation and normal neurologic evaluation.

Conclusion: This case highlights the rarity of biventricular thrombi presentation with acute myocarditis and its unresponsiveness to anticoagulation. Surgical thrombectomy is a high-risk option in the management of these patients, with predictable drawbacks such as further ventricular dysfunction and embolism. We also present this case for its good outcome in terms of use of ECMO as a bridging therapy to heart transplantation, with no major complications.