



Interruption of the Aortic Arch in the Adult and Fulminant Myocarditis: A Strange Presentation

Jesús Samuel Borges López¹, Víctor Ochoa Pérez², Emma Rosas Munive³, Rodolfo de Jesús Castaño Guerra⁴ and Eduardo Ayala Hernández⁴

¹Department of Cardiology, General Hospital of Mexico "Dr. Eduardo Liceaga".

²Hemodynamics Department, General Hospital of Mexico "Dr. Eduardo Liceaga".

³Echocardiography Department, General Hospital of Mexico "Dr. Eduardo Liceaga".

⁴Coronary Intensive Care Unit, General Hospital of Mexico "Dr. Eduardo Liceaga".

*Corresponding author: Jesús Samuel Borges López, Calle José Antonio Torres # 524. Int 201. Col. Paulino Navarro. From. Cuauhtémoc. Mexico City, Mexico

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Introduction

53 years old female patient, who presented oppressive precordial pain, radiating to the neck and jaw, for which she went to the emergency room, where an ECG image of complete left bundle branch block was evidenced (Figure 1), with taking ultrasensitive troponin I at > 50,000 pg/ml, presenting data of acute heart failure and acute pulmonary edema, requiring endotracheal intubation, moving urgently to cardiac catheterization without evidence of obstructive coronary lesions, observing in aortography interruption of the aortic arch with collateral vessels connecting to the descending aorta (Figure 2). Later in the ICU, an echocardiogram was performed that reported LVEF of 27%, generalized hypokinesia, severe MI and apical thrombus (Figure 3), diagnosing fulminant myocarditis, for which treatment with methylprednisolone at a

dose of 500 mg for 3 days was started. presenting improvement with LVEF of 35%, however, she later presented septic shock of pulmonary origin, which led to the death of the patient. Aortic arch interruption is a congenital malformation characterized by complete interruption between the ascending and descending aorta, with 3 types according to the Celoria-Patton classification, B being the most frequent, while fulminant myocarditis is myocardial inflammation due to various etiologies, mainly viral, which can present from a picture of acute heart failure to cardiogenic shock and can simulate a picture of acute coronary syndrome. The importance of the previous case resides in the fact that, although there is no association between both pathologies, there is no case reported in the literature in which they occur simultaneously.

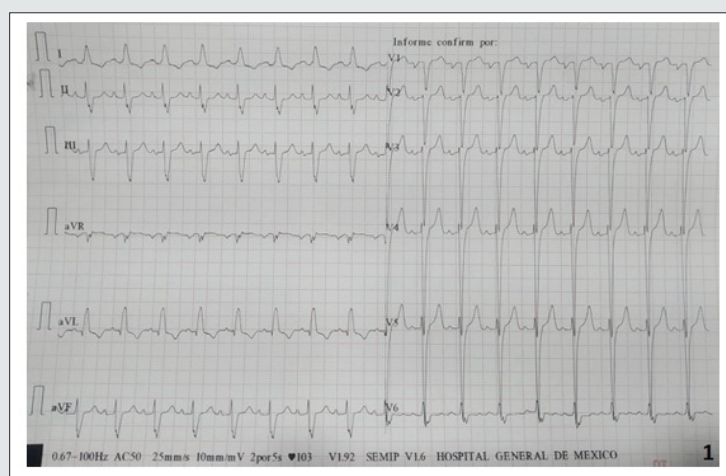


Figure 1: 12-lead electrocardiogram. Image of complete left bundle branch block.

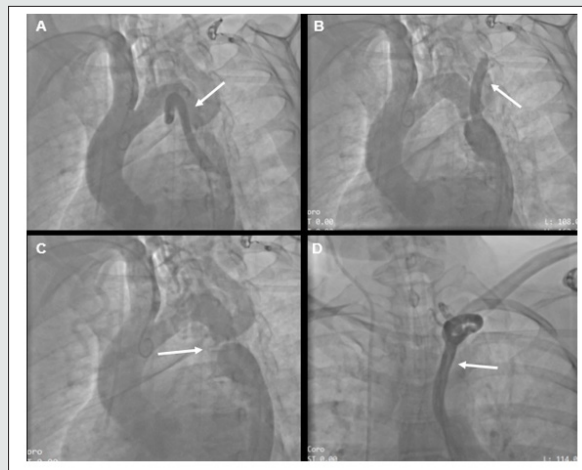


Figure 2: Aortography. Interruption of the aortic arch and presence of collateral vessels in the aortic arch and descending aorta are observed.

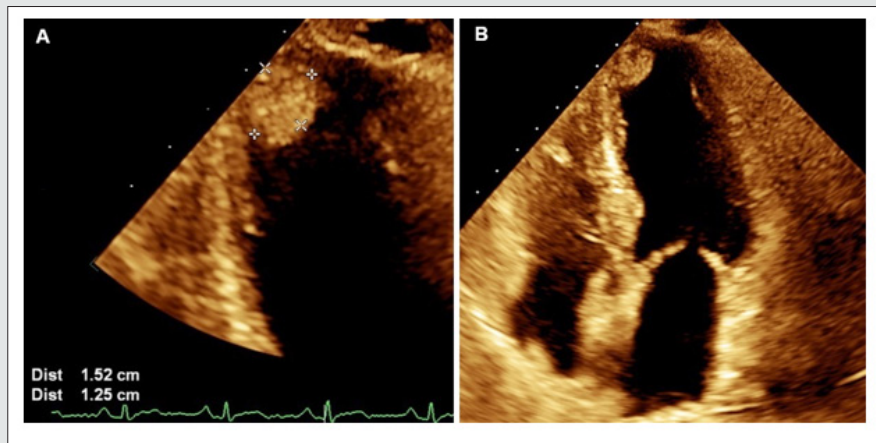


Figure 3: Transthoracic echocardiogram. Apical axis 4 chambers.

Using a zoom, a 15x12 mm image of a thrombus is observed at the apex level.

Image of apical thrombus without zoom.

Conflict of interest

There is no conflict of interest.

Thank Notes

I thank my family, friends and medical colleagues from the cardiology service.

References

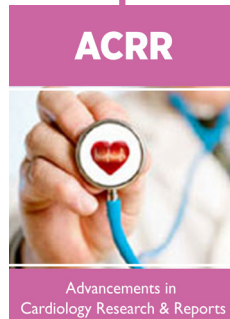
1. Centella Hernández T (2015) Coartación aórtica. Interrupción del arco aórtico. *Cir Cardiovasc* 21(2): 97-106.
2. Jonas RA, Quaegebeur JM, Kirklin JW et al. (2015) Outcomes in patients with interrupted aortic arch and ventricular septal defect. A multiinstitutional study. *J Thorac Cardiovasc Surg* 107: 1099-113.
3. (2016) Interrupted Aortic Arch in an Adult and Myocardial Infarction. *Rev Esp Cardiol* 69(2): 212.



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