Poster

Two Faces of a Condition: Aortic Dissection in the Context of HIV

John Barbosa [1,*], Yudenes Osório [1], Domingas Mbala [1]

[1] Department of Cardiology, Complexo Hospitalar de Doenças Cardiopulmonares Cardeal Dom Alexandre do Nascimento, Luanda, Angola.

* Correspondence: john2joaquim@gmail.com.

Keywords: Aortic dissection; Immunodeficiency; HIV.

Aortic dissection is a potentially fatal cardiovascular emergency, more prevalent in older and hypertensive individuals. In young patients with HIV, its occurrence is rare but may be associated with virus-induced vasculopathy, premature atherosclerosis, and opportunistic infections. Therapeutic management must consider both the extent of the lesion and the patient's immunological status. We report the case of a 36-year-old man with long-standing HIV infection, irregularly adherent to antiretroviral therapy, who presented with sudden chest pain radiating to the back and lower abdomen, accompanied by syncope. Physical examination revealed pulse asymmetry, a diastolic aortic murmur, and signs of peripheral hypoperfusion. Transthoracic echocardiography showed a mobile intimal flap in the ascending aorta, a double lumen with differentiated flow on color Doppler, and significant aortic regurgitation. Computed tomography angiography demonstrated a complicated type A aortic dissection extending from the aortic arch to the iliac bifurcation. Due to high surgical risk, intensive medical management was chosen, including strict blood pressure control, analgesia, and monitoring in the intensive care unit. The patient developed refractory shock and subsequently died. HIV infection may contribute to aortic dissection through at least three main mechanisms: (1) immunodeficiency, favoring bacterial proliferation and opportunistic infections; (2) autoimmunity, resulting from molecular mimicry between viral proteins and arterial proteins; and (3) direct viral infection of cells responsible for arterial wall integrity. Aortic dissection in young HIV patients is uncommon but should be considered in the differential diagnosis of acute chest pain.

Funding: None.

Ethics Committee Approval: None.

Acknowledgments: None.

Conflicts of Interest: The authors declare no conflict of interest.

Supplementary Materials: None.

*Proceedings of the **7th Angolan Congress of Cardiology and Hypertension**, held from October 9 to 11, 2025, in Luanda, Angola.*

Citation: Barbosa J, Osório Y, Mbala D. Two Faces of a Condition: Aortic Dissection in the Context of HIV. Brazilian Journal of Clinical Medicine and Review. 2025 Jan-Dec;03(Suppl.5): acch29

https://doi.org/10.52600/2763-583X.bjcmr.2025.3.Suppl.5.acch29

Published: 9 October 2025