

Clinical Image

Infectious Endocarditis due to *Abiotrophia Defectiva* Case Report

Enio B^{*}, Pederçole GL, Machado AA, Teles CA and Branco JNR

Department of Cardiovascular Surgery, Federal University of Brazil-Paulista School of Medicine, Brazil

Clinical Image

Female patient, 71 years old, with a history of two aortic valve replacement surgeries using a biological prosthesis, the 1st resulting from Infectious Endocarditis (IE) and the 2nd due to stenosis of the prosthesis, was admitted to the emergency room with a history of dental treatment 2 months ago, having undergone IE prophylaxis with Amoxicillin, evolving for 2 weeks with complaints of general malaise, daily fever (>38°C) and the appearance of reddish spots on the lower limbs. Laboratory tests were collected, which demonstrated neutrophilic leukocytosis, increased CRP and ESR and positive blood cultures for penicillin-resistant *Abiotrophia defectiva*. The transthoracic echocardiogram showed aortic biological prosthesis with double dysfunction (predominance of significant stenosis), thickened leaflets, mean systolic gradient of 60 mmHg, orifice of 0.8 cm² and vel. max. 4.76 m/s. The patient initially underwent antimicrobial treatment (Gentamicin 3 mg/kg IV daily twice a day for 15 days, and Vancomycin 15 mg/kg IV twice daily for 4 weeks) and subsequently aortic valve replacement surgery. The intraoperative findings were: bioprosthesis with signs of degeneration, with calcification of 2 leaflets, significant stenosis, with the presence of vegetation on all leaflets.

Infectious endocarditis refers to infection of the endocardial surface and generally leads to the involvement of one or more heart valves or infection of an intracardiac device and in 5 to 20% of cases remain without microbiological diagnosis. *Abiotrophia defectiva* is a fastidious, catalase-negative and anaerobic gram-positive coccus that belongs to the oral, intestinal and urogenital commensal microbiota, rarely causing bacteremia and representing approximately 1% to 3% of endocarditis cases. However, as they are demanding organisms for their proliferation, their role in IE may be underestimated. Mushtaq et al, isolated and tested the antimicrobial susceptibility of 25 samples of *Abiotrophia* between 1986 and 2015 and found that 24% of them were susceptible to penicillins, 92% to ceftriaxone, Clindamycin or Cefotaxime, 72% to meropenem and all were susceptible to Levofloxacin and Vancomycin. As exposed, *Abiotrophia* is a bacterium that is difficult to isolate and has considerable resistance to antibiotics, therefore the fact that the patient underwent prophylaxis for IE before the dental procedure was not enough to provide adequate coverage, therefore we must reconsider the current regimen used, individualizing according to the patient's history. The patient in question should have her regimen expanded whenever she needs antibiotic prophylaxis as her colonization with *Abiotrophia* is known and her high risk of developing IE.

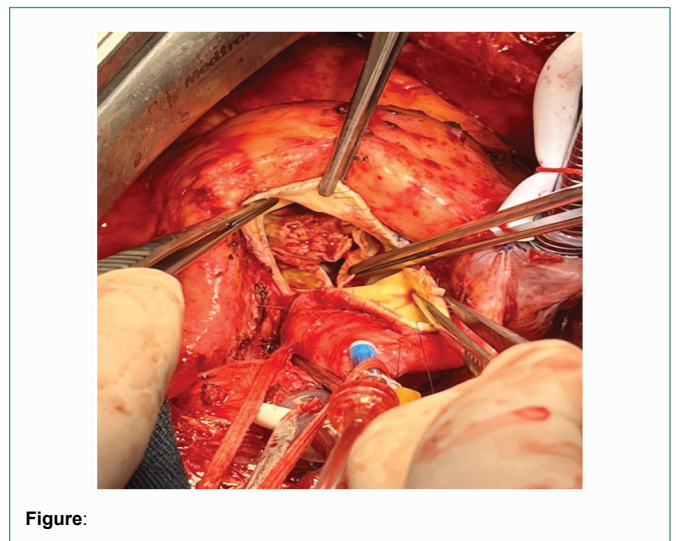


Figure:

Citation: Enio B, Pederçole GL, Machado AA, Teles CA, Branco JNR. Infectious Endocarditis due to *Abiotrophia Defectiva* Case Report. *Am J Surg Case Rep.* 2024;5(8):1150.

Copyright: © 2024 Enio Buffolo

Publisher Name: Medtext Publications LLC

Manuscript compiled: Nov 14th, 2024

***Corresponding author:** Enio Buffolo, Department of Cardiovascular Surgery, Federal University of Brazil-Paulista School of Medicine, Brazil