CASE IMAGE

Bioprosthetic mitral and aortic valve endocarditis associated with Candida Albicans

Candida Albicans ilişkili biyoprotez mitral ve aort kapak endokarditi

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Orthopaedic and Sports Medicine Hospital, Al Buwairda St. Doha, Qatar A 74-year-old woman, with a history of hypertension diagnosed of a chronic concomitant rheumatic mitral and aortic valve disease was submitted to a mitral and aortic valve replacement months before 8 admission to our department. She admitted was to our department because of a wasting syndrome and а fever of 4 months' evolution. In the physical, analytical

evaluations, and blood cultures, no relevant findings were observed. A transthoracic and transesophageal echocardiogram was obtained, showing the presence of vegetations in both aortic and mitral prostheses, without prosthetic dysfunction (Figure 1A-C, Video 1-3*). Given the persistence of fever and echocardiographic findings, surgery was decided. Replacement of both valve prostheses was performed, detecting atypical whitish vegetations (Figure 1D-E), leading to suspicion of an unusual pathogen. Cultures of the explanted prostheses detected growth of Candida albicans. The patient was treated with amphotericin-B (240 mg/24 h) and flucytosine (1500 mg/24 h) for 6 weeks, presenting a favorable evolution, with no evidence of subsequent recurrence.

Fungal infection is an extremely rare but usually fatal cause of endocarditis, generally associated with



Figure 1. (A-B) Two-dimensional echocardiography images showing lesions adhered to mitral and aortic prostheses suggesting prosthetic valve endocarditis. **(C)** Three-dimensional transesophageal images of the atrial side of mitral prosthesis. **(D-E)** Prosthetic valve explanted, showing atypical whitish vegetations.

immunosuppressed hosts. The most frequent isolated species are *Candida* and *Aspergillus*. Fever of unknown origin is usually its most frequent manifestation. The diagnosis of prosthetic fungal endocarditis is extremely difficult, and the treatment of *Candida* endocarditis challenging, as it forms a biofilm at the level of the native valve or prosthesis, which prevents the action of the antifungal. Although different strategies exist for treatment, a combination of surgery and aggressive antifungal treatment seems to be the strategy with the highest probability of success.

Informed consent was obtained from the patient for the publication of the case image and

the accompanying images

*Supplementary video files associated with this article can be found in the online version of the journal.

