

Image in cardiology

Quadruple native valve infective endocarditis

Endocarditis infecciosa de las cuatro válvulas nativas



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ARTICLE INFO

Article history:

Received 5 April 2022

Accepted 5 May 2022

Available online 30 May 2022

A 57-year-old man with alcoholic cirrhosis presented to our hospital with a 3-day history of dyspnea and peripheral edema. He had been hospitalized 5 days before due to pneumonia. He was afebrile, examination revealed cardiac pansystolic and early diastolic murmurs and bilateral lower limb edema. Blood tests revealed marked elevation of the inflammatory parameters (leucocytes, neutrophils, C-reactive protein and procalcitonin). Patient and family informed consents were obtained.

Transthoracic echocardiography (TTE) showed left ventricle dysfunction and multiple vegetations, which was confirmed by transesophageal echocardiogram (TOE). Aortic valve presented cusp prolapse and vegetations (Fig. 1A, arrow). Similarly, mitral valve had multiple vegetations, the largest attached to the atrial face of the anterior leaflet (Fig. 1B, arrow). Severe aortic and mitral regurgitation were noted. Vegetations were also visible on tricuspid (Fig. 1C, arrow) and pulmonary valves (Fig. 1D, arrow). Furthermore, fistula between the aortic root and right ventricle was observed (Fig. 2, arrows).

He was admitted to cardiac intensive care unit with acute heart failure, severe multivalvular insufficiency and possible quadruple valve endocarditis. Empirical treatment with vancomycin, gentamicin and rifampin were started. Cardiothoracic team decided for urgent surgery; however, patient

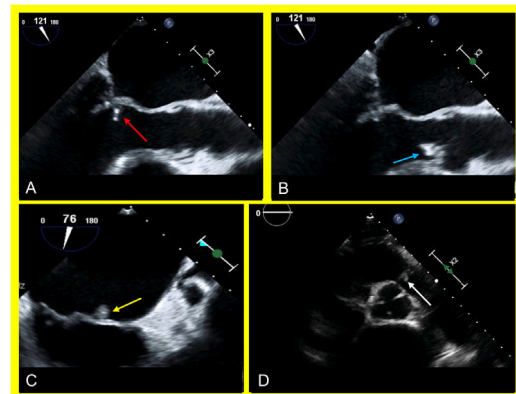


Fig. 1

quickly worsened and died the next day. Blood cultures revealed staphylococcus hemolyticus and autopsy confirmed multivalvular vegetations.

Infective endocarditis presents high morbidity and mortality, and quadruple-valve IE is rare, representing a challenge to healthcare providers. Despite absence of fever, elevation of inflammatory parameters, clinical examination, and risk factors should raise clinical suspicion of infective endocarditis. We highlight the importance of care in hospitalized patients to avoid nosocomial infections.

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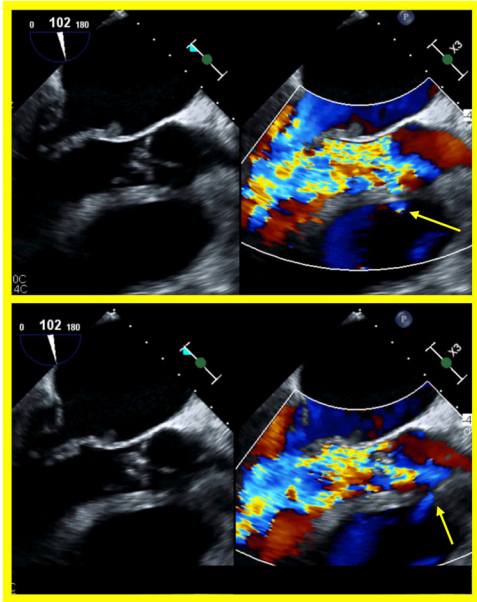


Fig. 2

Funding

None.

Authors' contribution

All authors have contributed significantly to the submitted work and have read and approved the final submission of the manuscript.

Conflicts of interest

None.