



Isolated Pulmonic Valve Endocarditis in a Patient with Tetralogy of Fallot

Barış Veysel Özgür^{1*}, Uludağ Gerede¹, Demet Menekşe², Kılıçkap Mustafa² and Erol Çetin²

¹Department of Cardiology, Gülhane Research and Training Hospital, Turkey

²Department of Cardiovascular Surgery, Ankara University School of Medicine, Turkey

Clinical Image

Pulmonic valve infective endocarditis is a very rare condition and it is usually accompanied with tricuspid valve endocarditis and isolated pulmonic valve endocarditis is exceptionally rare clinical entity that affecting less than 1.5% of patients suffering from endocarditis. There are many risk factors to pulmonic valve endocarditis such as intravenous drug use, right-sided catheters and pacing wires infection. We report a case of pulmonic valve endocarditis in a 33-year old woman who have bioprosthetic pulmonary valve because of tetralogy of fallot. A 33 year-old female patient was admitted with complaints of fever, dyspnea, weight loss, cough and sputum for three weeks. Her medical history included pulmonary valve implantation because of pulmonary valve regurgitation six months ago and corrective surgery for tetralogy of fallot 10 years ago. She did not smoke or use alcohol or any illicit drugs. Her medications included acetylsalicylic acid and propranolol. At presentation, Physical examination revealed Levine grade V crescendo-decrescendo systolic murmur at the second left intercostal space, inspiratory crackles at the basal fields of the lung and a temperature of 38.3°C. Laboratory findings on admission included a white blood cell count $11.2 \times 10^3/\text{mm}^3$ ($4.0\text{-}12.4 \times 10^3/\text{mm}^3$), ESR 107 mm/h and CRP 107.5 mg/L. Trans-thoracic echocardiography revealed vegetation with diameters of 33 mm \times 12 mm on the pulmonic valve and severe pulmonic valve stenosis (peak pressure: 50 mmHg and mean pressure was 30 mmHg) (Figure 1). Multi-sliced computed tomography of the chest confirmed the presence of interstitial infiltrates at the bilateral lung base (Figure 2). Trans-esophageal echocardiography showed 20 mm \times 22 mm vegetation attached to pulmonic valve and that caused obstruction on pulmonary valve (Figure 3). Blood cultures grew candida albicans, and she was commenced on intravenous imipenem, fluconazole and amphotericin B. She continued on IV antibiotherapy for a total of 4 weeks and control of her CRP level was 83 mg/dl. Repeat echocardiography showed the same large mobile mass on the pulmonary valve and severe pulmonary regurgitation (Figure 4). Therefore, surgical intervention for the pulmonary valve was offered but the patient refused it. After 12 weeks of antibiotic therapy she was died. Isolated pulmonary endocarditis is the least common of endocarditis. It is associated with predisposing factors such as intravenous drug use, alcoholism, right-sided catheters and pacemaker leads infection. Because of pulmonary septic embolization, clinical manifestations commonly include respiratory system signs such as cough and sputum. Computed tomography shows characteristic findings such as nodules with varying degrees of cavitation and interstitial

OPEN ACCESS

*Correspondence:

Barış Veysel Özgür, Department of Cardiology, Gülhane Research and Training Hospital, Ankara, Turkey, E-mail: veyselozgurbaris@yahoo.com

Received Date: 21 Oct 2019

Accepted Date: 08 Nov 2019

Published Date: 13 Nov 2019

Citation:

Özgür BV, Gerede U, Menekşe D, Mustafa K, Çetin E. Isolated Pulmonic Valve Endocarditis in a Patient with Tetralogy of Fallot. *Clin Surg.* 2019; 4: 2653.

Copyright © 2019 Barış Veysel

Özgür. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

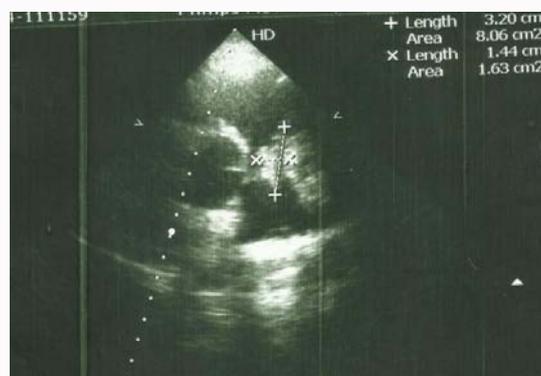


Figure 1: Trans-thoracic echocardiography, short axis revealed vegetation with diameters of 33 mm \times 12 mm on the pulmonic valve.



Figure 2: Multi-sliced computed tomography of the chest confirmed the presence of interstitial infiltrates at the bilateral lung base.

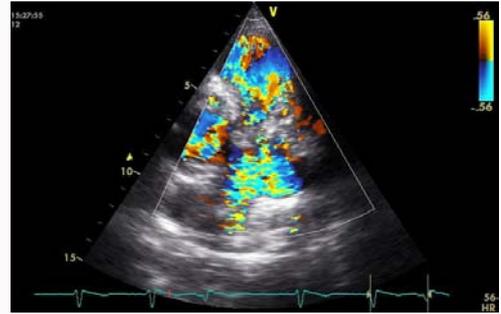


Figure 4: Repeat echocardiography showed the same large mobile mass on the pulmonary valve and severe pulmonary regurgitation.



Figure 3: Trans-esophageal echocardiography showed 20 mm x 22 mm vegetation attached to pulmonic valve and that caused obstruction on pulmonary valve.

infiltrates. Echocardiographic evaluation is the most important diagnostic tool especially patient with prior surgery or known risk factors for pulmonary endocarditis. Indications for surgery include persistent bacteraemia or persistent fever in patients on a regimen of adequate antibiotic treatment, repetitive pulmonary emboli, right heart failure despite diuretic therapy and vegetations larger than 20 mm.