



[www.e-journalofcardiology.com](http://www.e-journalofcardiology.com)

## **Giant Right Ventricular Aneurysm Associated with Constrictive Pericarditis**

Akturk IF, Biyik I, Yalcin AA, Erturk M.

Department of Cardiology, Istanbul Mehmet Akif Ersoy, Thoracic and Cardiovascular Surgery Center and Research Hospital, Istanbul, Turkey.

### **ABSTRACT**

Right ventricular aneurysm related to constrictive pericarditis is very rare in literature. Here in, we present a case of a giant aneurysm of the right ventricle associated with constrictive pericarditis which was successfully treated.

### **CASE PRESENTATION**

The major pathophysiological consequences of pericardial scarring are markedly restricted filling of the heart chambers and elevation and equilibration of filling pressures in all chambers and systemic and pulmonary veins. Right ventricular aneurysm related to constrictive pericarditis is very rare in literature. Here in, we present the case of a giant aneurysm of the right ventricle associated with constrictive pericarditis which was successfully treated.

A 45-year-old man with history of palpitation, dyspnea and abdominal distension was referred to outpatient clinic. Previous medical history was essentially unremarkable. Physical examination revealed blood pressure of 110/70 mmHg, irregular pulse of 110 beats per minute, irregular muffled heart sounds, marked jugular venous distension, abdominal fullness with minimal ascites and minimal peripheral edema. Electrocardiogram showed atrial fibrillation. Transthoracic echocardiography with low echogenicity showed dilatations of left atrium and right heart chambers, mild tricuspid regurgitation, 35 mmHg of estimated pulmonary artery pressure, normal left ventricular systolic function and pericardial thickening. Computerized tomography demonstrated dense pericardial calcification and an aneurysm sized 5x5 cm at right ventricle infundibulum (Figure-1A,B). Cardiac MRI was done to rule out arrhythmogenic right ventricular dysplasia. Simultaneous right and left-heart catheterization showed equalization of diastolic pressures with a characteristic dip and plateau sign consistent with constrictive pericarditis. The diagnosis of constrictive pericarditis with idiopathic etiology was established and the patient was referred for surgical exploration and pericardiectomy. Intra-operatively, the focal right ventricle aneurysm with morphologically normal right ventricle wall under the overlying area of normal pericardium was seen. The pericardium constricting of the remainder of

the right ventricle and the other chambers was diffusely thickened and fibrotic. Pericardiectomy was successfully performed (Figure-1C). The post-operative period was uneventful.

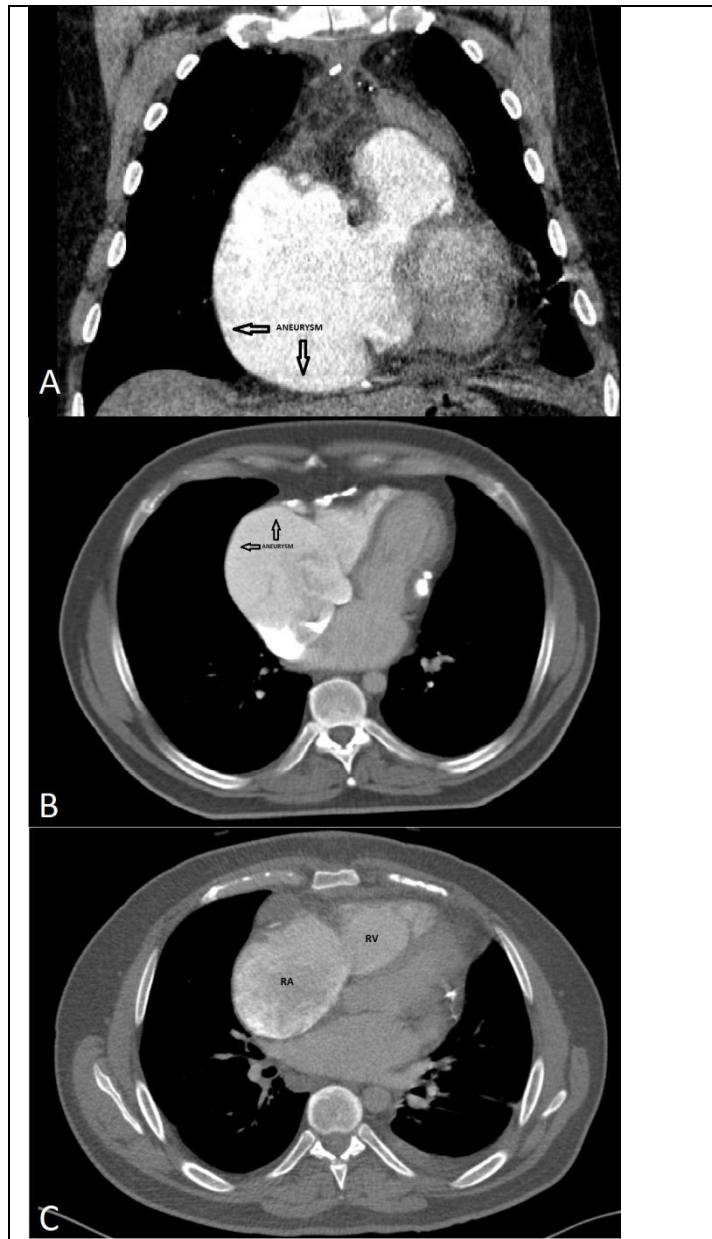


Figure-1: A, B: Giant aneurysm of the right ventricle associated with constrictive pericarditis.

C: After pericardiectomy.

## REFERENCES

(1) Ocak I, Turkbey B, Lacomis JM. Constrictive pericarditis presenting with an out pouching of the right ventricle free wall simulating an aneurysmal dilatation. *Br J Radiol.* 2011;84:e58-61.

(This article may be cited as Akturk IF, Biyik I, Yalcin AA, Erturk M, Giant Right Ventricular Aneurysm Associated with Constrictive Pericarditis, *E-Journal of cardiology* 2012;2(1):1-3.)