

Clinical Image

Constrictive Pericarditis: Extensive Pericardial Calcification

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A 67-year old woman was hospitalized due to a heart failure onset; previous main medical history consisted of osteoporosis and a permanent atrial fibrillation.

Chest x-ray showed an extended pericardial calcification so the initial diagnosis was Constrictive Pericarditis (CP). Transthoracic echocardiography revealed biatrial enlargement, an early diastolic septal bounce (most specific sign of CP) and a diffuse pericardial thickening. It was estimated in 5 mm affecting extensively both ventricles (magnetic resonance) but without doubt, best images were achieved by computed tomography (Figure 1:A,B). Patient was discharged receiving furosemide, spironolactone, diltiazem, and acenocoumarol (October 2013). Cardiac catheterization was unnecessary and follow-up remains uneventful.

CP patients often present symptoms of fluid overload and reduced cardiac output in response to exertion [1]. The majority of cases are idiopathic; other causes are tuberculosis, post-cardiac surgery or post-chest radiation [1]. Echocardiography, magnetic resonance and computed tomography can be used to demonstrate pericardial thickness [2].

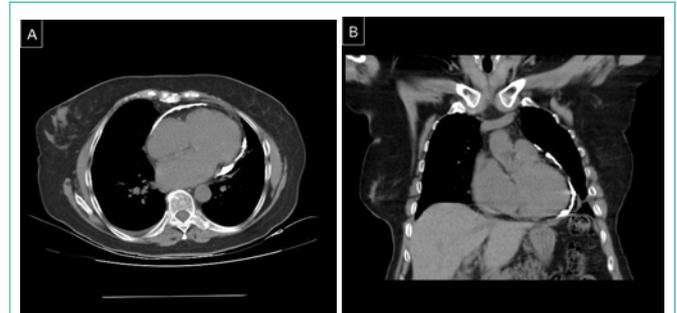


Figure 1: Extensive calcification of the pericardium showed by computed tomography: axial (A) And coronal (B) Views.

This last method was considered better than magnetic resonance defining the heterogeneous degree of pericardial thickening or calcification [3].

References

1. Ling LH, Oh JK, Schaff HV, Danielson GK, Mahoney DW, Seward JB, et al. Constrictive pericarditis in the modern era: evolving clinical spectrum and impact on outcome after pericardiectomy. *Circulation*. 1999; 100: 1380-1386.
2. Klein AL, Abbara S, Agler DA, Appleton CP, Asher CR, Hoit B, et al. American Society of Echocardiography clinical recommendations for multimodality cardiovascular imaging of patients with pericardial disease: endorsed by the Society for Cardiovascular Magnetic Resonance and Society of Cardiovascular Computed Tomography. *J Am Soc Echocardiogr*. 2013; 26: 965-1012.
3. Reinmüller R, Gürkan M, Erdmann E, Kemkes BM, Kreutzer E, Weinhold C. CT and MR evaluation of pericardial constriction: A new diagnostic and therapeutic concept. *J Thorac Imaging*. 1993; 8: 108-121.