

Constrictive Pericarditis : A Treatable Diastolic Heart Failure

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Constrictive pericarditis is a disease of pericardium which limiting diastolic filling of both ventricles and results in heart failure. Chronic inflammation of pericardium is the major cause of constrictive pericarditis however, reversible acute or subacute inflammation of pericardium can be cause of constrictive pericarditis. Most common presentation of constrictive pericarditis is heart failure in 67% and some patients present as liver disease.

Etiology of constrictive pericarditis is idiopathic, cardiac surgery, radiation, infection and collagen vascular disease. Pericardial calcification in X-ray suggest chronic constrictive pericarditis however sensitivity is low. Echocardiography gives critical hemodynamic information about constrictive pericarditis. Interventricular dependency during respiratory cycle is the typical feature of constrictive pericarditis. Echocardiographic findings include; exaggerated ventricular septal motion, respiratory variation of mitral inflow and hepatic vein diastolic flow reversal during expiration, decreased lateral left ventricular wall motion constriction. Dissociation between intracavitary and intrathoracic pressures and exaggerated ventricular interaction can be seen in cardiac catheterization. CT is helpful in 80% of cases by demonstrating thickened pericardium with/without calcification. MRI is easy to visualize the pericardium and myocardial movement. Delayed enhancement of pericardium has been reported to be associated with reversible constrictive pericarditis. ¹⁸F-DG-PET is also helpful to diagnose the transient constrictive pericarditis.

Pericardiectomy is the treatment of choice for chronic constrictive pericarditis and good prognosis after successful operation. Prognosis of constrictive pericarditis is poor in radiation pericarditis. Anti-inflammatory treatment can rescue acute or subacute effusive-constrictive pericarditis in selected cases.