**SIGNIFICANT CORONARY FLOW IMPAIRMENT SECONDARY TO EFFUSIVE CONSTRICTIVE PERICARDITIS**

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Background: Effusive-constrictive pericarditis (ECP) is a rare syndrome characterized by concurrent pericardial effusion and pericardial constriction where constrictive hemodynamics are persistent after the pericardial effusion is drained. CASE Presentation: A 66 year old male presented with progressive dyspnea and peripheral edema for 2 weeks. He had elevated JVP, low voltage EKG and pulmonary edema on CXR. Transthoracic echocardiography (TTE) showed EF of 45-50% with septal bounce, moderate pericardial effusion and thickened visceral pericardium. Right and left heart catheterization showed elevated RVEDP (29mmHg), LVEDP (34mmHg), RAP (28mmHg) and decreased CO (2.8 L/min) with significantly slow coronary flow (CF) (TIMI 1-2, 10.3 sec to fill contrast). Simultaneous RV and LV tracing showed respiratory discordance. Pericardiocentesis yielded 300 ml of bloody pericardial fluid and intra-pericardial pressure (IPP) dropped to 8 mmHg from 24. TTE post pericardiocentesis showed trace effusion. The next day the CF improved dramatically (TIMI 3, 2.5 sec to be filled) as did hemodynamics [CO (5.6L/min), LVEDP (27mmHg), RVEDP (19mmHg), RAP (21mmHg)], IPP was 12 mmHg. Pericardial fluid analysis and endomyocardial biopsy didn’t reveal any etiology. Symptoms improved markedly and the patient was subsequently discharged home, to repeat TTE and, if symptoms recurred, to consider pericardiectomy.

Conclusion: To the best of our knowledge, this is the first case to report significant CF impairment secondary to ECP and flow restoration after pericardiocentesis. In patients with diminished CF and CHF symptoms, constrictive pericarditis should be ruled out and pericardiocentesis should be considered to immediately restore CF by decreasing the IPP to <12 mmHg.