Transient constrictive pericarditis in systemic lupus erythematosus

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A 28-year-old woman with a history of pulmonary arterial hypertension associated with systemic lupus erythematos was admitted to our hospital with the complaint of chest pain and dyspnoea. Echocardiography showed a thickened pericardium and a minimal amount of pericardial effusion. Respiratory variation of mitral inflow (Figure 1A) and diastolic reversal of hepatic vein flow at expiration (Figure 1B) were found, compatible with constrictive physiology. Cardiac magnetic resonance (CMR) imaging revealed pericardial thickening and septal bouncing (Figure 1C and D; see Supplementary data online, Movies S1 and S2), suggesting constrictive pericarditis. Late gadolinium enhancement of CMR image clearly showed a pericardial delayed enhancement, reflecting active inflammation (Figure 1E and F).

After 3 months of steroid therapy, patient’s symptom was improved with pericardial thickness normalized (Figure 1I and J; see Supplementary data online, Movies S3 and S4). Delayed enhancement of the pericardium was nearly absent on follow-up CMR (Figure 1K and L). Improved constrictive physiology was also confirmed by echocardiography with no significant respiratory change in mitral inflow (Figure 1B) and disappeared diastolic reversal of hepatic vein flow at expiration (Figure 1G and H).

Supplementary data are available at European Heart Journal – Cardiovascular Imaging online.