An 80-year-old woman presented to the emergency department due to dyspnea for 3 weeks. She was admitted to the hospital with a diagnosis of massive pleural effusion. Thoracentesis revealed a transudative effusion. Adenosine deaminase level in the fluid was 12 U/L (normal range, 0–40 U/L), and erythrocyte sedimentation rate was 94 mm/h. Control chest X-ray examination revealed cardiomegaly (Fig. 1). Transthoracic echocardiography revealed hyperechogenic pericardial effusion (Fig. 2, Panels A and B; Videos 1 and 2). Inferior vena cava plethora with blunted respiratory response was present (Fig. 2, Panel C). Significant respiratory variation in mitral inflow was observed (Fig. 2, Panel D). PET/CT revealed 20 mm of pericardial effusion and increased FDG uptake in the pericardium with an SUVmax of 19.3 (Fig. 2, Panels A and B).

Effusive constrictive pericarditis diagnosed with PET/CT and treated medically

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Based on these findings, tuberculous effusive constrictive pericarditis was the preliminary diagnosis. The patient was referred to a pulmonologist, and anti-tuberculosis therapy was initiated. The patient was prescribed isoniazid, rifampicin, pyrazinamide, and ethambutol for 2 months and isoniazid and rifampicin for additional 7 months. Colchicine was started during the third month and continued till the end of anti-tuberculosis therapy. Ibuprofen was prescribed during the third month and continued for 1 month. Symptoms of the patient improved, and pericardial effusion resolved during follow-up (Fig. 2, Panels G and H; Videos 3 and 4). Inferior vena cava plethora and mitral inflow were normalized (Fig. 2, Panels I and J). PET/CT confirmed the resolution of pericardial effusion and normalized FDG uptake in the pericardium. No complication was observed at 1 year of follow-up.

Effusive constrictive pericarditis is usually associated with tuberculosis. Medical therapy including anti-tuberculosis and anti-inflammatory agents should be attempted before performing a high risk surgery such as pericardectomy.

**Video 1.** TTE, apical four chamber view, massive hyperechogenic pericardial effusion

**Video 2.** TTE, subcostal view depicted constrictive pericardial effusion

**Video 3.** TTE, resolved pericardial effusion after treatment

**Video 4.** TTE, resolved pericardial effusion after treatment

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Figure 1. Posteroanterior chest X-ray showed cardiomegaly

Figure 2. (a) TTE, apical four chamber view, massive hyperechogenic pericardial effusion (b) TTE, subcostal view, pericardial effusion (c) TTE, M mode, inferior vena cava plethora (d) TTE, pulse wave Doppler, significant respiratory variation in mitral inflow (e) CT demonstrated 20 mm of pericardial effusion. (f) PET/CT showed increased FDG uptake in the pericardium with an SUVmax of 19.3. (g) TTE, apical four chamber view, resolved pericardial effusion after treatment (h) TTE, subcostal view, resolved pericardial effusion after treatment (i) TTE, M mode, collapse of inferior vena cava with inspiration after treatment (j) TTE, pulse wave Doppler, normalized mitral inflow after treatment (k) CT confirmed resolution of pericardial effusion after treatment. (l) PET/CT confirmed normalized FDG uptake in pericardium after treatment