Acute cardiogenic shock with standing-still heart

Ga Yeon Lee, MD, PhD Division of cardiology, Department of Medicine, Heart Vascular Stroke Institute Samsung Medical Center, Seoul, Korea

Forty-nine year-old female visited emergency room for dyspnea. She had no previous medical history other than ulcerative colitis controlled by mesalazine. She had developed exertional chest pain 2 weeks ago, and performed coronary angiography and transthoracic echocardiography. But, there was no significant abnormal finding except small amount of pericardial effusion. However, the chest pain was not relieved, Moreover, general weakness, poor oral intake and edema of lower extremities were consecutively developed and followed by febrile sensation, cough and more aggravated dyspnea. On physical examination, ascites with bilateral pleural effusion was noted. She was admitted and treated by antibiotics for possible pneumonia. At 2 a.m. on the third day of hospitalization, she was fainted during defecation. And after 5 hours since then, she was found on the status of pulseless electrical activity. Extracorporeal membrane oxygenation was inserted during cardiopulmonary resuscitation and severely-decreased cardiac function was noted, At that time, she was transferred to our hospital for further evaluation and management. At admission day, left ventricular (LV) venting was intended for more successful LV decompression. However, transesophageal echocardiography showed continuously-closed aortic valve and standing-still LV filled with high-echoic material (Figure). Surgical approach was proceeded for evacuating possible thrombus and performing surgical LV venting. However, there was no thrombus at all. So, heart biopsy and formation of iatrogenic atrial septal defect was performed. Cardiac biopsy revealed giant cell myocarditis. Steroid pulse therapy was prescribed, but no myocardial recovery was observed until the patient had heart transplantation at tenth day from the day visiting emergency room.

