CURIOUS CASE OF ELEPHANT SITTING ON CHEST: EXTREMELY RARE CASE OF REVERSIBLE
CARDIOMYOPATHY

Moderated Poster Contributions
Hall C
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A 28 year old male smoker presented with chest pain and dyspnea. Physical examination was unremarkable except mild tachycardia. Complete blood count, basic metabolic panel and drug screen were normal. Troponin was 32 ng/ml and electrocardiogram (ECG) showed sinus tachycardia with a new incomplete right bundle branch block (RBBB). Echocardiogram showed diffuse moderate biventricular hypertrophy, mildly depressed biventricular function and a small pericardial effusion. Cardiac catheterization showed normal coronary anatomy. He was discharged after 2 days on Ibuprofen to follow up in clinic in 4 days. Hours later he returned with syncope, hypotension and tachycardia. An S3 gallop was present and creatinine was now elevated. ECG showed complete RBBB. Echocardiogram revealed severe biventricular dysfunction with left ventricular ejection fraction of 25%. Invasive monitoring showed wedge pressure at 24 mmHg, cardiac index 1.6 L/min/m2 and mixed venous saturation of 41%. Intra-aortic balloon pump was placed, mixed venous saturation improved to 58%. He then developed ventricular tachycardia storm requiring multiple defibrillations and antiarrhythmics. An extracorporeal membrane oxygenator (ECMO) was placed and he was transferred to a transplant center. The endomyocardial biopsy (EMB) showed acute Necrotizing eosinophilic myocarditis (NEM) and intravenous steroids were initiated. He was eventually weaned from ECMO. A repeat EMB showed resolution of myocarditis and echocardiogram showed normal biventricular wall thickness and function.

Conclusions: NEM is a rare condition (0.1% of all myocarditis). The diagnosis is often confirmed at autopsy. A high clinical suspicion, EMB and early treatment with steroids can be life saving. The rapidly declining clinical course with findings of myocardial injury and diffuse wall thickening due to edema as seen on echocardiography should raise suspicion for NEM. If suspicion is high, initiation of therapy should not be delayed for EMB results. The loss of right ventricle function is a powerful predictor of death or need for transplant. Aggressive supportive measures, including mechanical support may be needed as bridge to recovery or transplant.