Peri-Partum Cardiomyopathy (PPCM) is a rare disorder of uncertain etiology. Virchow and Porack first recognized the relationship between heart failure and pregnancy in the 1870s when they noted myocardial degeneration in patients who died in the postpartum period. PPCM was first described as a distinctive cardiomyopathy in 1937 by Gouley et al. Since then, much has been learned about this disease process, and better treatment options now exist. Incidence varies greatly worldwide. Reports suggest an incidence of 1 case per 299 live births in Haiti, 1 per 1000 in South Africa, and 1 per 3000-4000 in the United States. Reported mortality rates are between 18% and 56%. A latent form of PPCM has also been described. Here we describe a case of latent PPCM in a morbidly obese patient who developed dramatic flash pulmonary edema in the postanesthesia care unit (PACU).

Case Report
A 31-year-old morbidly obese (BMI 53), African American female G3P2002 at 37 weeks’ gestation, with a history of insulin-dependent diabetes mellitus, hypertension, hyperlipidemia, gastric esophageal reflux disease, chronic focal segmental glomerular sclerosis, hyperthyroidism and hyperlipidemia, vaginally delivered twins under epidural analgesia. Patient was stable after delivery. Epidual anesthesia was also used the next day for tubal ligation. Intraoperative course was uneventful.

Patient was stable in PACU, but soon developed dyspnea with some wheezing. Albuterol jet nebulizer and 100% non-rebreather oxygen face mask did not help. Patient suddenly progressed into flash pulmonary edema, requiring emergency intubation. Patient was transferred to ICU and placed on a ventilator with 100% FiO2 and high PEEP. Postintubation chest x-ray revealed pulmonary edema and cardiomegaly; arterial blood gas showed metabolic and respiratory acidosis. Immediate cardiac consultation was obtained. Electrocardiogram showed sinus tachycardia but was otherwise normal. Transthoracic echocardiogram, technically difficult due to patient’s body habitus, demonstrated severely decreased left ventricular systolic function. Left ventricular ejection fraction (LVEF) was 20-25% and left ventricular chamber size was moderately dilated with LVIDd 6.28 cm (range, 3.8-5.7 cm).

After excluding other causes for flash pulmonary edema, diagnosis of peri-partum cardiomyopathy was made. Patient also developed acute renal insufficiency for a short period but recovered quickly. Patient was aggressively treated in ICU and extubated on Postoperative Day 2. Patient was discharged home in stable condition after 4 days, and was doing well at 3 mo follow-up. Repeat echocardiogram showed moderately reduced LV function with (improved) LVEF 35%. LVIDd improved to 5.52 cm. She reported being asymptomatic and walking a mile without symptoms.

References