Peripartum Anesthetic Management and Outcomes of Parturients with Cardiomyopathy in an Academic Center

Abstract Type: Case Report/Case Series
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Background: Cardiomyopathy (CM) is a significant cause of pregnancy related deaths in the USA. Between 1991-1997 it accounted for 8% of maternal deaths [1], 70% of these deaths resulted from peripartum cardiomyopathy (PPCM) and the remaining 30% occurred due to cardiomyopathy associated with various underlying factors or unknown etiology. Mortality related to PPCM is improving with advances in medical therapy for heart failure and multidisciplinary care [2]. In this series we report our peripartum management and outcomes in this group of high-risk parturients.

Methods: Our institution’s Heart Disease in Pregnancy Registry was used to identify women with a diagnosis of cardiomyopathy who delivered at our birthing center from 01/ 2008 - 11/2010. We reviewed peripartum anesthetic management as well as maternal and fetal outcomes.

Results: 17 patients were identified from the database. 5 of these patients were excluded from the study because they were asymptomatic with normal echocardiograms in the index pregnancy but were in the database because of a history of cardiomyopathy in a previous pregnancy for which they received care in another hospital. Table 1 summarizes management and outcomes of the remaining 12 patients. 16% of surgeries were performed in the cardiac operating room with placement of femoral catheters to allow emergent initiation of extracorporeal membrane oxygenation (ECMO) in the event of cardiac decompensation. One patient developed cardiogenic shock intraoperatively and required inotropic support for 24 hours in the Intensive care unit and another patient developed an arrhythmia, which was refractory to pharmacological treatment and had to be cardioverted. 75 %% of patients were admitted to ICU postoperatively. Two patients had AICD’s implanted for EF<20% at 6 months post delivery.

Discussion: In this case series, 50% of patients had follow-up at our institution and none had recovered baseline cardiac function at 6months post delivery. Those who had severe ventricular dysfunction with LVEF < 30% were still symptomatic at 6 months follow up, which agrees with Abboud et al. [3] To date we have had no reported deaths in our cohort. Early recognition of the condition and referral for evaluation allows for better planning of peripartum care.

1. Obst Gynecol 2003;102;1326-31
2. Crit Care Med 2005;33;S340-6
3. Int Jour Card 2001;118;295-203