WCC 2016-105: Risk Stratification of Women with Peripartum Cardiomyopathy at Initial Presentation: A Dobutamine Stress Echocardiography Study

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Objectives: We sought to determine the prognostic use of inotropic contractile reserve on risk stratification and prognostication of women with peripartum cardiomyopathy.

Background: Peripartum cardiomyopathy is a rare disorder effecting women in their prime years of life. There appears to be an initial high-risk period with 25% to 50% of women dying within the first 3 months postpartum. Early risk stratification and prognostication are, thus, crucial. However, only limited data are available.

Methods: In all, 10 women (mean age 20.7 years) with peripartum cardiomyopathy and severe left ventricular (LV) dysfunction (mean LV ejection fraction [LVEF] 27.3 + 6.5%) were studied. Of these, 8 underwent dobutamine stress echocardiography at baseline and a follow-up resting echocardiogram at a mean of 3.6 + 0.9 months after initial presentation. Resting and peak inotropic contractile reserve, and follow-up LVEF, were computed.

Results: The mean LVEF improved significantly from baseline (27.3 + 6.5%) to maximal inotropic contractile reserve (52.6 + 11.2%) (P _ .0004) and at follow-up (54.2 _ 14.3%) (P _.006). Importantly, LVEF at maximal inotropic contractile reserve and at follow-up (3.6 months) did not differ significantly. The mean LVEF at maximal inotropic contractile reserve correlated well with the follow- up (LVEF R _ 0.79). However, the baseline LVEF did not correlate with follow-up LVEF.

Conclusions: In patients presenting with peripartum cardiomyopathy, inotropic contractile reserve during dobutamine stress echocardiography accurately correlates with subsequent recovery of LV function and confers a benign prognosis.

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