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PERIPARTUM CARDIOMYOPATHY IN THE SETTING OF A COMPLICATED PREGNANCY AND COVID-19 INFECTION

Poster Contributions

For exact presentation time, refer to the online ACC.22 Program Planner at <https://www.abstractsonline.com/pp8/#!/10461>

Session Title: Complex Clinical Cases: FIT Flatboard Poster Selections -- Covid

Abstract Category: FIT: Coronavirus Disease (COVID-19)

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Background: Peripartum cardiomyopathy (PPCM) remains a disease entity associated with significant morbidity and mortality, requiring prompt diagnosis and management. COVID-19 infection is well-known to be associated with cardiomyopathy, however it has rarely been described in context of a complicated pregnancy.

Case: A 29-year-old COVID positive pregnant female at 33 weeks was admitted with pre-eclampsia. Magnesium and labetalol were given. She became hypoxic requiring escalating supplemental oxygen and was symptomatic of progressive dyspnea and chest pressure. Her exam revealed periorbital edema, lower extremity edema, and diffusely decreased breath sounds. Chest X-Ray showed multifocal pneumonia and flash pulmonary edema, and emergent cesarean delivery was performed. Oxygen requirements continued to increase after successful cesarean delivery and bilateral tubal ligation. EKG obtained showed no ischemic changes and TTE showed depressed ejection fraction of 40-45% with mild global hypokinesis. She was diuresed and ultimately optimized on a guideline-directed regimen including lisinopril and metoprolol.

Decision-making: The pathogenesis of our patient's cardiomyopathy is complex and multifactorial, likely driven by both complicated pregnancy and COVID infection. This patient was acutely managed with diuresis, while chronic management was initiated in the form of guideline-directed therapy. ACE inhibitor therapy was initiated as benefits of maternal cardiac remodeling were more likely than fetal harm through breastmilk transmission. Due to previously discussed birth control strategies, she underwent bilateral tubal ligation at the time of surgery.

Conclusion: We report a case of PPCM in setting of pregnancy complicated by pre-eclampsia and COVID-19 infection. We highlight a management approach utilizing symptomatic treatment and traditional chronic guideline-directed medical therapy. Further study is needed within this cohort to determine postpartum outcomes, establish management recommendations, and to appropriately counsel patients seeking subsequent pregnancies. There is unclear benefit of bromocriptine and cessation of breastfeeding on PPCM.