ACC.12
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innovation in intervention

Pericardial/Myocardial Disease

CHARACTERISTICS OF 2067 PATIENTS HOSPITALIZED WITH PERIPARTUM CARDIOMYOPATHY

ACC Oral Contributions
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Session Title: All That Glitters In Myocardial and Pericardial Disease
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Background: Peripartum cardiomyopathy (PPCM) is rare, affecting up to 1/2000 mothers in the US. Hospital discharge data provides an opportunity to assemble a large number of PPCM cases.

Methods: Hospital discharge data were obtained from agencies in California, New Hampshire, New Jersey, New York, and West Virginia from 2003-2007. Admissions including the ICD-9 CM codes 674.50-674.55 were analyzed. Data dictionaries and ICD-9 codes were used to quantify demographics, comorbidities, and outcomes. Analyses were conducted using MySQL Server (5.5.6).

Results: 2,067 records included a diagnosis of PPCM. Patient characteristics are shown in the Table. Hypertension, anemia, and mitral valve disease were common. Most patients were non-white (62.5%), > age 30 (63.3%), and post-partum (67.0%). 10.3% of patients presenting at or prior to delivery had multiple gestations. 44% of peri- or antepartum patients had preeclampsia or eclampsia. Length of stay at time of delivery was 8.8±9.2 days. Cardiac arrest was the most common serious complication (7.2%). In-hospital mortality was low at 1.8%, as was the rate of mechanical circulatory support (1.2%) or transplant (0.6%).

Conclusion: PPCM is a rare complication of pregnancy that preferentially affects older, non-white mothers and is associated with preeclampsia/eclampsia, multiple gestations, hypertension, anemia, and mitral valve disease. In-hospital mortality and need for advanced heart failure therapy are low.

	All	White	Black	Hispanic	Other
	2067	36.5%	35.4%	21.2%	6.9%
Age					
< 18	1.0%	0.2%	1.7%	1.0%	2.1%
18-29	35.7%	27.2%	38.8%	43.6%	33.0%
30-39	52.0%	59.4%	49.4%	43.6%	54.3%
40-49	10.7%	12.5%	8.9%	11.8%	10.6%
50-59	0.6%	0.8%	0.9%	0.0%	0.0%
60-69	0.1%	0.0%	0.2%	0.0%	0.0%
Payor					
Medicare	4.7%	2.5%	7.1%	2.5%	6.6%
Medicaid	33.1%	28.4%	32.7%	42.3%	23.1%
Private	35.6%	37.6%	29.7%	35.5%	52.7%
Self Pay	6.9%	10.9%	6.1%	3.7%	9.9%
Other	19.7%	20.6%	24.4%	28.6%	1.9%
Comorbid conditions					
Heart failure	57.1%	54.3%	59.3%	58.9%	57.0%
Preeclampsia*	39.1%	41.6%	36.5%	38.0%	48.8%
Hypertension	36.5%	30.5%	43.0%	34.1%	37.2%
Anemia	30.7%	27.9%	32.5%	32.8%	28.9%
Mitral valve disorder	14.2%	15.8%	11.3%	13.4%	17.4%
Asthma	11.0%	9.1%	14.4%	8.9%	9.1%
Multiple gestation*	10.3%	14.5%	6.8%	6.0%	17.1%
Tobacco use	10.3%	12.8%	11.0%	5.4%	5.0%
Obesity	10.1%	7.8%	12.8%	7.5%	9.1%
Diabetes	5.9%	3.3%	6.5%	7.3%	5.8%
Eclampsia*	4.9%	6.3%	5.4%	5.3%	4.9%
Outcome					
Death	1.8%	0.9%	1.3%	2.2%	2.5%
Length of stay	6.8± 12.7	6.1±7.9	6.9±18.2	7.3±10.5	6.0±6.9
Shock	2.6%	1.6%	2.1%	3.2%	1.7%
Cardiac arrest	7.2%	7.4%	6.1%	7.0%	6.6%
Circulation assist device	1.2%	0.8%	1.6%	1.9%	0.0%
IABP	0.9%	0.6%	1.1%	1.3%	0.0%
Transplant	0.6%	0.8%	0.3%	0.8%	0.0%
LV assist device	0.4%	0.0%	0.8%	0.3%	0.0%
Cesarean section*	68.2%	67.5%	69.1%	67.4%	75.0%
Still born*	2.9%	1.3%	4.3%	3.5%	2.7%

*Antepartum or delivered patients only