

Peripartum Cardiomyopathy- Is the Current Definition Too Restrictive?

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BACKGROUND

- Peripartum cardiomyopathy (PPCM) is an uncommon condition defined as new symptomatic heart failure of unknown etiology with left ventricular ejection fraction [LVEF] < 45% diagnosed in the last month of pregnancy and up to the 5th postpartum month.
- The purpose of this study was to determine how many patients referred with the diagnosis of PPCM met all current defining criteria and whether outcomes were similar in patients who did not.

METHODS

- The Utah PPCM Registry was queried. Patients age 18 years with PPCM were identified by 3 means: direct referral, by ICD-9 codes within our hospital system, or self-referral.
- Patients were categorized into those meeting (Group 1) vs. not meeting (Group 2) PPCM criteria.
- Reasons for exclusion included; LVEF > 45%, outside the timeframe, or prior known cardiac history.
- Outcomes studied included internal cardioverter defibrillators (ICD) use, need for mechanical circulatory support (MCS) and/or heart transplantation, and death.

Table 1: Comparison of Groups Meeting (Group 1) and Not Meeting (Group 2) PPCM Criteria

Demographics and Outcomes	Group 1 (n=88)	Group 2 (n=25)	P-value
Age at Diagnosis (years)	30.3 6.3	30.4 5.7	0.921
Caucasian	84.5%	88.0%	1.00
Gravida	2.7 1.9 (n=79)	2.9 2.2 (n=25)	0.56
Parity	2.3 1.5 (n=83)	2.5 1.9	0.475
Cesarean Section Delivery	59% (n=78)	50% (n=22)	0.453
Subsequent Pregnancy (%)	3.4%	16.0%	0.042
ICD (%)	15.9%	20.0%	0.762
MCS (%)	4.5%	0%	0.574
Transplant (%)	5.7%	4.0%	1.00
Death (%)	2.3%	0%	1.00

RESULTS

- 204 patients with clinical characteristics of PPCM were identified; 108 patients met strict PPCM criteria while 96 did not.
- Reasons for not meeting PPCM criteria included: LVEF out of range (36.5%); prior cardiac history (36.5%); and the timeframe (13.5%). 13 (13.5%) patients had 2 reasons for not meeting PPCM criteria.
- 162 patients were referred or identified by ICD-9 codes, and 42 were self-referred. PPCM criteria were met in 50.6 % of referred patients versus 61.9% of self-referred patients.
- Basic demographics and outcomes studied were uniformly similar between both groups in those with available records (*Table 1*).

CONCLUSIONS

- A significant number of patients labeled as PPCM do not fit strict defining criteria despite otherwise similar clinical characteristics and outcomes.
- If validated on a larger scale, these results would raise the question whether current defining criteria for PPCM need to be expanded.