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Peripartum cardiomyopathy: A case report

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Abstract
Peripartum cardiomyopathy is an idiopathic heart failure occurring in the absence of any determinable heart disease during the last month of pregnancy or the first 5 months postpartum. The differential diagnosis includes pre-existing cardiomyopathy, such as familial dilated cardiomyopathy, previous myocarditis, and drug or toxin induced cardiomyopathy; valvular disease, congenital heart disease, such as shunt lesions; and pulmonary arterial hypertension. Common complications with PPCM include thromboembolism, arrhythmias and heart failure. A multidisciplinary approach is required to handle the pregnancy as well as its associated complications.

Keywords: Cardiomyopathy, valvular disease, peripartum cardiomyopathy, heart disease

Introduction
Peripartum cardiomyopathy is an idiopathic heart failure occurring in the absence of any determinable heart disease during the last month of pregnancy or the first 5 months postpartum [1]. Risk factors include pre-eclampsia, advanced maternal age, and multiple gestation pregnancy women with black ancestry are at the greatest risk.

Diagnostic Criteria for Peripartum Cardiomyopathy [2, 3]
1. Development of heart failure in last month of pregnancy or 5 months postpartum
2. Absence of preexisting heart disease
3. Indeterminant cause
4. Echocardiographic Findings (a, together with b or c, or all of these)-

a) Left ventricular end diastolic dimension >2.7cm/m2
b) M-mode fractional shortening < 30%
c) Left ventricular ejection fraction <0.45

Case Report
A 26 y primigravida at 38 weeks 3 days with Gestational Hypertension (Controlled on tab labetalol 200 mg twice a day) was admitted for induction of labour. She underwent an emergency LSCS in view of non-progress of labor. During caeseran section, there was atonic postpartum haemorrhage for which bilateral uterine artery ligation and B lynch suture application was done.
On 2nd Post-operative day she developed tachypnea (up to 60 breaths/min) and tachycardia (up to 120 beats per minute)

Investigations
Hb-9.8g/dl
TLC-23,000/L
Plt- 256
ESR-100 mm/hr
qCRP-466.8; 290.8
RFT- WNL
LFT-WNL
2D echo- LVEF- 60%LV Global hypokinesis; trivial to mild MR/ moderate LV systolic dysfunction/ Normal RV function
TROPI-301.1; 155.7

CT Chest- no e/o pulmonary thromboembolism
f/s/o- PAH+
B/L Pleural effusion +
Patient was managed conservatively on diuretics, beta blockers, low molecular weight heparin and antibiotic cover. For left global hypokinesia, patient was started on Ramipril and Aldactone. The patient is currently asymptomatic.

Discussion

Peripartum Cardiomyopathy is a rare and idiopathic condition but with serious consequences and complications if timely diagnosis and intervention is not done. Women with PPCM typically present with symptoms of congestion, including dyspnea on exertion, orthopnea, paroxysmal nocturnal dyspnea, and edema of the lower extremities [3].
The differential diagnosis includes pre-existing cardiomyopathy, such as familial dilated cardiomyopathy, previous myocarditis, and drug or toxin induced cardiomyopathy; valvular disease, congenital heart disease, such as shunt lesions; and pulmonary arterial hypertension.
Common complications with PPCM include thromboembolism, arrhythmias and heart failure. Thromboembolism is the most common severe complication of PPCM, affecting 6.6% of women with PPCM in the US [4]. Women with PPCM complicated by arrhythmias may require acute or chronic administration of antiarrhythmic drugs [5].
In women who are stable and doing well, breastfeeding is advised. However some studies suggest a role of prolactin in the pathogenesis of peripartum cardiomyopathy and advise suppression of breast milk. This however remains controversial [6].

Conclusion

Peripartum cardiomyopathy is a rare condition and the clinician should be vigilant to keep this as a diagnosis in mind in cases of sudden deterioration of maternal condition in the last month of pregnancy or postpartum. A multidisciplinary approach is required to handle the pregnancy as well as its associated complications. The women suffering from such are to be kept on long term follow up.

Conflict of Interest

Not available

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