



CLASSICAL CASE OF PERIPARTUM CARDIOMYOPATHY FOLLOWING UNCOMPLICATED PREGNANCY.

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Objectives

- Peripartum cardiomyopathy is a potentially life-threatening, pregnancy-related condition which is characterized by left ventricular dysfunction and heart failure.
- It typically develops towards the end of pregnancy or during postpartum period.
- The incidence of peripartum cardiomyopathy is 1 in 1000 to 1 in 4000 pregnant women due to geographical, socioeconomic and genetic factors.
- This syndrome is associated with a high morbidity and mortality, and the diagnosis is often delayed.

Referred by: Dr. W.A.P.B. Walisundara
Thank you for Referring

cardiac Situs	
A-V Relationship	
V-A Relationship	

Measurements	
Left ventricle	
LVEDD..... <u>33</u> mm	LV Cavity - <u>moderately dilated</u>
LVESD:..... <u>33</u> mm	LVH - <u>NO LVH</u>
EF:..... <u>50</u>%	Regional Wall :Strain and Motion abnormality
IVSD..... <u>9</u> mm	<u>mild anterior / septal hypertrophy</u>
IVPW..... <u>9</u> mm	
Diastolic Function	Overall LV Systolic function
Assessment	<u>Moderately improved</u>
E/A	Overall LV Diastolic function
E/E	
DT	
Left Atrium	<u>34 mm</u>
Right Ventricle	<u>not dilated</u>
Right Atrium	
Aorta	<u>Aortic 3.3 cm</u>
Pulmonary Artery	

Conclusion: Moderately impaired left ventricular function
Systolic function
Mildly dilated LV cavity

Recommendation: P Peripartum Cardiomyopathy
Avoid Breast Feeding

Follow up: stable
Metoprolol 25g bid
Lisin 10mg (m)
Spironolactone 12.5g (m)

Repeat Echo: RV on 8/11/2022 Tuesday
Avoid strenuous activity

Dr. L. Anuradha
Consultant Cardiologist (Acting)
District General Hospital, Matale

2D Echo by Dr. L. Anuradha
Conclusion: Moderately impaired left ventricular function
Systolic function
Mildly dilated LV cavity

Recommendation: Marginal LV dilatation
AV - Aortic root - 3.3 cm NO AA
NO AS AVA - 5mm
Pr - NO PS PPS - 3mm
TV - NO TR

Follow up: Improved EF (55%)

Repeat Echo: Improved EF (55%)

Plan:
Mobilize slowly
↓ Lisin 20mg once
omit spironolactone
cut metoprolol

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DISTRICT GENERAL HOSPITAL - MATALE
NAME: E.P.H.M. Pelakotte AGE: 26yr DATE: 09/11/22
SEX: M WARD: 2010 BHT: 59.8 kg HEALTH IDENTIFICATION NO: 123456789
REF. CONSULTANT: Dr. L. Anuradha INDICATION: B/c lower limb venous duplex

B/c common, and superficial femoral
popliteal vein show normal colour flow
duplex and compressibility

* No DVT seen in B/c lower limb
venous system

Case Report

- A 32 years old uncomplicated, primi mother delivered a baby weighting 3.2Kg vaginally.
- She complained of mild shortness of breath within first 24 hours of delivery without any lower limb pains, swellings or other respiratory symptoms.
- On examination there was no calf tenderness and Homan sign is absent.
- She had mild tachycardia with negative respiratory findings.
- Her lower limb duplex was normal and 12 leads ECG showed sinus tachycardia.
- Urgent cardiology and medical referral arranged.
- 2D Echocardiogram showed moderately impaired left ventricular systolic function with mildly dilated left ventricle.
- Patient was transferred to intensive care unit and started on metoprolol, frusemide and spironolactone.
- Breast feeding was withheld.
- Cardiac functions and vital parameters were closely monitored.
- Patient improved on 5th day of postpartum and her repeated Echocardiogram showed marginal left ventricular dilatation with improved ejection fraction.
- Then patient was mobilized gradually, frusemide dose was reduced and spironolactone was omitted while metoprolol was continued.
- After discharge, patient reviewed at 2 weeks and 6 weeks.
- Cardiac function was improved with above management.

Discussion

- The specific etiological factors and pathogenesis of this disorder remain unknown.
- However, Risk factors for peripartum cardiomyopathy include advanced maternal age, multiparity, African descent, twinning, and long-term tocolysis.
- The prognosis of peripartum cardiomyopathy is related to the recovery of ventricular function.
- Management of peripartum cardiomyopathy consists of several aspects including cardio-protection, supportive management, thromboprophylaxis, breast milk suppression and psychological support.
- Cardio-selective beta blockers, diuretics, vasodilators and ACE inhibitors play vital role in cardio protection.

Conclusion

- Even though peripartum cardiomyopathy is a life-threatening condition, early diagnosis and multidisciplinary approach helped to improve the clinical outcome.
- It can be developed in patients without known risk factors.
- Therefore, vigilant clinical suspicion would be extremely important in early diagnosis of peripartum cardiomyopathy.