

Destination Healthy Heart:

A ROADMAP TO MANAGING HEART FAILURE



Heart Failure

DUE TO PERIPARTUM CARDIOMYOPATHY (PPCM)

NURSE TALKING TIPS SHEET

This Nurse Tip Sheet was developed by AAHFN as a resource in facilitating patient education. It provides additional information so that the Nurse can supplement patient teaching with the corresponding Patient Tip Sheet. A list of resources is provided for additional information.

Background:

PPCM is a weakness of the heart muscle that occurs during the final month of pregnancy or within 5 months after delivery that leads to symptoms of Heart Failure (HF).

Risk Factors:

- Older maternal age (>30 years old);
- Pre-eclampsia
- Eclampsia
- Postpartum high blood pressure
- African American race
- Maternal cocaine abuse

Possible Causes:

- Angiogenic imbalance
- Altered prolactin processing
- Genetic, inflammatory, hormonal, hemodynamic, and autoimmune factors

Diagnosis:

The diagnosis of PPCM is challenging because patients and providers may dismiss symptoms such as shortness of breath, tiredness and swelling in the legs because these are symptoms often experienced by women in their third trimester of a normal pregnancy.

- PPCM is a diagnosis of exclusion; however, the eventual diagnosis is based on three distinct clinical criteria:
 - Development of HF during the final month of pregnancy or within 5 months after delivery
 - HF that is unexplained by other common causes of HF
 - Left ventricular ejection fraction (LVEF) is less than 45%
- Some women recover fully with normal heart function, some have a slow gradual recovery on HF medications, while some continue to decline despite medical therapy

Treatment/Prevention:

- PPCM is treated with standard HF medications with some exceptions

Management of Acute Decompensated HF:

- IV inotropic (Milrinone and Dobutamine) and vasodilator agents (Nitroglycerin) are safe during pregnancy
- Nitroprusside should be used with caution due to potential toxicity of thiocyanate to the baby
- Immunosuppressants and anti-inflammatory therapies are not recommended

Management of Compensated HF:

- Hydralazine, nitrates, digoxin and diuretics are safe during pregnancy and breastfeeding
- Angiotensin-converting enzymes (ACEI) , angiotensin II receptor blockers and aldosterone antagonists are not recommended during pregnancy, as they can affect the baby
- Left ventricular thrombus is common when the EF < 35% so anticoagulation therapy should be given and continued until LV function normalizes
- If breastfeeding is desired, safety profiles of medications in each category should be considered
- ICD placement should be deferred three to six months while receiving optimum medical therapy to determine whether criteria for placement are present
- Women are at risk of developing the condition again with another pregnancy, even if they have recovered completely.
- Pregnancy is not advised if the heart function has not recovered and the EF is <55%

Patient teaching:

- Discuss contraception options such as using a highly effective non-estrogen method of contraception, such as the etonogestrel implant, a copper intrauterine device (IUD), or levonorgestrel-releasing IUD
- Interdisciplinary (maternal-fetal medicine) collaboration among caregivers is recommended
- Review all medications the patient is taking including OTCs and supplements
- Counsel patient to take all medications as directed; to not stop any medications unless directed by their healthcare provider
- Teach patients the symptoms they need to report to their provider
- Encourage patients to keep all follow up appointments
- Follow the current AHA/ACC guidelines for management of HF
- Discuss the need for continued monitoring of their heart function to determine improvement/response to medication

For Future Reference:

Blauwet LA, Cooper LT. Diagnosis and management of peripartum cardiomyopathy. *Heart*. 2011; 97(23): 1970-81.

Johnson-Coyle L, Jensen L, Sobey A. Peripartum cardiomyopathy: review and practice guidelines. *Am J Crit Care*. 2012; 21(2), 89-98.

Sliwa K, Hilfiker-Kleiner D, Petrie MC, et al. Current state of knowledge on aetiology, diagnosis, management, and therapy of peripartum cardiomyopathy: a position statement from the Heart Failure Association of the European Society of Cardiology Working Group on peripartum cardiomyopathy. *Eur J Heart Fail*. 2010; 12(8):767-78.

