

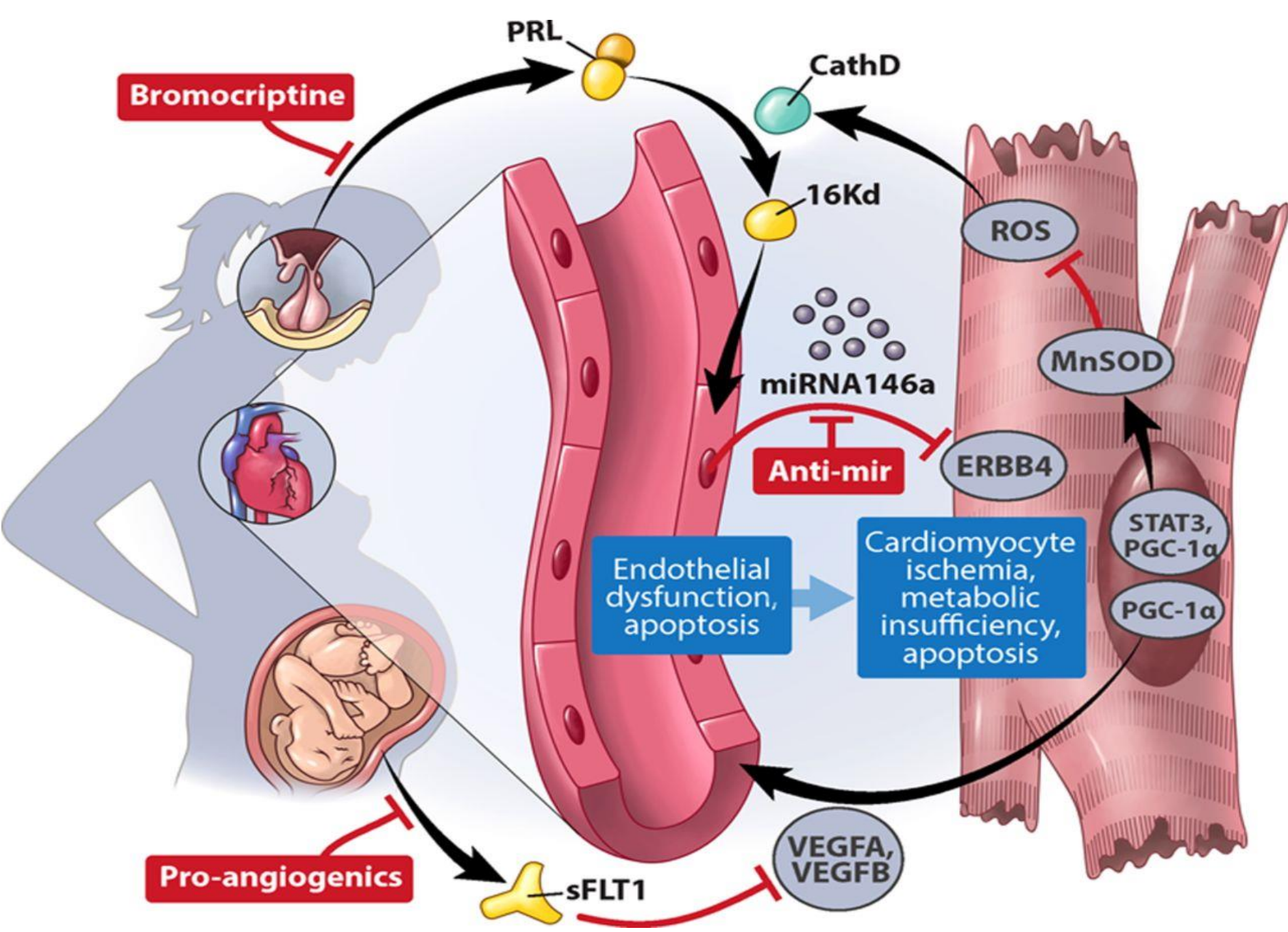
A REVIEW OF RECENT ADVANCES IN THE MANAGEMENT OF PERIPARTUM CARDIOMYOPATHY.

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Introduction

- ✓ Though uncommon, peripartum cardiomyopathy (PPCM) is associated with severe maternal morbidity and mortality.
- ✓ Despite several pieces of research in this field, its etiopathogenesis and presentation are uncertain. Its diagnosis is often delayed as symptoms and signs mimic cardiovascular changes in pregnancy.
- ✓ Due to unclear pathophysiology and variable presentation of PPCM, its management remains challenging for physicians.
- ✓ So, a narrative review was conducted to assess the recent advances in the management of PPCM.



Objectives

To assess the recent advances in the diagnosis and management of PPCM.

Methods

- ❖ This review was conducted to analyze the recent discoveries and advances in the etiopathogenesis, diagnosis and management of PPCM.
- ❖ Online search from January 2000, to December 2021 was performed using Medline data search. All article types were included in the search.
- ❖ 237 relevant publications were retrieved.
- ❖ Out of these 67 studies were included in the review.

Medline data search PPCM
N=1552 studies

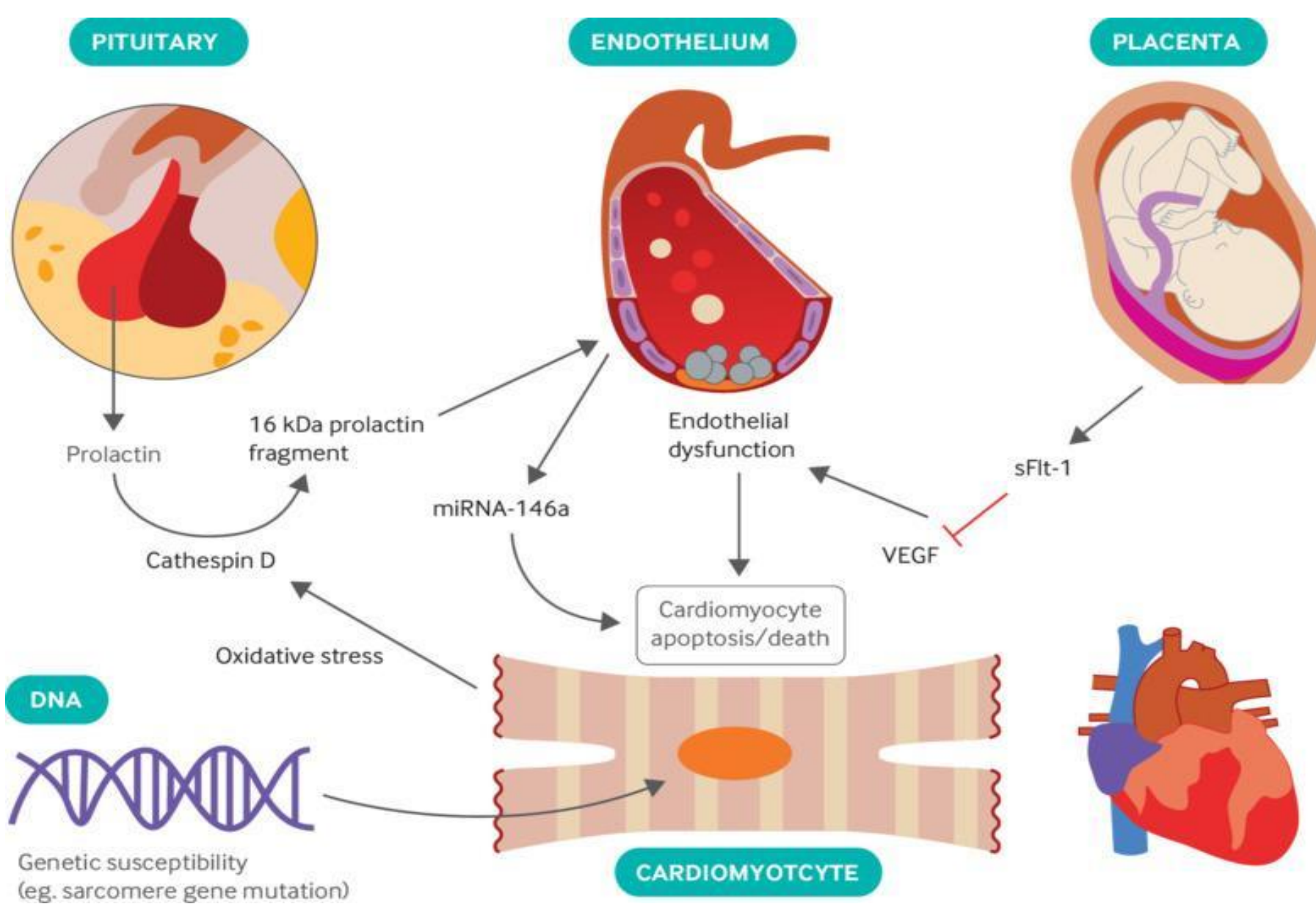
Articles with full text retrieved
N=623

Articles that do not meet the objectives excluded

Articles Included
N=237

Articles included in this review
N=67

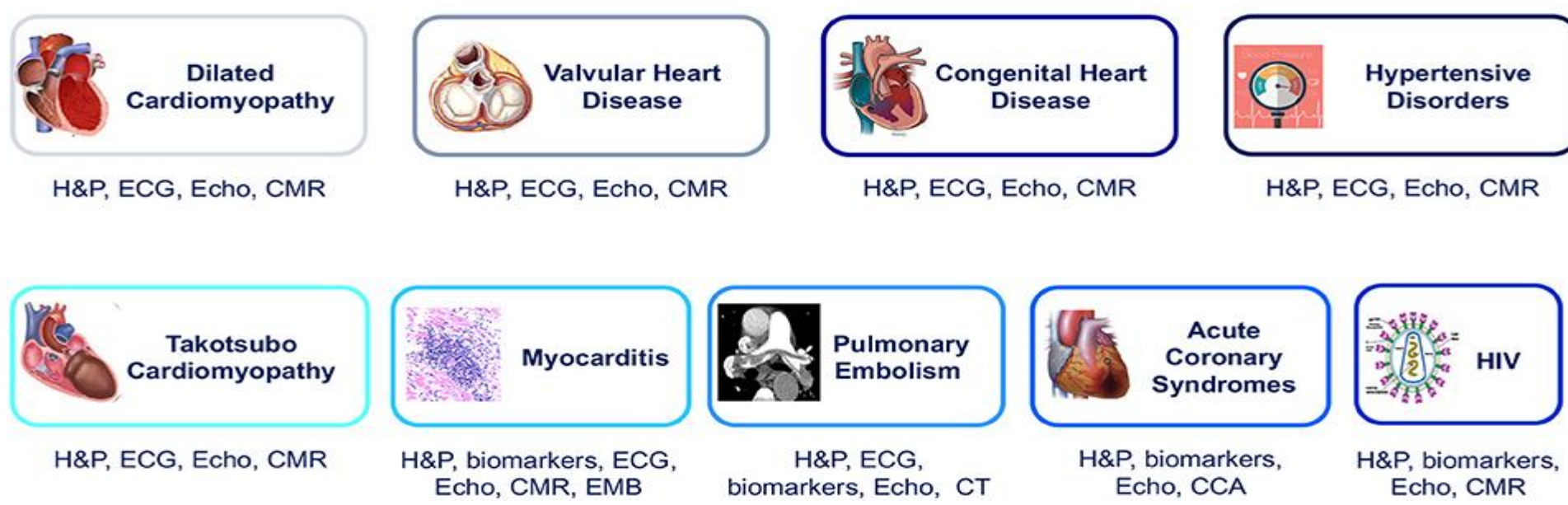
Results



Results

- ✓ Damage to the cardiac myocytes and endothelium by oxidative fragmentation of prolactin and heat shock proteins are suggested as the etiopathogenesis of PPCM.
- ✓ Genetic predisposition for PPCM with a pathogenic mutation with TTN truncations, myosin-binding protein C, lamin A/C, beta-myosin, or sodium voltage-gated channel alpha subunit 5 (SCN5A) was noted by many authors.
- ✓ PPCM was frequently noted in elderly nullipara women but multiparous women were also identified as at risk by some authors.
- ✓ Preeclampsia, multiple gestation, iron deficiency anemia, gestational diabetes mellitus and obesity were addressed as risk factors for PPCM.
- ✓ Echocardiography remains the imaging modality of choice in these cases.
- ✓ The use of Ambulatory echocardiography devices was found beneficial in diagnosis of arrhythmias.
- ✓ Treatment and outcomes were essentially case-specific.
- ✓ A multidisciplinary approach is advisable in all these cases.
- ✓ The role of heart failure therapies, anticoagulants, vasodilator agents, and diuretics was found to be beneficial in most of these patients.
- ✓ In resistant cases, Bromocriptine, inotropic therapy, an intra-aortic balloon pump and left ventricular assist device use has been tried with success.
- ✓ Cardiac transplantation remains the last modality of treatment with variable results.
- ✓ Early diagnosis and prompt management remain the mainstay in the treatment of PPCM.
- ✓ Women with irreversible ventricular dysfunction had the worst outcomes and should be advised against future pregnancy.

Differential diagnosis of peripartum cardiomyopathy



Results

ECG changes in $\geq 50\%$ nonspecific ST and T wave abnormalities
Prolong PR & QRS interval

Echocardiography
Reduction in LV systolic function
LVEF<45%
Left Ventricle may be enlarged

Cardiac Catheterization
Right side—Critically ill patients
Left side—to evaluate coronary artery disease

Management of Peripartum Cardiomyopathy

PRE-DELIVERY	POST DELIVERY	LONG TERM PLAN
DIURETICS BETA-BLOCKERS ANTICOAGULANTS HYDRALAZINE AND NITRATES(HTN) BIOMARKERS CARDIAC IMAGING PLAN FOR DELIVERY	MEDICAL THERAPY ANTICOAGULANTS REVIEW BY CARDIOLOGY TEAM CONTRACEPTION COUNSELING	CONTRACEPTION GENETIC TESTING FOLLOW UP

Conclusion

- ✓ Despite several studies to date, the prevalence and outcome of PPCM are unpredictable.
- ✓ Usually, women with early reversal of ventricular function have a better prognosis.
- ✓ Identifying women for high risks for PPCM and multidisciplinary approach may aid in early diagnosis and management of these cases and hence outcomes can be ameliorated.

References

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