

Peripartum Cardiomyopathy with Early Presentation of Pneumonia

Fanni Luciana¹, Agrifa H Haloho¹, Iin I Pertiwi¹, Dimas Priantono¹

1. Brawijaya Hospital Depok

Corresponding email : fanni.Luciana.fl@gmail.com

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Background

- Peripartum cardiomyopathy (PPCM) is a disease characterized by dilatation of the heart muscle wall, particularly left ventricle, without significant hypertrophy that might lead to systolic dysfunction.¹
- PPCM occurs in the last month of pregnancy up to 5 months postpartum, with no prior history of heart disease.²
- Sign and symptoms PPCM similar like pneumonia (dyspnea, orthopnea, paroxysmal nocturnal dyspnea).³

Case Report

- A parity one 22-year-old woman presented with worsening shortness of breath from day three of the perpueral. The patient had history of uncomplicated spontaneous labor with a vigorous baby 5 days before onset.
- The patient had no history of dyspnea and heart disease.
- Vital Sign : BP 146/106 mmHg; HR 140 bpm ; RR 35 bpm ; T 37,1 C ; SpO2 88% (NRM 10 LPM--> 98%)
- Physical examination : Rales were found in both lung fields ; no abnormalities detected from the cardiac.

References

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- Chest X-Ray : normal heart size with opacities in the basal aspect of both lungs indicating pneumonia
- Laboratory : respiratory alkalosis, anemia, leucocytosis with neutropilia, elevated CRP level, and light reduction of potassium
- Echocardiogram : Left atrial (LA) and left ventricle (LV) dilatation, Left Ventricle Ejection Fraction (EF) 24%, Mild Mitral, Tricuspid, Pulmonal regurgitation
- Therapy : Beta blocker, ACE- inhibitor, Dopamine receptor agonist (bromocriptine)
- 5 months after therapy patient had significant improvement

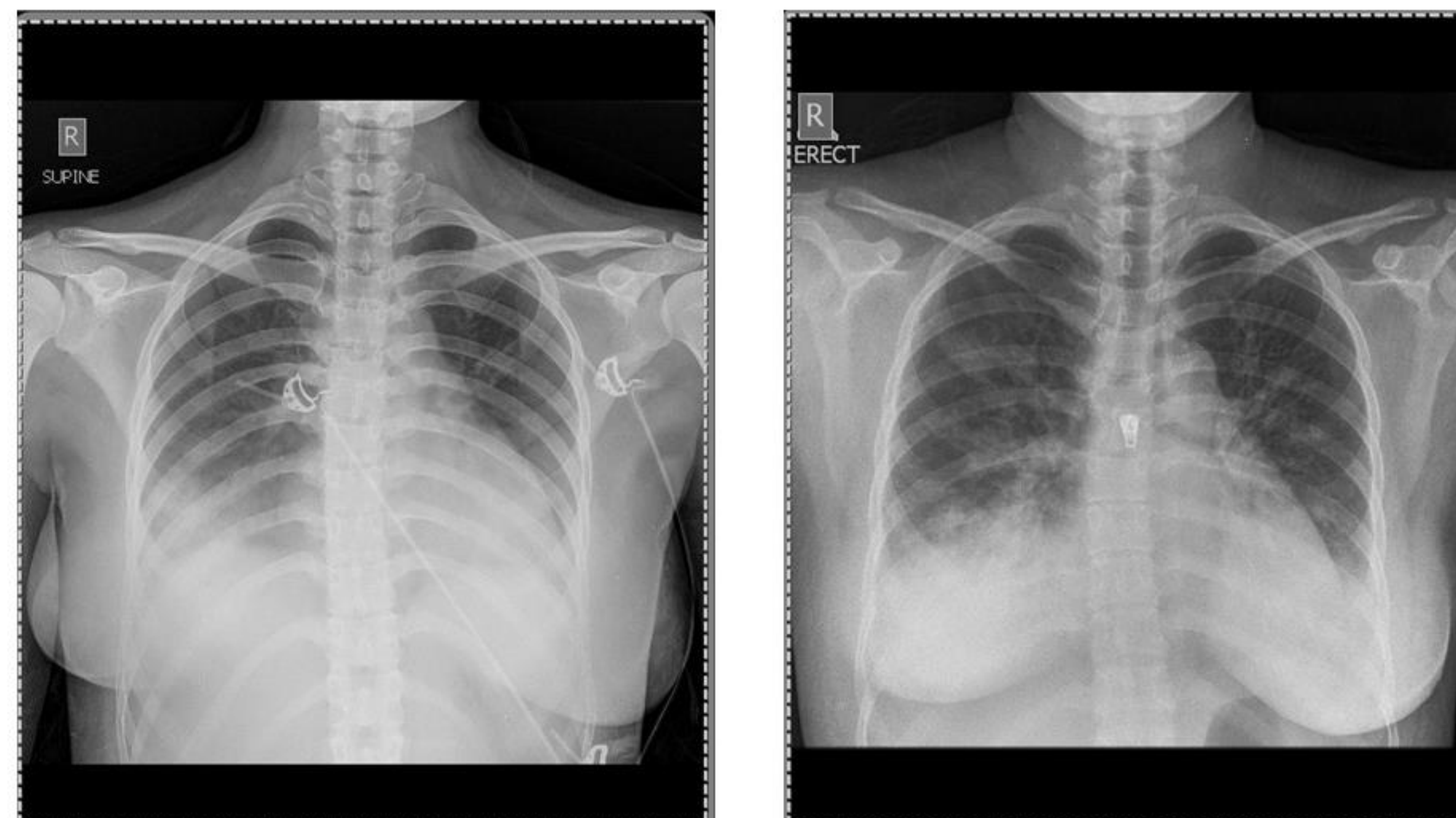


Figure 1a (Left) : Chest X-ray showed normal heart size with opacities in the basal aspect of both lungs indicating pneumonia. Figure 1b (Right) : Chest X-Ray after four day admissions

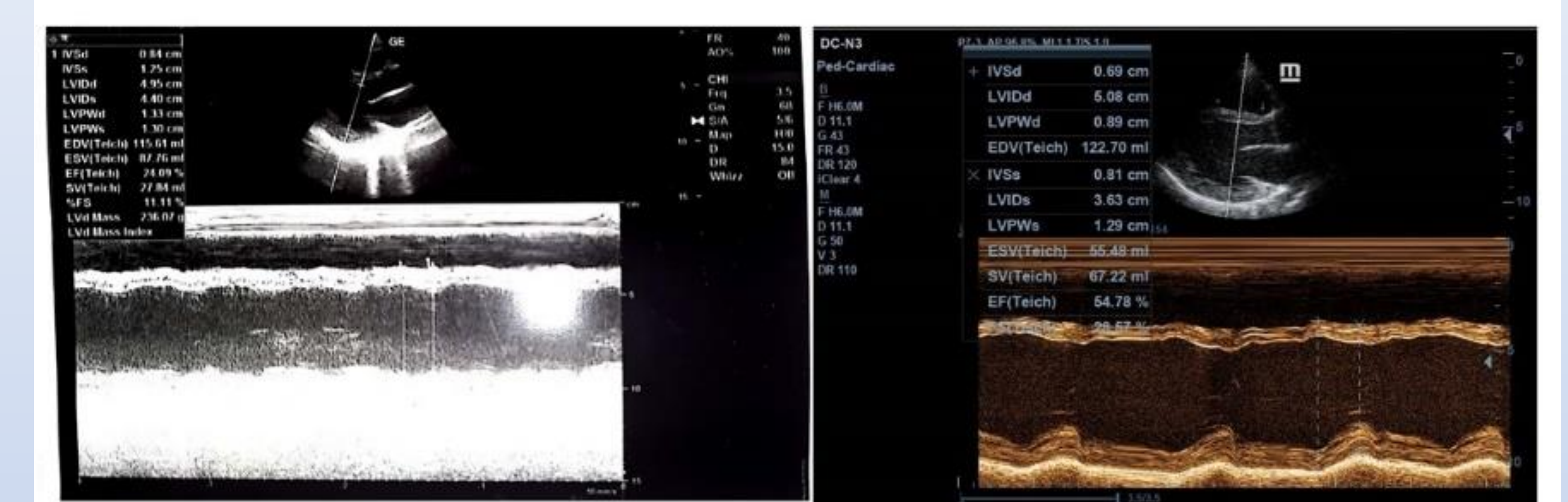


Figure 2a (left) : Echocardiogram showed Mild Tricuspid, Mitral, Pulmonal Regurgitation. Left Ventricle Ejection Fraction (LVEF) 24%, Left Ventricle Spontaneous Echo Contrast (LVSEC) + ; Figure 2b(Right) : Echocardiogram after 5 months post partum showed increasing ejection fraction

Discussion

- PPCM risk factor include disease that cause cardiovascular disorder such as hypertension, smoking, and diabetes, >32 years, preeclampsia, multiparity, multifetal, and obesity (BMI >30)⁽²⁾
- Early PPCM sign and symptoms are usually similar to the normal physiological findings of pregnancy, including pedal edema, dyspnea, orthopnea, paroxysmal nocturnal dyspnea, abdominal discomfort, therefore, it is often too late to be diagnosed⁽³⁾.
- In the absence of systematic studies comparing therapeutic approaches in PPCM, standard heart failure therapy needs to be initiated along with dopamine receptor agonist (bromocriptine)⁽⁴⁾

Conclusion

- PPCM should be considered in peripartum women with acute dyspnea . Early treatment can reverse cardiac dysfunction and restore patient's quality of life.