

# Management of Peripartum Cardiomyopathy:

## A Case Series

Dr Sarah Morrisson

Here we present insight from the management of two cases of peripartum cardiomyopathy within a tertiary centre in 2022-2023.

The *European Society of Cardiology Working Group On Peripartum Cardiology 2010* defines peripartum cardiomyopathy as:

- Development of heart failure with left ventricular systolic dysfunction and LVEF of less than 45%, AND
- developed towards the end of pregnancy or within 5 months following delivery AND
- without another identifiable cause.

### Risk factors:

Multiple gestation  
pregnancy  
age greater than 30 years  
ion pregnancy  
HTN  
maternal cocaine use  
parity greater than three.

### Differential diagnosis:

pulmonary embolism,  
myocardial infarction  
preexisting cardiac  
conditions (unmasked  
during pregnancy).

Case 1. 34-year-old para 1 presented to hospital at 36+6 weeks reporting 6 weeks of progressive dyspnoea, inability to lay flat, and limb swelling. There was bilateral pedal edema and bibasilar crackles. Systolic blood pressure was 160 mmHg. Echocardiogram showed LVEF 30%. Despite efforts to optimize medically prior to delivery, repeat echo 1 week later showed further deterioration in LVEF to 20% and thus decision for delivery via emergency cesarean section was made.

Case 2. 28-year old para 2 presented at 36+0 weeks with 2 weeks progressive dyspnoea and limb swelling. Systolic blood pressure was 150 mmHg and echocardiogram showed LVEF 15%. The patient was admitted to ICU and plan was made to deliver during daylight hours via caesarean section. The patient spontaneously laboured in ICU on day of admission and received an early epidural to minimise cardiac stress secondary to pain. Given the poor ejection fraction, Valsalva manoeuvre was contraindicated and the patient was delivered via forceps in operating theatre.

### Key Insights

Both cases required the careful management of hypertension – which likely contributed to the development of PPCM – to avoid further diminishing cardiac output. We found early epidural and forcep assisted delivery effective in minimising cardiac stress associated with labour.