

# Impaired Haemodynamics In Pregnancy: A Case Of Dilated Cardiomyopathy

Bettison TM<sup>1,2</sup>, Nippita TA<sup>1,2,3</sup>

1. Department of Obstetrics and Gynaecology, Royal North Shore Hospital, Sydney, NSW, Australia
2. Sydney Medical School Northern, University of Sydney, Sydney, NSW, Australia
3. Clinical and Population Perinatal Health Research, Kolling Institute of Medical Research, Sydney, NSW, Australia

## Background

Pregnancy and the peripartum period changes haemodynamics and cardiovascular demand. We present a case of a 31-year-old woman, G1-P0, with severe dilated cardiomyopathy (DCM) and her obstetric management.

## Case

Mrs SH was transferred to a tertiary care centre at 33+1/40 with threatened premature labour (painful regular tightenings, cervix closed), on background of asymptomatic DCM diagnosed at 12+3/40 (LVEF :28%) having been investigated nine-years prior for ectopic beats, but lost to follow up at the time. On presentation, TTE showed severe global dysfunction but improved

ejection fraction (LVEF: 37%) and she remained asymptomatic. Telemetry showed non-sustained ventricular tachycardia asymptomatic episodes and she was admitted for the remainder of pregnancy for monitoring. Labetalol was commenced, and plans made for postpartum insertion of an automated implantable cardiac defibrillator (AICD). Growth ultrasounds were normal (EFW 58<sup>th</sup> centile). Incidentally, she also developed cholestasis of pregnancy (pruritus, bile acid=25). Mrs SH had a prelabour LSCS at 37+1/40, delivering a live male infant (3160g, APGARS 9<sup>195</sup>), with an epidural (slow onset) and was admitted to ICU for 24hrs postpartum monitoring. Her intraoperative and postoperative course was unremarkable. Mrs SH

had an AICD three days postpartum.

## Discussion

Mrs SH had a prolonged hospital admission with a good outcome, despite severe DCM (LVEF<30%), consistent with *WHO Class-IV* (pregnancy contraindicated). Interestingly, LVEF improved from second to third trimester, likely a result of shifting haemodynamics, allowing a term delivery. This highlights the unpredictable nature of conditions for which there is little evidence and the importance of serial monitoring.

Contact:  
travis.bettison@sydney.edu.au