

A Primigravida with Senning Atrial Switch, Residual Severe LVOT Obstruction, and Thrombocytopenia

Case:

- G₁P₀ at 37 3/7 wks presents for IOL in CVICU due CHD with significant residual components
- Multidisciplinary conference held at 35 weeks:
 - delivery plan location (CVICU)
 - mode of delivery
 - plan for emergency contingencies
- Zio cardiac monitor at 24 weeks
 - 9 episodes of NSSVT and 2 episodes of NSVT.
- Echo during 1st trimester
 - SAM of MV with severe LVOT obstruction, peak gradient of 162 mmHg.
- Patient takes metoprolol and ASA 81 mg daily
- Currently asymptomatic

A vertical image on the left side of the slide. The top half shows a cable car suspended from cables against a clear blue sky. The bottom half shows a modern hospital building with a glass facade and a red-tiled roof, partially obscured by green trees.

On Admission:

- Platelets 86k
- early epidural planned prior to further progression of thrombocytopenia
 - adequate analgesia
 - prevent tachycardia and ↑ in myocardial contractility with labor pain
- Two 18ga IVs and a-line placed
- Defibrillator and pads readily available
- Labor epidural placed without difficulty
 - Initiated with 8 ml of 0.125% bup given in 2 ml aliquots + fent 100 mcg
- Hemodynamics unchanged.
- A PIEB program with PCEA using bup 0.0625% + fent 2 mcg/ml is used
- 2nd stage lasts 95 minutes.
- The patient is monitored in the CVICU postpartum for 12 hours without event



- Optimal outcomes use a proactive multidisciplinary approach
- Preadmission planning with agreement on:
 - IV access
 - Cardiac monitoring needs
 - Arterial & central line access
 - Other items tailored to patient's specific condition.
- Consider:
 - Mode of delivery (vaginal vs. C/S)
 - Location for laboring (L&D vs. ICU)
 - Recovery phase (postpartum unit vs. ICU)
 - Emergency contingencies for emergency C/S
- For best outcomes:
 - Know how to activate all parties quickly
 - Transport patient to correct location for procedure (OB OR vs main OR)
- Arrhythmias and heart failure prevention considered in delivery plan.¹

References

1) Tutarel O, Baris L, Budts W et al. "Pregnancy outcomes in women with a systemic right ventricle and transposition of the great arteries," results from the ESC-EORP Registry of Pregnancy and Cardiac Disease (ROPAC). Heart 2022,108:117-123.

