

Management of Hypertrophic Obstructive Cardiomyopathy During Cesarean Section

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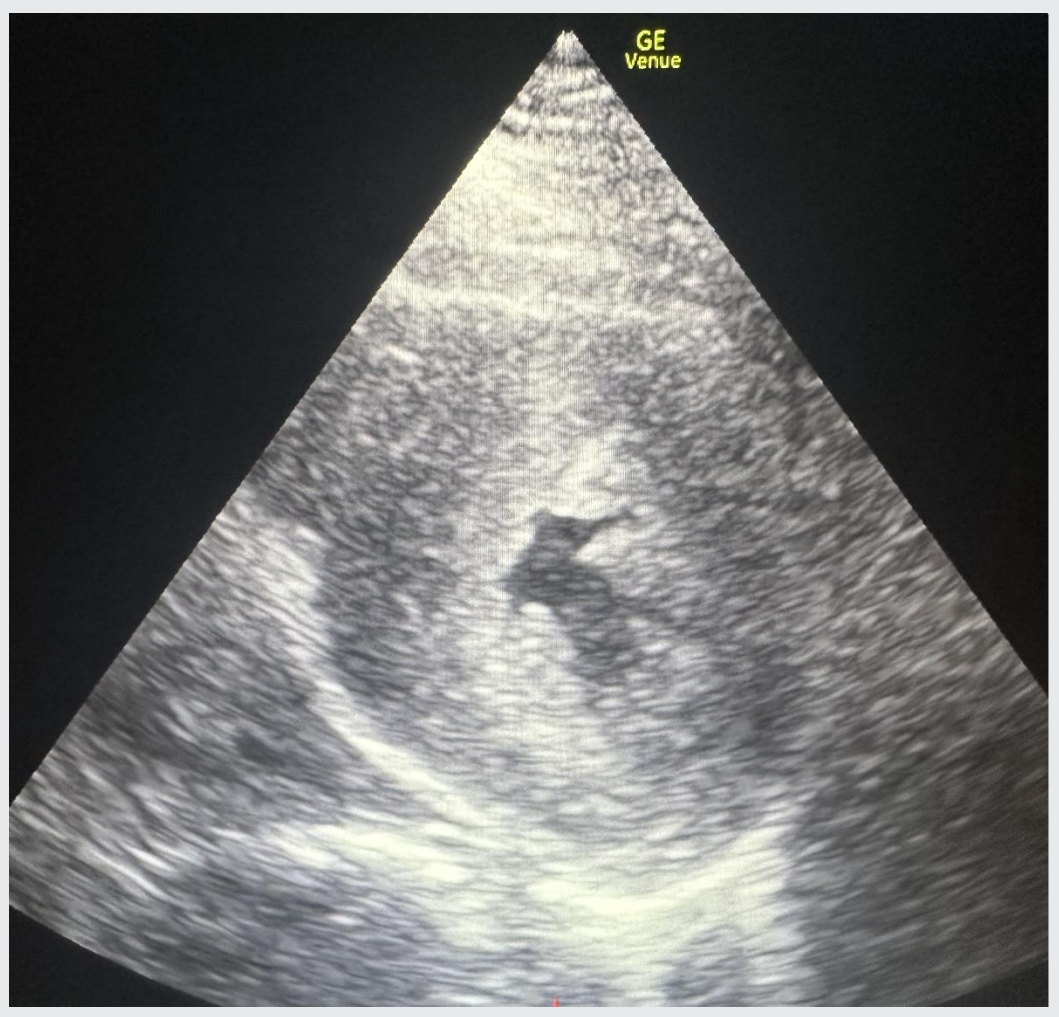
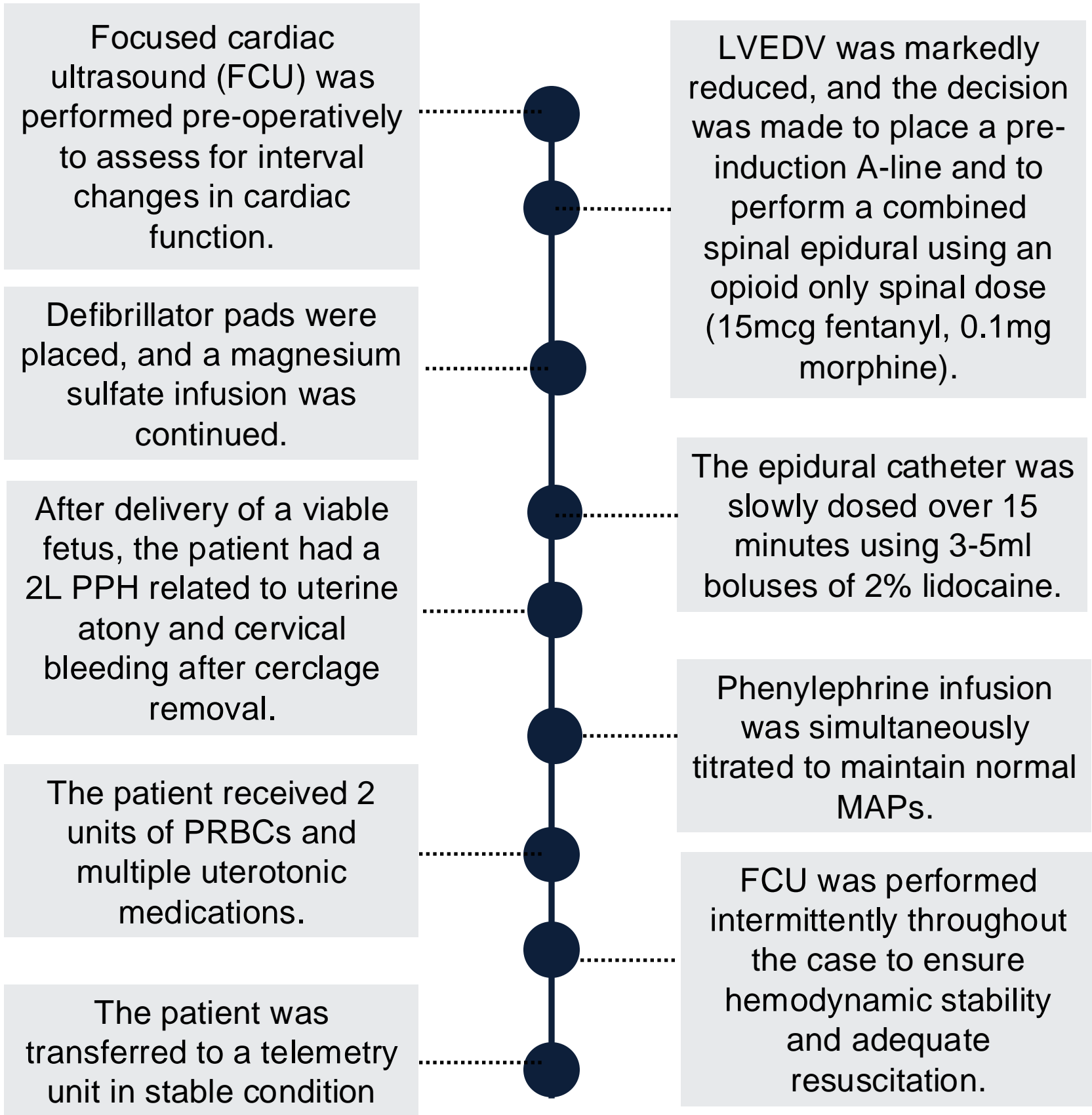
INTRODUCTION:

- HOCM is the most common genetic cardiac condition in the United States (prevalence 1:200-500).
- Data is minimal regarding intrapartum management.^{1,2}
- Physiologic changes of pregnancy & disease heterogeneity make peripartum management challenging.
- Key considerations: ensuring adequate preload, stroke volume, and cardiac output to support uteroplacental perfusion and hemodynamic stability.³

PATIENT BACKGROUND:

- 36-year-old G2P0101 with a 5-year history of HOCM (WHO class 2-3), paroxysmal VTach, and chronic HTN admitted to at 35w4d for expectant management of superimposed pre-E with severe features.
- History of cervical insufficiency s/p rescue cerclage.
- Maternal cardiac MRI → significant LVH, 2.5cm septum
- Second trimester echo → estimated LVEF 65-70%.
- Continuous wearable cardiac monitor (ZioPatch) placement earlier in pregnancy w/ an episode of non-sustained VTach. **Given this cardiac history, evolving pre-eclampsia refractory to IV medications, and prior C-section the OB team recommended urgent repeat C-section at 35w5d.**

ANESTHETIC MANAGEMENT:



CONCLUSIONS:

- Patients with HOCM require careful peripartum management. Use of opioid-only spinal dosing and slow loading of epidural local anesthetic provides hemodynamically stable neuraxial anesthesia for cesarean delivery.
- This case illustrates the utility of FCU for hemodynamic assessment in parturients undergoing urgent surgery.

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2. Maron BJ, Desai MY, Nishimura RA, Spirito P, Rakowski H, Towbin JA, Rowin EJ, Maron MS, Sherrid MV. Diagnosis and Evaluation of Hypertrophic Cardiomyopathy: JACC State-of-the-Art Review. *J Am Coll Cardiol.* 2022 Feb 1;79(4):372-389. doi: 10.1016/j.jacc.2021.12.002. PMID: 35086660.
3. Saberi S. Hypertrophic Cardiomyopathy in Pregnancy. *Cardiol Clin.* 2021 Feb;39(1):143-150. doi: 10.1016/j.ccl.2020.09.009. Epub 2020 Oct 29. PMID: 33222809.



