Balancing Relative Contraindications: Epidural Anesthesia in a Pregnant Patient with Cardiac and Hepatic Dysfunction

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Worsening liver function is often an indication for urgent delivery, and **general anesthesia** may be preferred due to bleeding risk

However, other conditions might better benefit from **neuraxial anesthesia** due to desire for hemodynamic stability

Causes of transaminitis in pregnancy: AFLP, HELLP, severe pre-eclampsia, viral hepatitis, HIV[1]

We present a challenging case of a patient with significant transaminitis concerning for AFLP and newly diagnosed peripartum cardiomyopathy for whom we performed an epidural for urgent CS

The Case

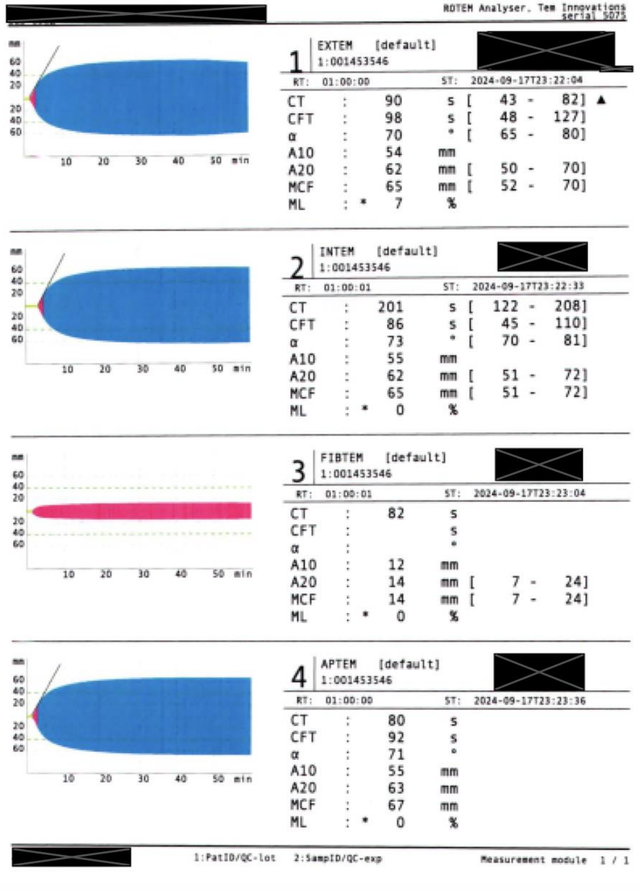
38-year-old G2P2002 presented at **28w1d** with newly diagnosed HFrEF (LVEF 20%) and transaminitis (ALT/AST 1900s) with concern for AFLP, and ultimately underwent urgent CS due to NRFHT

Patient History

- **PMH:** Hepatitis C, untreated HIV, asthma, and active polysubstance abuse (meth, THC, MDMA)
- **Initial presentation:** RUQ pain, N/V, lethargy, and HTN (SBP into the 160s); was unaware that she was pregnant
- **Labs:** mild anemia without hemolysis, leukocytosis, lactic acidosis, AKI with uremia, transaminitis, and prolonged PT/PTT with INR of 1.4
- ROTEM without hypocoagulability

Anesthetic Course

- After discussion of risk/benefits of GA vs NA, patient elected to proceed with neuraxial
- Patient underwent uneventful low-dose CSE
  - Epidural removed in PACU, no epidural hematoma formation on follow-up
- Further workup revealed transaminitis was more consistent with the combination of pre-eclampsia, heart failure, and HIV cholangiography



Teaching Points

When Contraindications Contradict

- Risk benefit analysis is necessary to determine best plan of care
- When debating GA vs C-section in an urgent delivery, it may be beneficial to proceed with neuraxial anesthesia after overt coagulopathy has been ruled out

Prioritizing Cardiac Function

- Epidural hematomas are rare (approx. 1:200,000 patients)[2]
- CV disease is one of the *leading causes of maternal mortality* in the US[3]

References

1. Sharma AV, John S. Liver Disease in Pregnancy. [Updated 2023 Jun 12]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2025 Jan.
2. D'Angelo R, Smiley RM, Riley ET, Segal S. Serious complications related to obstetric anesthesia: the serious complication repository project of the Society for Obstetric Anesthesia and Perinatology. Anesthesiology. Jun 2014;120(6):1505-12.
3. Meng M-L, et al. Anesthetic care of the pregnant patient with cardiovascular disease: A scientific statement from the American Heart Association. *Circulation*. 2023;147(11).