Anesthesia and Multidisciplinary Management in a High-Risk Obstetric Patient with Severe Pulmonary Disease Undergoing Cesarean Delivery

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- **32-year-old G3P0304 presenting for Cesarean delivery**
  - PMHx: severe asthma, bullous emphysema, obstructive sleep apnea, chronic hypoxic respiratory failure requiring home oxygen, and obesity
  - PSHx: At 28 weeks gestation, she underwent a laparoscopic cholecystectomy at OSH complicated by prolonged intubation and a left-sided pneumothorax requiring chest tube placement.
    - *Later extubated and transferred for further management. Non-reassuring antenatal testing with recurrent decelerations necessitated a cesarean delivery at 32 weeks gestation.*
- Preoperative Evaluation
  - 6L NC in L&D room, no acute respiratory distress, chest tube on suction without leak.
  - Physical exam: Mallampati III, TOM distance >/= 6 cm, mouth opening > 3 cm, normal dental exam

References:
- Br J Anaesth 2019; 123(4)480-7
- JOGNN 2019; 48(2):234-42
- Thromb Res 2018; 171:51-6
- Anesthesiology 2016; 124(4):792-802
- Anaesthesia 2014; 70(3)323-9

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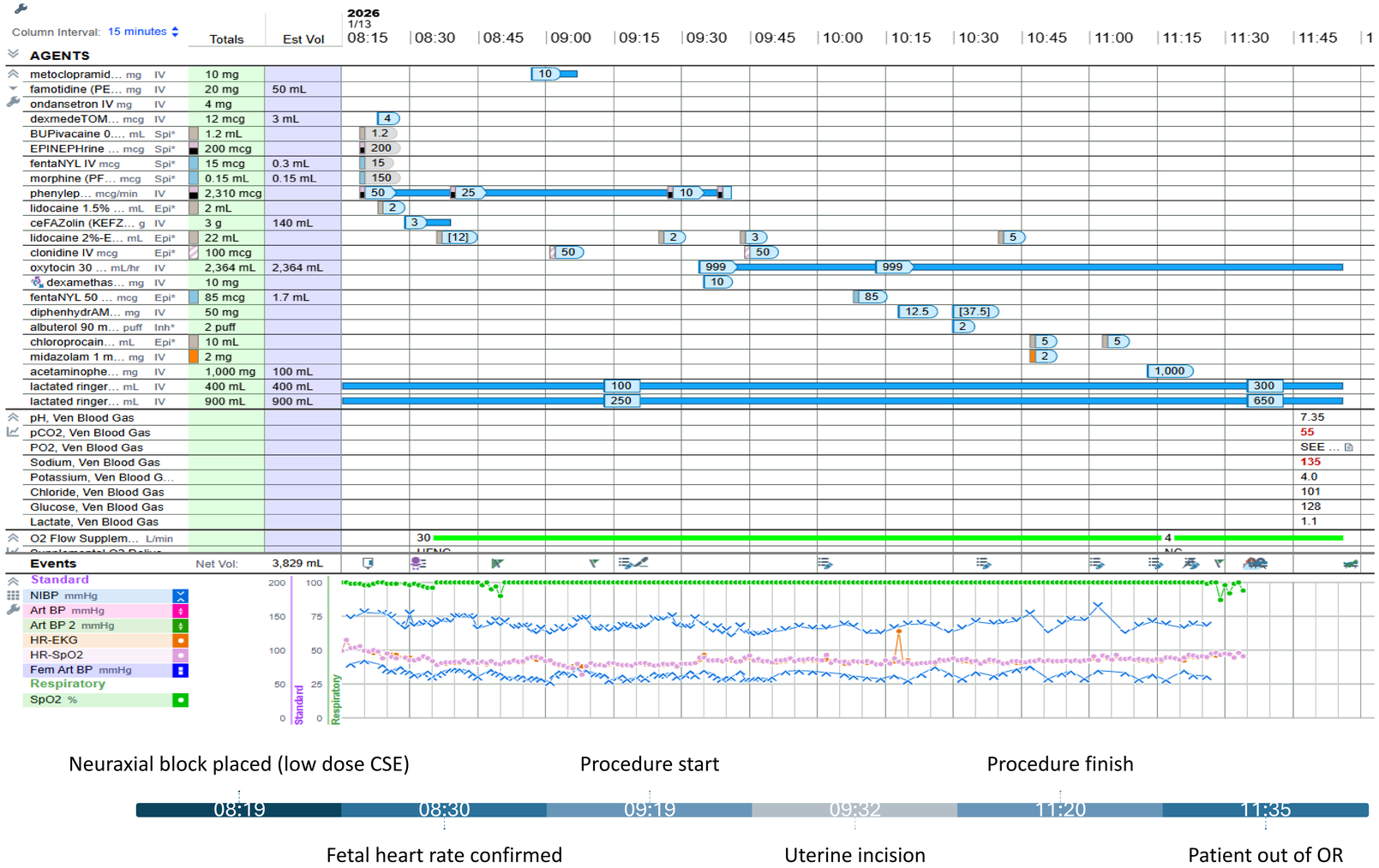

Neuraxial block placed (low dose CSE) 08:19

Fetal heart rate confirmed 08:30

Procedure start 09:19

Uterine incision 09:32

Procedure finish 11:20

Patient out of OR 11:35

Notable Intraoperative Events:

8:34
- HHF for oxygenation

10:00
- Patient reports L>R chest wall discomfort
- Additional local anesthetic given via epidural catheter

11:00
- Increased pressure sensation with occasional description of sharp sensations
- OB team paused suturing SQ tissue for more epidural and IV medications
- Patient reported improvement of her pain

Clinical Considerations:

Anesthetic choice: GA vs. Neuraxial	- Strong clinical evidence supporting neuraxial technique - Low-dose spinal + CSE to avoid respiratory demise
Importance of interdisciplinary communication	- Obstetrics, obstetric anesthesia, thoracic surgery, surgical ICU, NICU - Multiple coexisting and sometimes competing priorities
Balancing maternal and newborn safety	- Physical location of cesarean section when adult and neonatal ICU's are in separate hospitals -Transport timing and proper support