Anesthetic Management of a Preeclamptic, Morbidly Obese Parturient With Von Willebrand Disease: A Case Report

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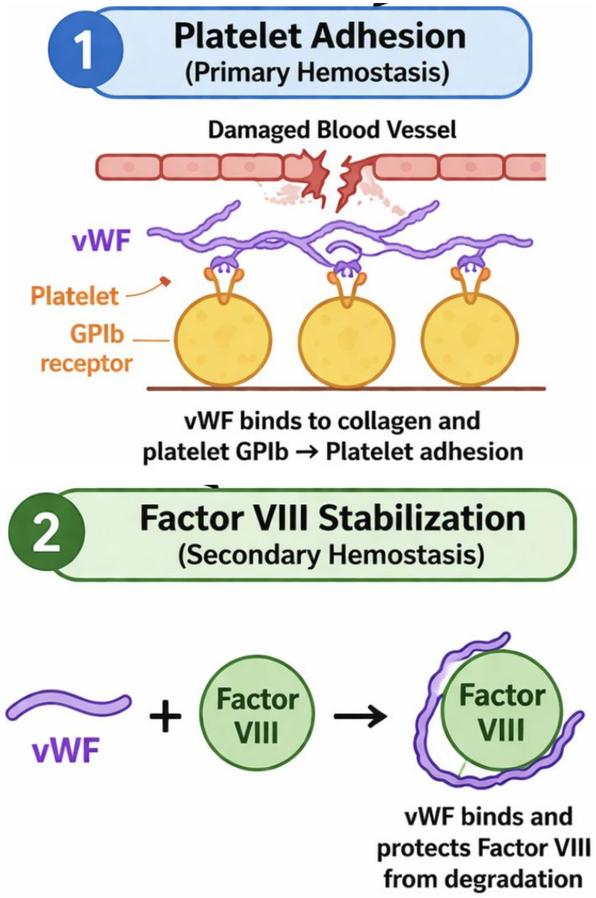
Background

- Von Willebrands Disease is characterized by impaired hemostasis and variable clinical severity[1]
- Requires balancing hemorrhagic and hypertensive risks during cesarean delivery
- Pregnancy alters coagulation, complicating management
- Co-morbidities (e.g., severe preeclampsia, morbid obesity) increase anesthetic complexity



Case Presentation

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Presentation (35+5wks)

- Severe HTN: 184/100, 176/100, P/C: 0.31
- vWD (unknown type), BMI 48, Hgb 8.7
- No HA/vision changes, LFT: 0.2,12,16,118

Initial Management

- MgSO4 4g IV + nifedipine 10mg PO
- Bethamethasone 12mg IM x2
- Category 1 fetal tracing

Preoperative Planning

- Persistent HTN → Cesarean delivery planned
- Hematology: DDAVP 20mcg IV (30min pre-op)
- Case delayed ~9hours

Intraoperative Course

- Spinal (US-guided)
- Bupivacaine 0.75% (1.6mL) + Morphine 200mcg
- TXA 1g given
- Uncomplicated delivery; QBL 600mL

Outcome & Post-op

- Neonate: Apgars 8/9, stable (cleft lip/palate)
- POD1: Hgb 7.7, Na 133
- Discharged HD6, uncomplicated recovery

Teaching Points

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Pathophysiology

- Defects in vWF → impair platelet adhesion and decrease factor VIII stability[1]
- Pregnancy inc vWF and Factor VIII → mask severity, complicating perioperative assessment[2]

Management

- Neuraxial anesthesia requires vWF>50IU/dL and consider US use[1]
- DDAVP: Type 1 only (avoid in Type 2B-thrombocytopenia risk)[2]
- vWF concentrate: preferred for reliable hemostasis[2]

Postpartum risks

- High risk of postpartum hemorrhage due to rapid factor decline[2]
- Monitor for neuraxial hematoma
- Hyponatremia secondary to DDAVP

1. Weyand AC, Flood VH. Von Willebrand disease: Current status of diagnosis and management. Hematol Oncol Clin North Am. 2021;35:1085–1101.

2. Castaman G, James PD. Pregnancy and delivery in women with von Willebrand disease. Eur J Haematol. 2019;103:73–79.