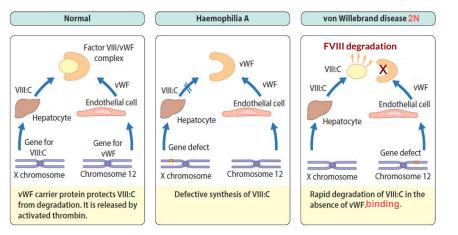
## Neuraxial Analgesia in Type 2N Von Willebrand's Disease: A Case Report

**Introduction to Case** 



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## Von Willebrand Disease Type 2N



Modified from Textbook of Paediatrics, 4th Ed.

#### Autosomal recessive disorder Estimated 1-10% of all VWD cases

**Treatment:** VWF-FVIII concentrates: Humate-P, Alphanate, Wilate Temporizing: DDAVP, FVIII infusion

## Patient case

23 y.o. female **G2P0** with a history of **Type 2N VWD**, presenting with **vaginal bleeding** at 28w6d.

Q: Safety of neuraxial analgesia for labor & delivery?

#### **Obstetric history:** G2P0

- G1 (2022): medical abortion, D&C
- G2 (present): vaginal bleeding at 26w4d with FVIII level 17%

#### **Hematologic history:**

- Diagnosed at age 14
- +: Heavy menstruation, prolonged bleeding, muscle hematoma
- Ppx: Alphanate, VWF-FVIII concentrate, DDAVP

Surgical history: Dental procedures, D&C

#### Anesthetic history: Non-contributive

#### **Physical exam:**

Mallampati: 2 Mandibular protrusion: 1 Spine deviation ~1 cm from midline

Weight: 5'6" | Height: 150 lbs BMI 24.2 kg/m<sup>2</sup>

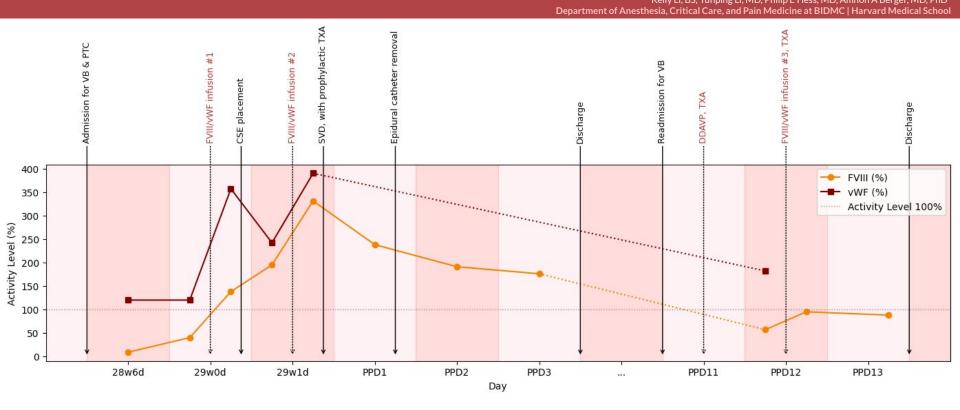
#### **Notable labs:**

Hct: 33 Plt Ct: 233 PTT: 45.7 s [25.0 - 36.5] Factor VIII: 9% [50-200] VWF Activity: 120% [50-200] TEG: R-value 8.7 s [nl non-pregnant 4.6-9.1]

# **Neuraxial Analgesia in Type 2N Von Willebrand's Disease:** A Case Report *Hospital Course*



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#### Peripartum Factor VIII and vWF Levels

Abbreviations: VB = Vaginal Bleeding, PTC = Preterm Contractions, CSE = Combined Spinal Epidural, SVD = Spontaneous Vaginal Delivery, TXA = Tranexamic Acid, DDAVP = Desmopressin, vWF = von Willebrand Factor.

### **Neuraxial Analgesia in Type 2N Von Willebrand's Disease:** A Case Report *Discussion*



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**Challenge:** Safe **NA management** in a **Type 2N vWD** patient with active bleeding and impending preterm delivery.

## **Treatment Approach:**

**Pre-treatment**: Humate-P (50 IU/kg)  $\rightarrow$  FVIII > 100%, vWF > 300% **Guidance by TEG** for real-time coagulation status **Safe NA placement** (combined spinal-epidural) with FVIII > 100%

# Summary of recommendations

## **Outcomes & Complications**

- Successful preterm vaginal delivery
- **Delayed postpartum bleeding**  $\rightarrow$  Readmission, FVIII  $\downarrow$  57%

- I. Monitor VWF and FVIII levels in third trimester.
- 2. Multidisciplinary approach with hematology, MFM, and OB Anesthesia.
- 3. Factor replacement for target levels >50% for neuraxial placement and labor & delivery.
- 4. Early epidural placement, with neuraxial ultrasound as needed.
- 5. Close **postpartum follow-up** and factor replacement as needed.