

# Utilization of ISTH BAT Score in a Parturient with Bleeding of Unknown Cause

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## CASE PRESENTATION

- 32-year-old G2P0010 at 38w4d who presented in early labor in the setting of bleeding of unknown cause (BUC)
- History significant for heavy menorrhagia, easy bruising, excessive bleeding after wisdom teeth extraction, and maternal family history of postsurgical bleeding
- Hematology workup at 17 weeks without definitive diagnosis
- Hematology recommendations due to a BAT score of 6:
  - Neuraxial contraindicated
  - 1 unit platelets and 1 gram tranexamic acid (TXA) on admission
  - 1 unit platelets q8-12 hours, 1300 mg oral TXA q8h for 5-7 days



## Peripartum Course:

- Admission labs normal: hemoglobin **12.3**, platelet count **251**
- Initially started on nitrous oxide for labor analgesia, transitioned to remifentanyl PCA
- Delivery was complicated by a PPH requiring methylergonovine, TXA, misoprostol, and one unit packed red blood cells
- Patient was discharged on PPD1
- Readmitted on PPD2 for vaginal bleeding and found to have retained products of conception
  - Underwent a D&C and received 1 unit of platelets and 1 gram of TXA preoperatively
  - Discharged with seven days of oral TXA
- Presented to triage on PPD9 with continued vaginal bleeding and found to have a vascular lesion within the uterus
  - Scheduled for D&C and uterine artery embolization at six weeks postpartum
    - Received regimen of 1 unit of platelets and 1 gram TXA preoperatively
    - Received additional 2 units of platelets intraoperatively due to excessive bleeding
    - Required foley balloon and vaginal packing, removed on POD1
  - Discharged on POD4 with resolution of bleeding

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## Discussion:

- Bleeding Assessment Tool (BAT)
  - Screening tool for inherited platelet disorders
- Scoring
  - 14 categories
  - Each category is scored from 0-4
- Limitations
  - Insensitive to acquired bleeding disorders
  - Less helpful for differentiating inherited platelet disorder from Von Willebrand disease
- This scoring system can guide preoperative management in parturients with BUC and avoid complications of inadvertent neuraxial placement

|                            |                                        |                                                        |
|----------------------------|----------------------------------------|--------------------------------------------------------|
| Epistaxis                  | Normal Range:<br>Adult Males           | 0-3                                                    |
| Cutaneous Bruising         |                                        | A score $\geq 4$ is considered 'abnormal'              |
| Bleeding from minor wounds |                                        |                                                        |
| Oral Cavity Bleeding       | Normal Range:<br>Adult Females         | 0-5                                                    |
| GI Bleeding                |                                        | A score $\geq 6$ is considered 'abnormal'              |
| Haematuria                 |                                        |                                                        |
| Dental Extractions         | Normal Range:<br>Child [Age <18 years] | 0-2                                                    |
| Surgery                    |                                        | A score of $\geq 3$ is considered 'abnormal'           |
| Menorrhagia                |                                        |                                                        |
| Post-partum Haemorrhage    |                                        | A Bleeding Score <2 makes a Bleeding Disorder unlikely |
| Muscle Haematomas          |                                        |                                                        |
| Haemarthrosis              |                                        |                                                        |
| CNS Bleeding               |                                        |                                                        |
| Other Bleeding Problems    |                                        |                                                        |