

Asymptomatic Hypofibrinogenemia In A Primigravid

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Case Presentation

Pre - OP

- A 39-week G1P0 with no prior medical history
- Patient was unaware of any personal or familial coagulopathies
- Labor epidural was placed uneventfully
- Laboratory assessment
- slightly prolonged PT/INR of 14.7/1.4
- Fibrinogen level < 75 mg/dL
- Note: Viscoelastic testing was unavailable at our facility. Hematology was consulted

Intra-OP

- Two units of cryoprecipitate were administered prior to delivery
- Fibrinogen level remained < 75 mg/dL
- Uneventful vaginal delivery
- Healthy male infant with APGAR scores of 9 and 9
- Estimated blood loss of 200 mL
- Received one additional unit of cryoprecipitate after delivery
- Epidural catheter removed

Post-OP

- Postpartum fibrinogen levels did not exceed 95 mg/dL
- Discharged home on postpartum day 2
- Scheduled follow-up by Hematology

	Pre-Procedure Labs	Post-Procedure Labs
WBC	11.1	
Hg	11.0	
HCT	33.9	
PLT	224	
PT		14.8
aPTT		27.9
INR		1.4
Fibrinogen		<75

Significance

- Hypofibrinogenemia
 - Rare clotting disorder
 - Circulating fibrinogen < 150 mg/dL
 - Clinical Presentation
 - In parturients, there's a wide range presentation
 - Severe cases associated with early pregnancy loss or placental abruption (1-3)
 - Therapy
 - Fibrinogen supplementation with cryoprecipitate

References

1. PMID: 30076675.
2. PMID: 17635718
3. PMID: 23852822
4. PMID: 17413923.
5. <https://doi.org/10.1182/hematology.2020000090>
6. <https://doi.org/10.1016/j.ajogmf.2022.100778>

Discussion

- General laboratory testing prior to epidural placement is not recommended in healthy parturients (4)
- Laboratory testing following epidural placement can lead to transfusion of blood products out of an abundance of caution
- Epidural removal and delivery might have been completed without cryoprecipitate
 - In this patient, fibrinogen levels remained < 75 mg/dL after cryoprecipitate and EBL for delivery was normal
- Viscoelastic testing would have provided confirmatory information on clot formation in this clinical scenario and guided administration of cryoprecipitate (5,6).