

Management of a Patient During ECV Abruption Leading to DIC

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Background:

Rare complication of ECV (external cephalic version) with an incidence of 0.18%.¹

This case highlights unrecognized placental abruption during ECV procedure.

ECV can lead to rare but severe complications like placental abruption and subsequently DIC (disseminated intravascular coagulation).

Prompt recognition and management are critical to prevent further complications.

1. Grootscholten K, Kok M, Oei SG, et al. External cephalic version-related risks: a meta-analysis. *Obstet Gynecol.* 2008;112:1143–1115

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Case Presentation:

- Previously healthy 32-year-old G2P1, 38 weeks gestation, scheduled for external cephalic version (ECV) due to frank breech presentation. ECV was unsuccessful and the procedure was aborted due to fetal distress
- The patient had extended monitoring post-procedure. There was no evidence of bleeding and/or pain. FHR monitoring had moderate variability with spontaneous decels responsive to resuscitation maneuvers.
- Cesarean delivery performed 5.5 hours post-ECV
- Intraoperative findings: active hemorrhage along the hysterotomy, rectus muscles, and omentum. Labs were consistent with DIC (see table)
- Maternal postoperative care:
 - Persistent thrombocytopenia delayed epidural removal (POD 3)
 - Discharged on POD 5 with improvement in clinical status

Events	Pre-ECV	After neonatal delivery	PPD 0 5 hrs post-delivery	PPD 1 12 hrs post-delivery	PPD 1 23 hrs post-delivery	PPD2	PPD3	PPD3 Epidural removed
Interim Transfusions			1 U FFP 20 pooled cryo units 1 U platelets	2 U pRBCs 1 U platelets	1 U pRBCs			2 U platelets
Hemoglobin	12.1 g/dL	8.8 g/dL	7.4 g/dL	7.7 g/dL	8.4 g/dL	8.2 g/dL	7.6 g/dL	7.8 g/dL
Platelet	162 x10 ⁹ /L	70 x10 ⁹ /L	58 x10 ⁹ /L	72 x10 ⁹ /L	64 x10 ⁹ /L	41 x10 ⁹ /L	32 x10 ⁹ /L	79 x10 ⁹ /L
Fibrinogen	--	52 mg/dL	182 mg/dL	203 mg/dL	259 mg/dL			
Creatinine	--	1.4 mg/dL	--	1.84 mg/dL	1.95 mg/dL	1.64 mg/dL	1.25 mg/dL	

ECV=external cephalic version; FFP = fresh frozen plasma; cryo=cryoprecipitate; pRBC = packed red blood cells

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Take Away Points:

Placental abrupton is a rare complication of ECV.

A high index of suspicion is needed for non-reassuring fetal status after an ECV procedure.

Rapid response to maternal/fetal distress is crucial to stabilize the fetus and prevent complications.

DIC is a severe complication of placental abrupton.

Careful consideration must be used when managing an indwelling epidural catheter in a patient with DIC.