A Case of Severe Pre-eclampsia resulting in Placental Abruption and Disseminated Intravascular Coagulation

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Introduction and Aim

Disseminated intravascular coagulation (DIC) is a rare and life-threatening obstetric complication requiring prompt diagnosis and management. Understanding the underlying cause of DIC is paramount to informing management.
The aim is to present a case of DIC secondary to placental abruption resulting in unfortunate intra-uterine fetal demise (IUFD).

Case

A 31-year-old female, G9P6 23 weeks' gestation in an unbooked pregnancy presented with acute onset abdominal pain, vaginal bleeding, and hypertension. History on presentation revealed previous pre-eclampsia and five pre-term vaginal deliveries, and increased BMI. There was no preceding trauma or symptoms of pre-eclampsia. Examination demonsatrated tender and tense uterus, old blood in the vault with a long and closed cervix. Ultrasound revealed fetal demise with sonographic evidence of placental abruption.

Case cont.

Investigations revealed Hb 110, Plt 139, ALT 36, Creat 99, eGFR 66, **INR 1.3, Fibrinogen 1.0, D-dimer >128**.
ROTEM showed **FIBTEM A5 2**.
Her blood pressure was stabilised, and DIC was corrected with 4g fibrinogen concentrate, 20units cryoprecipitate and 1unit platelets. She underwent induction for delivery resulting in a 2L PPH which was medically managed. Placenta histopathology was consistent with massive retroplacental haemorrhage.

Discussion

Obstetric causes of DIC include placental abruption, as occurred in this case. This case highlighted several important points including management of DIC and obstetric haemorrhage. Management of coagulopathy was central to management - for correction of DIC and control of haemorrhage.

Conclusion

This case presents as a reminder to be vigilant in assessing for and correcting DIC, and the use of ROTEM as a point of care test to improve outcomes by providing immediate management solutions.