

Point of care management of Mirror syndrome associated with maternal low fibrinogen level

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Argomento: Caso clinico

Mirror syndrome is a rare obstetric condition characterized by maternal oedema associated to non-immune fetal and placental hydrops. Some possible causes have been identified such as Rhesus isoimmunization or viral infections e.g. Parvovirus B19.

A 37 years-old pluripara at 24 + 6 gestational week was referred to our center for fetal hydrops, lower limbs oedema and weight gain of 5 kg in ten days. Patient's history was negative for bleeding disorders. The day after intrauterine blood transfusion (IBT), the patient presented a hemodilution condition with low fibrinogen level (1,2 g/L) associated with dyspnea, worsening of oedema and oliguria. Point of Care ROTEM parameters were: FIBTEM A10 = 4 mm and EXTEM CT 80"/A10 = 43 mm. Platelets' count and coagulation tests (INR and APTT ratio) were normal. Cesarean section under spinal anesthesia was performed due to worsening of maternal conditions and antepartum hemorrhage. At the opening of the uterus, obstetricians observed fluid blood inside. After umbilical cord clamp, fibrinogen (Haemocomplettan) 60 mg/kg and oxytocin 10 U/500 ml/h were administered. Estimated blood loss was approximately 1500 ml. Four units of packed red blood cells, 1:1 ratio fresh frozen plasma and fibrinogen concentrate 2 g POC ROTEM-guided were transfused. ROTEM FIBTEM analysis was normal after 6 h from Cesarean section. The neonate died 1 hour after birth. Furosemide 20 mg and albumin 20% (50 ml) twice a day reduced maternal oedema (weight loss of 8 kg) and the patient was discharged fully recovered on D13 after delivery.

Low fibrinogen is a strict predictor of post-partum hemorrhage (PPH). Early POC ROTEM analysis represents an efficient tool to manage PPH, to correct subsequent coagulopathies, to reduce blood losses and to ensure a better outcome of our patients.

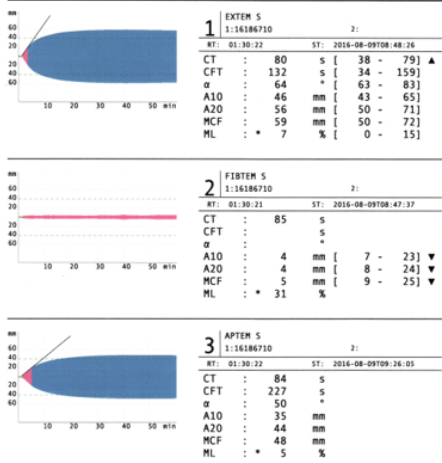


Table 1 Initial ROTEM analysis

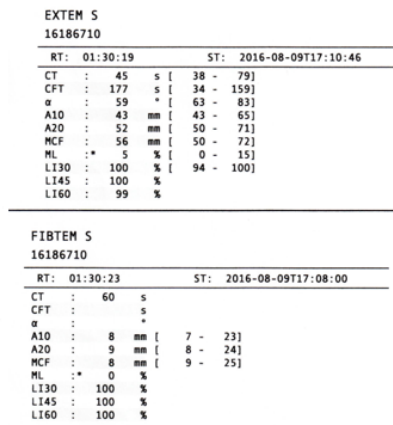


Table 2 ROTEM analysis 1 h after CS

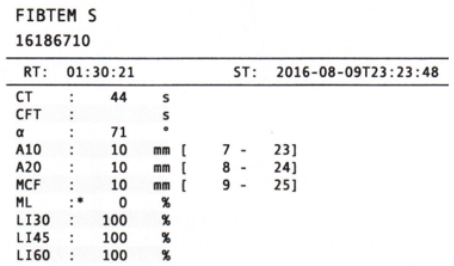


Table 3 ROTEM analysis 6 h after CS