Perinatal findings of women with pregnancy related haemolytic uremic syndrome: a case series from a single Italian tertiary perinatal care centre

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Objective. Pregnancy-associated atypical haemolytic uraemic syndrome (aHUS) is a rare and potentially lethal complement-mediated disorder. It can mimic preeclampsia, thrombotic thrombocytopenic purpura and HELLP syndrome. Thus, it can be hard to distinguish pregnancy-associated aHUS from other causes in peri/post-partum women presenting with features of microangiopathic haemolytic anaemia, thrombocytopenia and acute kidney injury.

Materials and Methods. We retrospectively search our electronic medical records for pregnant women who delivered at the perinatal centre of our hospital and developed perinatal thrombotic microangiopathy for evaluating their characteristics at the time of disease onset, final diagnosis, and maternal and foetal outcomes.

Results. Five women who developed aHUS were found. All pregnancies were singleton with the exception with one spontaneous twin pregnancy. Mean maternal age was 33.6; the mean maternal pre-conceptional BMI was of 24.3 kg/m^2. The twin pregnancy ended with a term vaginal delivery induced for preeclampsia. All the other four pregnancies were complicated by placental abruption with two stillbirths and two urgent preterm CS. Of six foetuses, four neonates were alive with a mean birthweight of 1,722.5 g. All women developed severe renal impairment (maximum creatinine level of 4.8 mg/dl) and thrombocytopenia (minimum level of 35.8 × 109/L) within 24 hours after delivery. A diagnosis of aHUS was performed, and treatment with eculizumab was initiated with rapid improvement of both clinical and laboratory parameters.

Conclusions. Our case series confirm the high frequency of overlapping conditions with placental abruption and preeclampsia preceding the post-partum aHUS diagnosis. High risk of foetal loss is also demonstrated.