

## HELLP Syndrome Diagnosis in an 19+2 week pregnancy: A case report

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**Objective:** To present the case history of a patient with HELLP Syndrome at 19+2 week pregnancy.

### Methods:

Case report: A 43-year-old pregnant woman at 19+2 weeks of gestation presented to the emergency room with acute epigastralgia. Her obstetric antecedents included previous c-section, and two late miscarriages.

The current pregnancy was secondary to assisted reproductive techniques and was being followed up in the hospital's high-risk obstetric unit. She had undergone cervical cerclage at 17+2 weeks due to her obstetric history.

Initial physical examination showed hypertension (164/104 mmHg) and mild abdominal pain with no signs of peritonism. An abdominal ultrasound confirmed a normal pregnancy.

A blood test was performed and showed elevated liver enzymes and severe plateletopenia ( $58 \times 10^9/L$ ) with an elevated protein/creatinine ratio found on urinalysis (1968,7 mg/mmol creatinine). Also schistocytes were detected in blood sample.

After discussing the case in a multidisciplinary group, the patient was managed in the semi-critical unit due to her deteriorating liver function and progressive plateletopenia (reaching  $34 \times 10^9/L$ ). Viral serologies and some autoimmune parameters including ADAMS 13 and AT III were negative.

Because of the alteration of angiogenic factors (Ratio sFit-1/PIGF of 1487) a HELLP syndrome was suspected. It was decided to finalize the pregnancy due to poor maternal prognosis at such an early gestational age. A pharmacological induction was performed, and delivery occurred 19 hours later. After delivery, woman showed signs of clinical and laboratory improvement until normalized biochemical parameters in eight days.

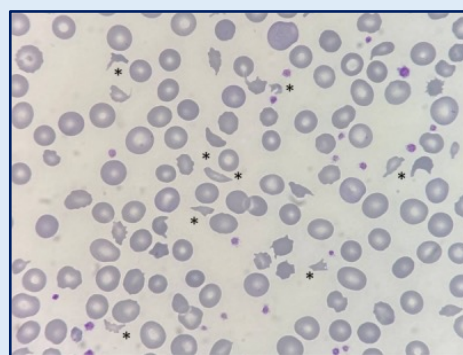
### Results:

Discussion: The most common cause of thrombocytopenia during pregnancy is gestational plateletopenia, which does not usually have major repercussions on the mother or foetus.

The clinical and laboratory severity of the patient in the case presented, as well as the presence of schistocytes in the blood, make it necessary to include other more severe conditions such as thrombotic thrombocytopenic purpura (TTP), haemolytic-uraemic syndrome (HUS), disseminated intravascular coagulation (DIC), severe pre-eclampsia and HELLP syndrome in the differential diagnosis.

HELLP syndrome was not initially considered as a primary diagnosis due to the gestation age, as it is very rare before 20 weeks of pregnancy.

The presence of a high angiogenic factor ratio was the key for the suspicion and diagnosis of HELLP syndrome in this patient.



**Conclusion:** The differential diagnosis of thrombocytopenia is highly important, as the risk of bleeding for both mother and child and the risk of severe maternal complications vary from one underlying disease to another, as does the required treatment.

This case suggests that HELLP syndrome can occur before 20 weeks of gestation, and that angiogenic factors are a key tool for differential diagnosis of thrombotic microangiopathies of pregnancy.

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