

THE SOPHISTICATION OF DIFFERENTIAL DIAGNOSIS AND TREATMENT OF HELLP SYNDROME IN CLINICAL PRACTICE

Gulomova Sh.Kh., Ibrohimova D.I,

Tashkent Medical Academy, Tashkent, Uzbekistan

Annotation: HELLP syndrome is one of the most important diseases that medical practitioners, especially gynecologists, should be knowledgeable about and able to differentiate from other obstetric illnesses, as well as rheumatologic conditions. This rare condition might cause maternal death due to doctors' ignorance.

Key words: HELLP syndrome, pregnancy, third trimester, preeclampsia, risk factors, key indicators

Aim of study: HELLP syndrome is a significant medical condition that clinicians, especially gynecologists, need to be aware. The aim of this article is to provide an overview of the differential diagnosis of HELLP syndrome and discuss appropriate treatment options.

Introduction: HELLP syndrome is a pregnancy-specific disorder defined by hemolysis, elevated liver enzymes and low platelet count that is found in parturients, more frequent in older multiparas. It is frequently associated with severe preeclampsia or eclampsia, but can also be diagnosed in the absence of these disorders.^[1] Women with a history of preeclampsia or eclampsia have a higher risk of developing HELLP syndrome, with up to 1 in 5 women who have had preeclampsia or eclampsia being affected. Other risk factors include age, previous history of HELLP syndrome, previous labor and delivery, and race, with white women being at higher risk.^[2] The etiology of HELLP syndrome is unknown, and the pathogenesis of this disorder (including the hepatological manifestations) is not fully understood.^[1] The most widely accepted hypotheses are: a change in the immune feto-maternal balance, platelet aggregation, endothelial dysfunction, arterial hypertension and an inborn error of the fatty acid oxidative metabolism. Hepatic involvement occurs by intravascular fibrin deposition and hypovolemia. Serum LDH and platelet count are the two most important clinical tools for disease assessment. LDH reflects both the extent of hemolysis and hepatic dysfunction. Maternofetal complications cause a 7.0-70.0% perinatal mortality rate and a 1.0-24.0% maternal mortality rate. The recognition of HELLP syndrome and an aggressive multidisciplinary approach and prompt transfer of these women to obstetric centers with expertise in this field are required for the improvement of materno-fetal prognosis.^[3]

Symptoms of HELLP syndrome may become apparent during pregnancy or shortly after childbirth, such as abdominal pain, blurred vision, malaise or fatigue,

edema, nausea, vomiting, and in rare cases, uncontrolled nosebleeds, seizures, or uncontrollable body shakes.

Materials and methods. In the obstetrics clinic, patient B.C., 35 years old. Complaints: No complaints of dizziness, nausea, or sleep disturbances. History: The patient has not experienced any serious illnesses or surgeries in the past. She is currently pregnant with her third child. The pregnancy has been proceeding well. The patient has been taking antiplatelet and anticoagulant (Cardiomagnyl, Clexane) medications under the supervision of an obstetrician-gynecologist. On 08.11.2023, at the City Maternity Hospital Complex 6, the patient gave birth to a healthy baby boy weighing 3200g at 38 weeks of natural physiological childbirth. The delivery process was uneventful. On 11.11.2023, discharge from the hospital was planned, but due to jaundice in the baby, further observation and treatment were required. On 13.08.2023, discharge from the hospital was planned, but the baby was not discharged due to persistent jaundice. The patient became very anxious about the baby's condition on that day. From November 13, 2023 to November 14, 2023, the patient had a fever with a temperature of 37.1°C, accompanied by weakness, pain in the joints and muscles, changes in the color of the skin on the hands and feet turning blue, as observed. On November 14, 2023, the patient was taken to the Regional Specialized Treatment and Diagnostic Center (RSTDC) and underwent examinations, including Doppler ultrasound of the blood vessels (vascular Doppler ultrasound). The presence of primary vasculitis was suspected. On November 14, 2023, at 14:00, respiratory distress symptoms appeared, and due to the above complaints with the addition of nodules on the hands and feet, the patient was urgently transferred to the intensive care unit for resuscitation. On November 14, 2023, at 18:00, consultations were held by an infectious disease specialist, pulmonologist, cardiologist, and rheumatologist in the intensive care unit to determine the diagnosis and provide recommendations for further examinations.

Based on the patient's complaints, medical history, physical examination findings, and results of laboratory and instrumental examinations, there is a suspicion of systemic autoimmune diseases.

Results. On November 15, 2023, the patient was reevaluated by a rheumatologist in the therapy intensive care unit. Diagnosis: Systemic autoimmune disease, undifferentiated type, with a severe course. Activity 3 (SLEDAI = 28 points), central nervous system involvement (disorientation, irritability), kidney (proteinuria), heart (tachycardia), blood vessels (Raynaud's syndrome, hemorrhagic lesions), constitutional symptoms (fever), liver (autoimmune hepatitis).

Antiphospholipid syndrome? -ANA screen, -dsDNA, -ANCA, -ScL 70, -ACL tests were ordered.

On November 15, 2023. The patient's general condition remains stable but heavy. SpO₂ - 94%. Oxygen saturation is maintained. Pulmonologist: 1. Chest CT

scan. 2. IgG and IgM for covid-19. 3. Sputum analysis was ordered. Pleural cavity ultrasound : No significant findings during the examination. Kidneys ultrasound : Some changes in the renal parenchyma are noted. Echogenic signs of salt diathesis. Gallbladder ultrasound : Condition after meals 7 hours. Diffuse changes in the liver parenchyma. Hepatosis appearance. Echogenic signs of chronic cholecystitis. Pneumatosis of the intestines. Procalcitonin: 39.0. D-dimer (16.11.2023): 10.0 [normal up to 0.5]. Hepatitis B (HBsAg) IFA (16.11.2023): Positive. Blood test for Wasserman reaction (16.11.2023): Negative. ANA screen, -dsDNA, -ANCA, -ScL 70, -ACL (16.11.2023): Negative. IgG and IgM for covid-19 (16.11.2023): Negative. Echocardiogram Conclusion: The left atrium is not enlarged: LVDd-4.5cm, LVSD-92.0 ml, EF-60.0%. Slightly dilated left ventricle. RV-normal. Aorta is tortuous, diameter -2.9cm. Pulmonary artery - age-related changes, normal, diameter LA-2.1cm. Left ventricular walls are diffusely thickened, dyskinetic. IVS-1.0cm; PWT-1.0cm.

Doppler echocardiography: normal MR and AR. Conclusion: no signs of heart defects. Changes have a systemic nature. Global myocardial contractility of the left ventricle is normal.

Conclusion. HELLP syndrome is a rare but serious pregnancy complication that can lead to maternal mortality and perinatal death. Early recognition of symptoms, close monitoring, and timely medical intervention are crucial for managing HELLP syndrome and reducing associated risks. The patient's general condition was stable without the need for intensive treatment. Despite being kept under close observation, signs of respiratory and cardiac insufficiency persisted, leading to impaired respiratory and cardiac function. Despite resuscitative measures being taken, the patient's respiratory and cardiac function did not improve. The patient was pronounced dead on 17.11.2023 at 18:45.

Main issue: HELLP syndrome. Competition: Bilateral pneumonia, severe course. Toxicodermnia

Outcome: DIC syndrome. Multiorgan dysfunction. Hepatic dysfunction. Renal dysfunction. Respiratory dysfunction II degree. MODS intoxication. Sepsis. Hypovolemic state. Respiratory and cardiac failure.

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Address: Toshkent sh., Olmazor district, Farobiy, 2-street

[mail:dilraboibrokhimova02@gmail.com](mailto:dilraboibrokhimova02@gmail.com)