
Subcapsular Hepatic Hematoma Complicating HELLP Syndrome: A Life-Threatening Obstetric Emergency – A Case Report

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ABSTRACT : Subcapsular hepatic hematoma is a rare but life-threatening complication of pregnancy, most commonly associated with HELLP syndrome. We report the case of a 30-year-old pregnant woman at 31 weeks of gestation admitted for severe preeclampsia complicated by HELLP syndrome. The patient presented with epigastric pain and biological abnormalities including elevated liver enzymes, thrombocytopenia, and hemolysis. Abdominal ultrasound revealed a subcapsular hepatic hematoma measuring approximately 4 cm associated with significant intraperitoneal effusion. The patient was managed in the intensive care unit with close hemodynamic monitoring, blood transfusion, and supportive treatment. The clinical course was favorable without surgical intervention. This case highlights the importance of early diagnosis and multidisciplinary management of this rare complication to prevent maternal mortality.

KEYWORDS : HELLP syndrome ; Subcapsular hepatic hematoma; Pregnancy; Preeclampsia; Case report

INTRODUCTION

Subcapsular hepatic hematoma is a rare complication of pregnancy, occurring in less than 2% of patients with HELLP syndrome. It is associated with high maternal mortality if not diagnosed and managed promptly. The condition results from hepatic vascular injury secondary to microangiopathy and fibrin deposition. Early recognition is crucial to guide appropriate management and prevent rupture, which carries a poor prognosis.

CASE PRESENTATION

A 30-year-old pregnant woman (G3P2) at 31 weeks and 4 days of gestation, with no significant past medical history, was admitted for severe preeclampsia.

On admission, the patient presented with:

- Blood pressure: 160/100 mmHg
- Heart rate: 120 bpm
- Epigastric pain
- No neurological symptoms

Laboratory Investigations Revealed :

- Hemoglobin: 7.9 g/dL
- Platelets: 60,000/mm³
- Elevated liver enzymes (ASAT 279 IU/L, ALAT 179 IU/L)
- Elevated LDH
- CRP: 33 mg/L

These Findings Were Consistent With HELL Syndrome.

Abdominal ultrasound demonstrated : (figure 1)

- Subcapsular hepatic collection measuring approximately 4 cm
- Heterogeneous echogenicity
- No Doppler vascularization
- Associated significant intraperitoneal effusion

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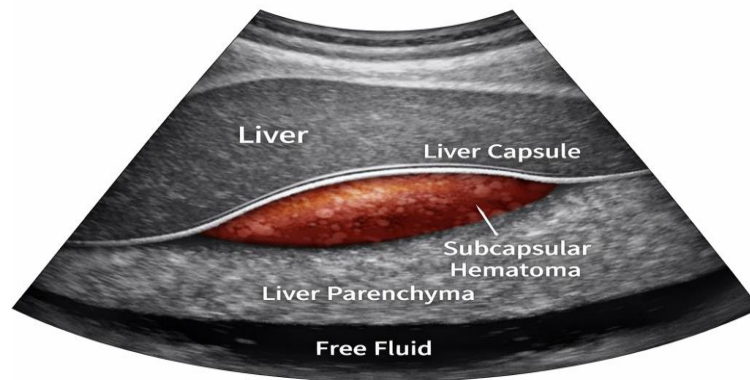


Figure1 :Abdominal ultrasound demonstrated a subcapsular hepatic collection measuring approximately 4 cm with heterogeneous echogenicity and no Doppler vascularization, associated with significant intraperitoneal effusion.

The diagnosis of subcapsular hepatic hematoma complicating HELLP syndrome was established.

The Patient Was Admitted To The Intensive Care Unit. Management Included:

- Magnesium sulfate infusion
- Blood transfusion
- Close hemodynamic and biological monitoring
- Antihypertensive therapy

No surgical intervention was required.

DISCUSSION

Subcapsular hepatic hematoma is a rare but severe complication of HELLP syndrome [1]. It results from hepatic sinusoidal obstruction and periportal necrosis leading to hemorrhage beneath the liver capsule [2].

Clinical presentation typically includes epigastric or right upper quadrant pain, which should raise suspicion in pregnant women with preeclampsia [3]. Laboratory findings usually show hemolysis, elevated liver enzymes, and thrombocytopenia [1,4].

Ultrasound is often the first-line imaging modality and can identify subcapsular collections, although computed tomography provides better characterization when needed [5].

Management depends on hemodynamic stability. Conservative treatment with intensive monitoring is recommended in stable patients, while surgical intervention is reserved for cases of rupture or hemodynamic instability [6].

In low-resource settings, early diagnosis may be challenging, making clinical suspicion essential. Multidisciplinary management involving obstetricians, anesthesiologists, and intensivists is crucial to improve maternal outcomes [7].

CONCLUSION

Subcapsular hepatic hematoma is a rare but life-threatening complication of HELLP syndrome. Early diagnosis and appropriate multidisciplinary management are essential to prevent maternal mortality. Ultrasound plays a key role in diagnosis, especially in resource-limited settings.

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