

Massive Hepatic Infarction in Severe Preeclampsia as Part of the HELLP Syndrome: A Case Report

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Abstract

Case Report

Hepatic infarction is a rare and fatal complication associated with hemolysis, elevated liver enzymes and low platelet syndrome. It can progress to fulminating liver failure and cause death in 16% of cases. A hepatic infarction is an extraordinarily rare complication of preeclampsia. The diagnosis should be suspected by noting elevated liver enzymes, thrombocytopenia and typical images of hepatic infarction on abdominal computed tomography. Early diagnosis and multidisciplinary management are necessary to prevent liver failure and death.

Keywords: Hepatic infarction Severe Preeclampsia HELLP.

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INTRODUCTION

Hepatic infarction is a rare and fatal complication associated with hemolysis, elevated liver enzymes and low platelets syndrome. It can develop into fulminant liver failure and lead to death in 16% of cases. We report the case of a patient with massive hepatic infarction associated with Preeclampsia and HELLP syndrome.

CASE REPORT

It's about 25 year's old women, with no remarkable pathological history, gravid at woparaone, who was sent to gynecological emergency unit for management of severe preeclampsia at 30 weeks of gestation.

First examination showed a conscious patient, blood pressure was 180/110mmHg. Laboratory test results showed 4+proteinuria, hemoglobin at 13g/dl; AST at 290IU/l; ALT at 193IU/l and anormal value of platelets.

We administered antihypertension drugs, magnesium sulfate and Betamethasone. However, those symptomatic treatments were inefficient, so the decision was taken for immediate cesarean delivery indicated for maternal rescue.

Within 2 days of delivery, the patient installed an intense epigastric pain, the hemoglobin dropped

to 9,1g/dl, AS Trose to 2809IU/l and ALT to 2502IU/l, platelets count decreased to 77000/ul, prothrombin time (PT) was at 61% and renal function was also disturbed. Then, Based on all above, we diagnosed the patient as HELLP syndrome and she was immediately transferred to the Medical Intensive Care Unit (MICU).

ATA PCT scan was performed and showed the existence of diffuse hypodense plaques, no enhanced after injection, interesting all hepatic segments (Figure 1). The vascular permeability of the portal and subhepatic was preserved. Those CT images correspond to massive hepatic infarction.

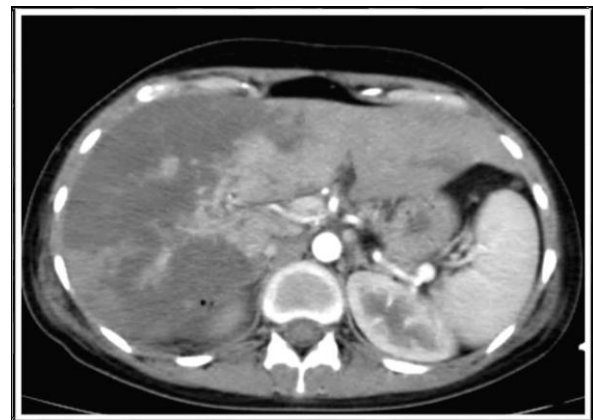


Fig-1: Contrast-enhanced CT of the abdomen showing the presence of massive hepatic infarction

During the surveillance, the patient became febrile and the biological features get worsened. Then, the patient received antibiotics, she was transfused by red blood cells and platelets concentrates and received albumin. Within 6 days, the patient has improved clinically, the biological results were normalized within 11 days, the damaged hepatic areas stayed stable for 15 days as shown by a control CT scan (Figure 2). So, at day 17 the patient was discharged with maintained follow-ups.



Fig-2: Contrast-enhanced CT of the abdomen showed the damaged areas were persisted on the 15th days after admission

DISCUSSION

The incidence of HELLP syndrome is between 10 and 20% of patients with severe preeclampsia, in 30% of times it occurs in the post-partum period [1, 2] and so was the case for our patient.

The pathogenesis of the HELLP syndrome is still unknown and the supposed mechanisms are difficult to differentiate from those of preeclampsia. Thus, the HELLP syndrome results from a disseminated microangiopathy, which is the consequence of a trophoblastic implantation defect [3].

A study of the literature reveals only a limited number of HELLP syndrome complicated by hepatic

infarction. Computed tomography scan is indeed the most sensitive method for the diagnosis of liver infarction and establishment of differential diagnosis.

Etiological treatment of HELLP syndrome is based on the interruption of pregnancy [3]. Many studies advocate for the use of corticosteroids in order to improve clinical signs and biological features of HELLP syndrome [4, 5]. However, the literature on this subject is discordant.

CONCLUSION

Clinicians should always pay attention to pregnant women referring with the complaints of hypertension, epigastric or shoulder pain, including patients at post-partum early period.

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