

Unusual Presentation of HELLP syndrome in parturient with gestational hypertension

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INTRODUCTION

- Hypertension in pregnancy can be multifactorial and determining the etiology can be challenging.
- The four major hypertensive disorders in pregnancy are ***gestational hypertension, chronic hypertension, preeclampsia superimposed on chronic hypertension, and preeclampsia.***
- Preeclampsia has its own set of related disorders; and may be with or without severe features, namely eclampsia and HELLP syndrome.
- Making the exact diagnosis can be tricky; laboratory and clinical findings need to be scrutinized to make an accurate diagnosis and exclude non pregnancy related causes.
- HELLP syndrome, characterized by hemolysis, elevated liver enzymes, and low platelet count, presents with symptoms like fatigue, nausea, abdominal pain, and blurred vision. It can lead to serious complications such as clotting abnormalities, placental abruption, and kidney failure.

CASE PRESENTATION

- 28-year-old G3P2002 with gestational hypertension, at 37w0d, presented to OB triage with 10/10 chest pain radiating to the back.
- She had severely elevated blood pressures, category II tracing with recurrent late decelerations, and was diagnosed with severe pre-eclampsia with suspected placental abruption.
- Urgent cesarean section was called.
- Platelet count was 85000 and combined spinal epidural was performed along with second iv access and arterial line.
- Tranexamic acid and magnesium infusion were started. Liver function tests (LFT) were pending, iSTAT run PT and INR were normal, and epidural catheter was removed at the end of surgery.
- Patient was monitored closely in PACU and received hydralazine for elevated blood pressure.
- Echocardiogram and troponin levels were normal. However, LFTs elevated to >10X normal, platelets dropped to 19000, and fibrinogen was 166 mg/dL, a diagnosis of HELLP syndrome with progression to DIC was made.
- Cryoprecipitate, platelets and FFP were transfused and patient was transferred to SICU for monitoring.
- Patient recovered uneventfully in ICU and discharged home later.

DISCUSSION

- Hypertensive disorders of pregnancy (HDP) are the leading cause of morbidity and mortality for both mother and fetus.
- Advanced maternal age (>40), obesity, parity, and gestational diabetes are associated with increased risks of hypertension in pregnancy.
- HELLP syndrome is a severe obstetrical complication or variant of severe preeclampsia affecting 0.5–0.9% of all pregnancies and complicates 10–20% of preeclampsia cases.
- It consists of triad of Hemolysis, Elevated Liver enzymes, and Low Platelets.
- Typical presentation of HELLP syndrome is nausea, vomiting, epigastric or right upper quadrant pain, headache, vision changes, hypertension, and proteinuria.
- Our case was interesting because the patient presented with severe preeclampsia with chest pain and turned out to have HELLP syndrome with progression to DIC.
- There was a significant drop in platelet count (85000 → 40000 → 19000), AST/ALT ranging from 400-600, LDH 500-1500 U/L, lowest fibrinogen level was 166 mg/dL.
- The multidisciplinary approach to treatment is pivotal, including urgent cesarean delivery, use of magnesium, antihypertensives, frequent blood tests to trend LFTs, platelets, and coagulation testing to detect DIC and treat at the earliest.
- Rapid availability of fibrinogen and blood products and post-operative ICU care are crucial in improving outcomes.

CONCLUSION

Hypertensive disorders of pregnancy may have varied presentations and quick progression. The roles of multidisciplinary approach and use of standardized protocols are emphasized time and again. High index of suspicion and vigilance is required for patients with hypertensive disorders of pregnancy. They can quickly worsen clinically and we should be mindful of complications and atypical presentation

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