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Case Report

Acute fatty liver of pregnancy: a diagnostic challenge to obstetrician

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ABSTRACT

Vomiting is a common symptom in pregnancy. However, vomiting in third trimester could be due to uncommon causes. One of the rare causes being acute fatty liver of pregnancy which is life threatening. Here we present an interesting case report and the importance of timely diagnosis of acute fatty liver of pregnancy.

Keywords: AFLP, Vomiting in pregnancy, Acute fatty liver

INTRODUCTION

Acute fatty liver of pregnancy is a rare catastrophic disease affecting women in the third trimester.[1] It can cause maternal and perinatal morbidity and mortality. It can lead to complications like coagulopathy, renal failure, hepatic encephalopathy.[2]

CASE REPORT

This is a case of young primigravida at 35+ weeks who was referred with complaints of vomiting for 10 days, fever, loose stools and decreased fetal movements for 2 days. There were no complaints of pain abdomen/leak/bleeding p/v, there was no h/o high blood pressure (BP) recording or deranged sugars. Outside T. bilirubin done was 19.1, ultrasonography (USG): fetal heart rate: absent. On receiving, patient was conscious and oriented. Icterus was present. Grade 3 pedal edema +. BP-110/70 mm Hg, per abdomen- uterus corresponding to 34 weeks, cephalic, relaxed, FHS- absent, p/v- os closed, GRBS- 48 mg/dl, urine dipstick - 1+, scan confirmed absent cardiac activity, EFW: 2.3 kg. Investigations done showed platelets 1.27l acs, white blood cells (WBC)-16,000, bilirubin- 20.27, AST-106, ALT-95, creatinine-2.75, fibrinogen- 72.5, PT- 23.9, APTT- 51.3, INR- 2.19, uric acid- 5, and ammonia- 150. Differential diagnosis included atypical HELLP syndrome, AFLP, ICHP, viral hepatitis. With the help of Swansea criteria, a diagnosis of acute fatty liver of pregnancy was made. Patient was started on 5% dextrose. TEG showed Fibrinolysis (transfused 10 cryo and 4 FFPs). Started on N-acetyl cysteine (NAC) infusion. USG liver: no change in liver echotexture, induction with 2 doses of misoprostol failed underwent emergency LSCS+ B-Lynch sutures + B/L uterine artery ligation, dead male baby of birth weight 2320 gm. Intraoperatively 10-pint cryoprecipitate transfused. Postoperatively, patient had intermittent hypoglycemia and finally on POD 10 parameters showed a decreasing trend and was discharged.

DISCUSSION

In our case, patient had presented with vomiting in 3rd trimester with vague anorexic symptoms and decreased fetal movements. When she referred to our center, fetal heart rate was absent and was referred as bilirubin was high. Investigations done showed hypoglycemia, deranged LFT, RFT, coagulopathy and DIC. Ammonia was elevated pointing towards hepatic encephalopathy. As blood pressure was normal and with help of Swansea criteria, a diagnosis of AFLP was made and successful maternal outcome was achieved.

In a recent study by Hadi et al, they have described in detail about the disease more over its rarity and complications if

not diagnosed in time. It is clinical diagnosis in the presence of liver dysfunction after 20 weeks of pregnancy with supporting clinical and laboratory findings. AFLP can lead to rapid liver failure with coagulopathy, encephalopathy, and hypoglycemia. Treatment involves supportive management and prompt delivery. Most patients recover completely after delivery, and the liver function returns to normal in 7 to 10 days. The affected mother and infant should undergo molecular testing for LCHAD deficiency.[2]

Liu et al study is another study which highlights importance of Swansea criteria being diagnostic tool for AFLP with 100% sensitivity and 57% specificity with an 85% positive predictive value and a 100% negative predictive value. It also concludes A liver biopsy is not necessary to make the diagnosis of AFLP in most cases and is only done to determine the need for early delivery in indeterminate cases.[3]

Ziki et al highlights a case report of AFLP diagnosed post-partum where patient developed worsening hepatorenal dysfunction and encephalopathy and mother died. This case shows importance of having high clinical suspicion to diagnose AFLP and worse outcome if not diagnosed.[4]

Vora et al case report is similar to our case in which a 24-year-old female at 34-week gestation, presented with malaise, nausea, vomiting, jaundice, and absent foetal movements. A clinical diagnosis of acute fatty liver of pregnancy was made. Although early caesarean section was performed, postoperative course was complicated by acute respiratory distress syndrome (ARDS) sepsis, and continuing coagulopathy. Supportive management in an intensive care unit resulted in successful outcome.[5]

CONCLUSION

There is a clinical overlap between HELLP syndrome and AFLP. However, vomiting (75%), malaise, anorexia and jaundice are more commonly associated with AFLP. Features of hepatic insufficiency such as hypoglycemia, encephalopathy and coagulopathy are more consistent with AFLP. Conversely in HELLP syndrome clinical presentation include Right upper quadrant /epigastric pain and tenderness and progressive thrombocytopenia. In conclusion, vomiting in third trimester is not to be ignored. Timely diagnosis and Delivery are keys to healthy mother and healthy baby.

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