Introduction

We present a unique case of clotting disorder related cirrhosis leading to pregnancy complications.

Clinical Presentation of Liver during Pregnancy

Normal Liver Findings during Pregnancy	Known Complications of Cirrhosis during Pregnancy
- Increased estrogen/decreased hepatic estrogen metabolism causing spider angiomatas and palmar erythema - Normal serum aspartate transferase (AST) and alanine transferase (ALT) - Increased alkaline phosphatase and placental alkaline phosphatase - Decreased albumin - Normal bilirubin	- Variceal bleeding - Worsening portal hypertension (HTN) - Worsening jaundice - Hepatic encephalopathy

Case Description

A 29-year-old Caucasian female with a history of gastrointestinal bleeding, gastroesophageal reflux disease, epistaxis, and alcohol use disorder, goes for a routine gynecologic checkup when the physician notices a concerning enlargement of the caudate lobe on a computed tomography scan. Further evaluation reveals cirrhosis and Budd-Chiari syndrome. The patient starts enoxaparin and warfarin following this diagnosis. Eventually the patient is placed on the liver transplant list with a MELD (model of end-stage liver disease) score of 17 which improves to a score of 7 with sobriety.

Case Description

The patient attempts pregnancy and is unable to conceive. She is told she has early menopause at the age of 34. She undergoes reproductive endocrinology evaluation and achieves a successful in-vitro fertilization with a donor egg at age 36. This starts her high-risk pregnancy. The high-risk nature of this pregnancy revolves around the patient's complicated past medical history of hemorrhagic stroke of unclear etiology, cirrhosis complicated by esophageal variceal bleeding, coagulopathy, Budd-Chiari syndrome, and thrombocytopenia.

The patient has close variceal and hepatic vein thrombosis surveillance, labs, and routine checkup for vaginal bleeding with her increased risk of thrombosis during pregnancy. Endoscopy in 1st and 3rd trimesters shows small esophageal varices with no evidence of progression.

Abdominal ultrasound displays vasa previa at approximately 28 weeks with velamentous umbilical cord insertion 2.3 cm from the internal os. After careful monitoring, the vasa previa is noted to resolve with umbilical cord insertion increasing to 4.8 cm from internal os in the following weeks. Repeated fetal echocardiograms present concern for the fetus being large for gestational age with estimated fetal weights ranging between the 95th-98th percentiles.

The authors have no conflicts of interest to report.

Discussion

We present a unique case of pregnancy during cirrhosis requiring management with multiple specialists.

With continued surveillance and interdisciplinary help, the patient underwent elective cesarean delivery and gave birth to a baby boy at 34 weeks with no labor complications despite concerns throughout the course of her pregnancy.

Although the physiologic changes in pregnancy are well understood, the way in which cirrhosis affects pregnancy and its outcomes are not yet well understood given paucity of published data. Certainly, there is complex interplay and physiology involved with increased potential for pregnancy complications.

References

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