



PREGNANCY AND AUTOIMMUNE HEPATITIS: A CASE REPORT

Halim Hajare*, El Moudane Jihane, Etber Amina, Lakhdar Amina, Zerai Naja and Baydada Aziz

Obstetrics and Gynecology Department, Souissi Maternity Hospital in Rabat, Morocco.



*Corresponding Author: Halim Hajare

Obstetrics and Gynecology Department, Souissi Maternity Hospital in Rabat, Morocco.

Article Received on 27/12/2023

Article Revised on 16/01/2024

Article Accepted on 06/02/2024

ABSTRACT

Autoimmune hepatitis (AIH) is a liver disease that primarily affects women of childbearing age. Pregnancy in patients with AIH is associated with an increased risk of adverse maternal and fetal outcomes. However, in the most recent series, improved care based on multidisciplinary monitoring, a greater number of patients treated before and during pregnancy, and a reduced incidence of cirrhosis at conception led to better maternal outcomes and a live birth rate similar to that of the general population. We report the case of a pregnant patient with a history of autoimmune hepatitis who presented ascitic decompensation during pregnancy.

KEYWORDS: Autoimmune hepatitis, pregnancy, ascitic decompensation.

INTRODUCTION

The obstetric care of patients with AIH is still not very systematized, the evolution of their pathology during pregnancy being very inconsistent. Classically, AIH affects women more frequently than men, especially during their childbearing years. Early published series reported unfavorable obstetric outcomes with high incidence of fetal loss, severe preeclampsia, prematurity, fetal growth restriction, high rates of cesarean delivery, and severe AIH flares with insufficiency hepatic and death.^[1-2] More recent studies have shown a different reality with much more favorable maternal and fetal outcomes thanks to better clinical management from preconception to the postpartum period.^[3-4] We report the case of a pregnant patient with autoimmune hepatitis discovered in childhood, who presented ascitic decompensation during her pregnancy.

OBSERVATION

27-year-old patient, primiparous primigravida, with a history of autoimmune hepatitis discovered at the age of 7, initially placed on corticosteroids and immunosuppressive treatment (Azathioprine) only, and for 4 years, also on ursodeoxycholic acid (Ursolvan). Her pathology was complicated in 2020 by the appearance of portal hypertension with esophageal varices treated by endoscopy several times preconception but not during pregnancy. The immunosuppressive treatment was stopped as soon as the pregnancy was discovered, after which the patient presented ascites decompensation. Corticosteroids as well as ursodeoxycholic acid were maintained throughout the pregnancy. This was carried to term, without obstetric complications. The patient did

not show any deterioration in her liver biological parameters. She presented with a rupture of the bag of waters at 37 weeks of amenorrhea. A prophylactic cesarean section was performed to prevent the risk of rupture of the esophageal varices. Furthermore, the patient did not present any decompensation of her pathology in the postpartum period, under the cover of resuming Azathioprine.

DISCUSSION

AIH is a chronic hepatic inflammation that has been described worldwide, affecting 1-18:10,000 people.^[5-6] Nevertheless, the subclinical course that characterizes the course of this disorder in many patients means probably the true incidence is considerably higher. It was classically a disorder affecting young women; nevertheless, it has been described from early childhood to old age, with a known female/male ratio of 3:1.^[7] Women with AIH are usually infertile.^[8-9] After recent advances in immunosuppressive therapy and increased clinical experience with AIH, pregnancies in this patient population have begun to be reported in the literature.^[10-11] There is a high risk of morbidity and mortality for both the fetus and the mother, from conception to the end of the postpartum period.^[12-3] Control of innate and humoral immunity as well as hepatic functions is essential, as is the need to prevent “endothelial damage/inflammatory processes” and thrombotic events.^[13,14] Obstetric complications are more common in women with AIH^[8] and the likely cause is that the maternal-fetal interface structures are target tissues for autoantibodies and natural immune cells activated by the disease.^[15]

In a Swedish study based on miscarriage incidence, it was found that 25% of women experienced a miscarriage and that 12% of all pregnancies resulted in miscarriage.^[16] The rate of premature delivery is 17%, which seems slightly higher than the general population without evidence of an association with the level of liver involvement.^[8] The incidence of intrauterine growth restriction or small for gestational age also appears to increase in AIH patients, as does the rate of cesarean deliveries.^[17, 18, 19] These obstetric complications were more common in severe cases, particularly in the presence of portal hypertension or cirrhosis.^[19] Available published data have not shown an increased incidence of preeclampsia compared to the general population.^[3, 17, 18, 11] Thrombosis, caused by endothelial injury and activation of the complement system, is also a major concern in these patients.^[13, 14]

In our case, the patient had neither miscarriage nor premature delivery, since the delivery was induced at 37 weeks of amenorrhea due to premature rupture of the bag of waters.

AIH flares occur in 7–33% of pregnancies and 11–86% postpartum.^[9, 20, 4, 17, 11, 8] In the majority of cases, these flare-ups can be controlled by increasing immunosuppressants without major consequences on pregnancy or fetal development. However, in some cases, severe flare-ups with hepatic decompensation could develop with the need to terminate the pregnancy.^[1,20] In this case, a pregnancy in HAI patients must be monitored by an experienced multidisciplinary team, ready to anticipate and control any maternal or fetal complications that may arise.

The presence of hepatic cirrhosis and portal hypertension should also be diagnosed before pregnancy, and its presence indicates the need to evaluate the upper gastrointestinal tract to exclude the presence of esophageal or gastric varices. Considering this, an upper gastrointestinal endoscopy could be performed before conception or during pregnancy to estimate the risk of gastrointestinal bleeding. It is a relatively safe procedure for the mother and fetus, especially during the second trimester of pregnancy.^[21]

The most commonly used treatment in a Swedish cohort was Azathioprine and/or corticosteroids.^[22] The US Food and Drug Administration categorizes AZA as category D during pregnancy, indicating a potential risk to the fetus.^[23,24] The American AIH guidelines^[10] recommend, if possible, discontinuing AZA treatment during pregnancy, while European guidelines^[25] recommend continuing it to prevent relapse, which itself poses a risk to both the unborn child and the mother. Both European and American guidelines^[10,25] emphasize the importance of informing women about the potential risks to the fetus before pregnancy.

In the case of our patient, she preferred to stop Azathioprine, after advice from her gastrologist, as soon as she discovered the pregnancy. She was placed on corticosteroids and ursodeoxycolic acid only. The course of the pregnancy was marked by the appearance of ascites from the 1st trimester. Two ascites evacuation punctures were performed at 6 and 8 months of pregnancy. Treatment of esophageal varices was offered, without anesthesia, at the start of pregnancy, but refused by the patient.

CONCLUSION

Autoimmune hepatitis is a rare liver disease that affects women during their reproductive years and is associated with adverse outcomes for the mother and fetus. The first published series reported unfavorable outcomes with a high incidence of obstetric complications and AIH flares, which can lead to liver failure and maternal death. The maternal and fetal outcomes reported in the most recent published studies are much more favorable, expressing a live birth rate similar to that of the general population. However, the incidence of premature birth, cesarean delivery and fetal growth restriction is further increased in these patients, expressing the need for close obstetric monitoring. The good results currently obtained reaffirm the importance of the existence of expert and trained multidisciplinary teams to control the complications associated with this disease.

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