



Recurrent Intrahepatic Cholestasis of Pregnancy: A Case Report

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Abstract

Intrahepatic cholestasis of pregnancy (ICP) is a rare disease triggered by the gestational process. Although its etiology is not fully known, environmental, geographical, nutritional, genetic, and hormonal issues are identified as predisposing factors and hyperestrogenemia is an important factor in predisposed women. The most common diagnostic feature of ICP is the persistent or severe itch, especially on the palms and soles of the feet. For the confirmation of diagnosis, LFT, serum bile acids are advised by the obstetrician and serum bilirubin should be noted. Ursodeoxycholic acid is the most effective treatment of IHCP, which improves the maternal condition and probably even prevents perinatal complications. Apart from timely diagnosis and treatment frequent fetal surveillance is strongly urged, aiming at an early delivery once fetal lung maturity is attained. Most women have no lasting hepatic damage, but ICP recurs in the majority of cases, with variations in intensity in subsequent pregnancies. Recurrence is less likely following multiple pregnancies. We present a case of a 27-year-old female who had intrahepatic cholestasis of pregnancy (ICP) in two pregnancies at an interval of 1 year. The case study aims to throw the light on clinical presentation, management, and prevention of Intrahepatic Cholestasis of pregnancy.

Keywords: : Recurrent, Intrahepatic cholestasis of pregnancy

INTRODUCTION

Intrahepatic cholestasis of pregnancy (ICP) is a rare disease triggered by the gestational process. Its incidence worldwide is between 0.5- 2.0% of all pregnancies, while the risk of recurrence is 40-60%. It is more prevalent in women with multiple pregnancies and those over 35 years of age. [1,2] ICP should be suspected when pruritus develops in the absence of a rash. Lab evidence Timely diagnosis of ICP is very important.

Management includes frequent fetal surveillance and an early delivery once fetal lung maturity is attained. includes elevated bile acids (>10umol/L). About 60% of patients have elevated transaminases and 20% have increased direct bilirubin levels. [1] We report a

case of a patient who had recurrent Intrahepatic Cholestasis of pregnancy.

CASE REPORT

A 26-year primigravida having regular antenatal visits in our OPD was admitted to our Obstetrics ward at 33 weeks of gestation complaining of itching all over the body for 15-20 days and elevated serum aspartate transaminase (AST-356U/L), alanine transaminase (ALP-375U/L), alkaline phosphatase (ALP-196U/L) and bile acid(26.5micrommol/L). She tested negative for viral infections and other blood investigations were normal. Ultrasonography revealed normal parameters

and a large, thin-walled cyst in the left ovary measuring 12.1x9.8cm.

The diagnosis of ICP (severe type) was made based on symptoms and tests. She was started on Tab Ursodeoxycholic acid (UCDA) 300mg thrice a day and Inj Dexamethasone. Ovarian tumor markers were normal except LDH, which was elevated (642IU/L). The patient experienced reduced fetal movements and a Caesarean section with left ovarian cystectomy was performed at 34 weeks of gestation. A preterm, alive male of 3.1 kg was delivered and the ovarian tissue was sent for examination. The baby was admitted to NICU on day-4 of life owing to hyperbilirubinemia (total bilirubin-11.3mg/dl) and was discharged after phototherapy of 48 hours. The patient was discharged on postoperative day-6 with contraceptive counselling. She followed up after one month with normal serum transaminases and a histopathology report of the ovarian cyst showing benign serous-cystadenoma.

Six months later, she came with a dichorionic-diamniotic twin gestation after contraceptive failure. Having regular visits in our OPD, she reported at 32 weeks of gestation complaining of generalized body itch for 20-24 days and elevated serum AST (210U/L), ALT(195U/L), ALP(137U/L), and bile acids(35.5micrommol/L). Other investigations were normal. Diagnosed with ICP, she was admitted for safe confinement. She was started on Tab UCDA 300mg thrice a day and was given injection Vitamin-K, Injection Dexamethasone for fetal lung maturation and Inj Magnesium-sulfate for neuroprotection. After one week, AST was 96U/L, ALT 88U/L, ALP 134U/L, and bile acids 10.7micrommol/L. Owing to the diagnosis of ICP, scarred uterus, DCDA twin pregnancy with short interconceptional period, a Caesarean section was performed at 36- weeks of gestation. She gave birth to two live babies weighing 3kg and 1.8kg with a satisfactory APGAR score. The condition of the patient during the puerperium was satisfactory and the biochemical parameters normalized. She was discharged from the hospital 5 days after delivery.

The follow-up of the newborns showed normal growth and development.

DISCUSSION

One of the most common symptoms of ICP is severe pruritus that typically happens around the third trimester, commonly between thirty-two and thirty-six weeks, though there's proof of its occurrence at eighteen weeks. Since pruritus is an awfully common finding in allergies or alternative dermal conditions, ICP might go unobserved, and prescription of antihistamines is incredibly routine to enhance this criticism. [2]

The differential diagnoses are hepatobiliary disorders, HELLP syndrome, dermatoses, allergic reactions. There are risks of premature births, metabolic issues in the baby, and intrauterine death with ICP. [3,4] Seasonal variation is noted, with severe cases in the winter months. [5,6] There is sensitivity to sex hormones. Patients with a history of ICP can also develop symptoms if taking the combined contraceptive pill. [7] They exert cholestatic effects via inhibition of the hepatocellular salt export pump and abnormality in sulfation. Sulfated progesterone metabolites saturate the hepatic transport mechanism for biliary excretion. ICP is associated with lower levels of Selenium.

The most common diagnostic feature of ICP is persistent or severe itch, particularly on the palms and soles. If serum transaminases and bilirubin levels are found elevated in the presence of itching, then it is a possible case of ICP. [7] Once diagnosed, the conduct is decided upon evaluating the laboratory results and gestational age. [3]

Patients should be monitored rigorously for the symptoms of ICP throughout the last trimester as estrogen is at its highest then. Similarly, those with multiple gestations are at a higher risk for developing ICP, because of higher levels of estrogen than singleton gestations. [8]

Treatment of ICP focuses on a) reducing symptoms of the mother; b) maintaining fetal well-being and preventing sudden intrauterine fetal death. There are many case reports of abnormal CTG and/or reduced fetal movements hours preceding fetal demise. One study showed that, in addition to standard fetal monitoring, routine amnioscopy at thirty-six weeks to assess the colour of amniotic fluid had good fetal outcome. [5] Management of itching might embrace cholestyramine and antihistamines, but their effectiveness is debated and a few adverse effects might occur. [8] UDCA improves clinical and

biochemical indices. UDCA protects the ducts against injury by hydrophobic digestive acids and stimulates their excretion and of other probably toxic compounds. [1] Dexamethasone inhibits placental sex hormone synthesis by reducing the secretion of the precursor, dehydroepiandrosterone sulfate from fetal adrenal glands. ICP is related to a risk of assimilation of fat-soluble vitamins because of reduced enterohepatic circulation of digestive fluid acids and later reduction of uptake within the terminal small intestine. Therefore, several clinicians choose to treat patients with oral vitamin K to protect against the theoretical risk of fetal antenatal and maternal intra- or postnatal hemorrhage. [4] A good policy is induction of labor at 37-38 weeks of gestation to reduce the danger of intrauterine death as several deaths occur at later gestations. [7]

CONCLUSION

Timely diagnosis of ICP is very important. Management includes frequent fetal surveillance and an early delivery once fetal lung maturity is attained. Most women do not have any persistent hepatic injury. ICP recurs within the majority of cases, with variations in intensity in later pregnancies. Ursodeoxycholic acid is presently, the best treatment of IHCP, which improves the maternal condition and possibly even prevents perinatal complications.

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