SUCCESSFUL TWIN PREGNANCY AFTER ORTHOTOPIC LIVER TRANSPLANTATION

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ABSTRACT – Aim - Report of a case of successful twin pregnancy following liver transplantation. Patient and Method - A 42-year-old nulliparous-woman was subjected to an orthotopic liver transplantation due to Budd-Chiari syndrome. Sixteen months after the transplantation, an ultrasonography revealed twin pregnancy. Her prenatal course was uneventful, except for mild arterial hypertension. The immunosuppressive agents used during pregnancy were cyclosporine and prednisone. Result - The patient gave birth to two healthy girls at 37 weeks of gestation. The patient’s postpartum course was uneventful with normal liver and renal function tests. Conclusion - Following successful pregnancy, women may become pregnant and give birth to normal children, including twins.

INTRODUCTION

Following successful liver transplantation, menstrual cycles return to normal in a few months and pregnancy may ensue(4). The first successful pregnancy in a liver transplant patient was reported by WALCOTT et al. in 1978. After the first report of twin pregnancy in a liver transplantation patient by GROW et al. in 1991, only a few of such cases have been described(2, 6).

Our objective is to present a patient who had an uneventful pregnancy and delivered normal twins.

CASE REPORT

A 42-year-old woman presented with ascites, hepatomesencephalopathy, and progressive liver failure. An eco-Doppler ultrasonography showed thrombosis of the hepatic veins due to essential thrombocytosis (Budd-Chiari syndrome). One year later, she was subjected to a successful orthotopic liver transplantation. The patient was maintained on a daily regimen of 425 mg of cyclosporine, 5 mg of prednisone, 100 mg of azathioprine, and 100 mg of aspirin. Liver function tests and hemogram were normal, except for severe thrombocytosis (platelets of 1.5 million per mm³). A 500 mg of hydroxyurea was administered orally every second day during the first month until platelet count decreased to normal limits. Normal menstrual cycles was observed (restored) 3 months later. Afterwards, the patient had good recovery with no further complications.

She had no previous pregnancy and was advised not to become pregnant by using condom. However, 16 months after the transplantation, she presented amenorrhea and an ultrasonography revealed twin pregnancy. The patient’s prenatal course was uneventful, except for mild arterial hypertension. Azathioprine and hydroxyurea were discontinued and prednisone, cyclosporine, and aspirin were maintained on the antepartum dosages throughout pregnancy, delivery, and postpartum periods. Hepatic tests and serum creatinine remained normal. Monitoring of serum level of cyclosporine remained within normal limits (100-150 mg/L). At 37 weeks of gestation, an ultrasonography showed areas of placenta infarction and therefore it was decided to interrupt...
the pregnancy. The patient gave birth by cesarean section to two healthy girls of 2,290 g and 1,870 g. The 1- and 5-minute Apgar scores of both babies were 9. They had no detected congenital anomalies and presented normal growth at 5 months after the birth. The patient’s postpartum course was uneventful with normal liver and renal function tests.

**DISCUSSION**

The number of pregnancies following liver transplantation is increasing due to a better patient and graft survival and quality of life. Few cases of twin pregnancy have been reported in liver transplant recipients. Although pregnancy after liver transplantation does not seem to have deleterious effects on allograft function or survival, several complications both to the mother and infant have been reported. Immunosuppressive agents used may cause arterial hypertension, pre eclampsia, and renal dysfunction. These agents cross the placenta and may cause fetal growth retardation. The rates of preterm (40% to 86%) and cesarean (45% to 71%) are high.

It is advisable to wait at least 2 years after liver transplantation before seeking conception. Although our patient was a 44 year-old nulliparous, she became pregnant 16 months after the transplantation. She had no complications, except for mild arterial hypertension. She developed no evidence of acute or chronic hepatic rejection and no evidence of recurrent Budd-Chiari syndrome during the pregnancy or post-partum convalescence. The infants had neither congenital malformations nor infection and had normal growth to date.

RESUMO – **Objetivo** – Descrição de um caso de gravidez gemelar com sucesso após transplante hepático.  
**Paciente e Método** - Paciente nulípara de 42 anos de idade com síndrome de Budd-Chiari foi submetida a transplante hepático. Dezesseis meses após o transplante, uma ultrassonografia revelou gravidez gemelar. As avaliações pré-natais foram normais, exceto por apresentar hipertensão arterial leve. Os imunossupressores utilizados durante a gravidez foram ciclosporina e prednisona.  
**Resultado** - Cesariana foi realizada na 37ª semana de gravidez, com nascimento de duas meninas sadias. A evolução pós-cesárea foi normal, com os exames de avaliação hepática e renal normais.  
**Conclusão** - Após o transplante hepático com sucesso, as mulheres podem engravidar e ter filhos normais, inclusive gêmeos.


**REFERENCES**