

Pregnancy after kidney transplantation and allograft outcomes

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Abstract

Kidney transplantations (KT) is the treatment of choice for end-stage renal disease (ESRD) patients. It improves survival and quality of life. In women in childbearing age, it also restores the fertility, and this can be within the first few months after the kidney transplantation.

The pregnancy during the lifetime of KT is considered to be safe for the mother and the child when a functional graft is present, however, an increased incidence of preeclampsia, surgical delivery, and prematurity has been reported in observational studies¹. However, the effect of pregnancy on graft function and loss is less clear.

In light of the limited evidence in graft outcomes, especially in developing countries where the pregnancy occurs in quite different circumstances than in developed countries, we aimed to investigate the effect of pregnancy in allograft function and rejections, as well as obstetrics complication associated with pre and post-transplant characteristics.

Methods:

We performed a retrospective cohort of women with pregnancies after at least one year of their KT, who were treated at the Nephrology Department from the Hospital General Regional 46 of the Instituto Mexicano del Seguro Social. Our institution has a nominal census of 1200 KT recipients with more than one year, of which, approximately 35 to 40% are female on childbearing age.

From January 1994 to January 2017, there were 41 pregnancies on 34 patients with a kidney allograft and were included to the study. As control group for the primary outcome, 66 women that received a kidney allograft during childbearing age without a history of pregnancy were included.

Outcomes:

The primary outcome was the time to occurrence of chronic allograft dysfunction (CAD), defined as a composite of persistently elevated serum creatinine (sCr) >1.5 mg/dL, estimated glomerular filtration rate (eGFR) calculated using the CKD-EPI equation <40 ml/min/1.73 m², and 24-hour urine protein collection >500 mg/day or urine protein / creatinine ratio (PCR) >0.5 g/g.

Secondary outcomes included frequency of allograft related complications: sCr >1.5 mg/dL, eGFR <40 ml/min/1.73 m², persistent proteinuria (>500 mg/day), need for allograft biopsy and biopsy proven rejections. The histological results from the biopsies were classified according to the Banff 2016⁴.

Obstetrics complications as preeclampsia, abortion, surgical delivery, preterm delivery were also considered secondary outcomes.

Biography:

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