

PREGNANCY OUTCOMES AFTER KIDNEY GRAFT IN ITALY: A LONG CHANGING STORY, OVER 35 YEARS (1978-2012)

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Objectives:

Kidney transplantation is considered the best way to restore fertility in a woman with severe CKD or on renal replacement therapy. However, several concerns exist on the best timing for starting a pregnancy after kidney graft and there are several caveats for avoiding kidney function impairment or for foetal development. The continuous improvements in the therapies are changing the panorama, with increasing patients age, different drugs and an overall more flexible approach for pregnancy start. Aim of this study was to analyse the changes over time recorded in the baseline data and in the materno-foetal outcomes in two cohorts of transplanted women who delivered a live-born baby in Italy in the last three decades (dichotomized in delivery before and after January 2000).

Methods:

A phone and mail interview was performed, involving all the Italian transplant enters (all public), on all pregnancies recorded since the start of activity of the Centers; the 2000-2012 estimated coverage is 60% of all pregnancies in grafted women Italy. Data on ESRD, dialysis, living/cadaveric transplantation, therapy, comorbidity, main materno-foetal outcomes were recorded and homogeneously reviewed.

Results:

Overall 193 pregnancies were recorded from the answering Centers, accounting for about 60% of the Italian Centers (80 in 1978-1999 and 113 In 2000-2012). Mean age at birth significantly increased over time: in the 1st period, median age was 30 years (range 20-38 years) versus 33.5 years (range 23-43) in 2nd period $p < 0.01$.

Azathioprine, Steroids and Cyclosporine A were the main drugs employed in the first period, while Tacrolimus emerged in the second period.

The prevalence of early pre-term live babies (born < 34 gestational weeks) increased from 11.7% in the 1st to 24.5% in the 2nd period; late-pre-term babies (34-36 gestational weeks) were 36.7% in the 1st versus 24.5% in the 2nd period.

Interestingly, mean weight at birth did not significantly change: from 2744 g in the 1st to 2791 g in the 2nd period; p : ns.

Three intrauterine deaths were recorded in each period (p : ns).

Available growth data (2nd period) reveal that 9% of the babies was small for gestational age (<5th centile) and 18% was below the 10th centile. However, regardless of weight and intrauterine growth, none of the live born babies died in this period.

Conclusions:

The main clinical features of transplant mothers changed over time, with a significant increase in maternal age. While the incidence of intrauterine death was unchanged, the incidence of "early preterm" live babies more than doubled over time. The changes in therapy (tacrolimus versus cyclosporine) and of increased maternal age are probably at the basis of this occurrence. In spite of high prematurity rates (about half of the babies in both periods), no neonatal death occurred since 2000, hence confirming a good foetal prognosis in these "at risk" pregnancies.

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