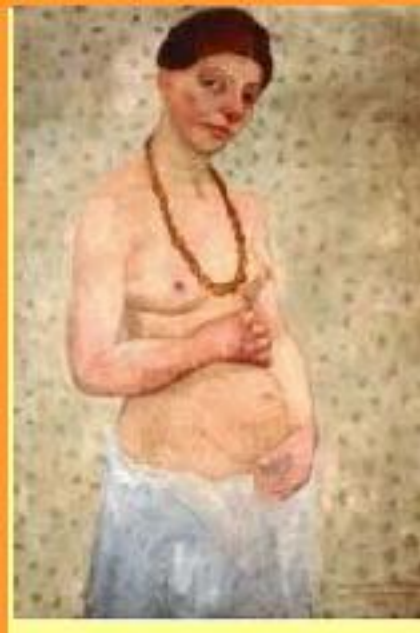


PREGNANCY OUTCOMES AFTER KIDNEY GRAFT IN ITALY: A LONG, EVOLVING STORY (1978-2012)



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Introduction and aims:

Kidney transplantation is often considered the best way to restore fertility in a woman 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-fetal outcomes in two cohorts of transplanted women who delivered a live-born baby in Italy in the last three decades (dichotomised in delivery before and after January 2000, up to the December 2012 updating)

Methods:

A phone and mail survey was performed, involving all the Italian transplant enters (all public), on all pregnancies recorded since the start of activity of the Centers; the estimated nationwide coverage is 70%. Data on ESRD, dialysis, living/cadaveric transplantation, therapy, comorbidity, main materno-foetal outcomes were recorded and homogeneously reviewed.

Results:

Overall, 189 singleton pregnancies were recorded (68 in 1978-1999 and 128 in 2000-2013). Mean age significantly increased over time; Azathioprine, Steroids and Cyclosporine A were the main drugs employed in the first period, Tacrolimus emerged in the second. Three intrauterine deaths were recorded in each period (p ns). The prevalence of early pre-term live babies (<34 gestational weeks) increased in the 2nd period; late-pre-term babies (34-36 gestational weeks also increased). The prevalence of SGA babies decreased over time, witnessing a difference in the obstetric policy (more babies are delivered preterm, thus avoiding intrauterine growth restriction). Regardless of weight and intrauterine growth, none of the live-born babies died in the second period (information not available in the first period).

	before 2000	after 2000	all grafts	P before and after 2000
N pregnancies	68	121	189	
Age at pregnancy (yrs)	30.7±3.7	34.1±3.7	32.8±4.1	<0.001
Cesarean sections (%)	89.6% (60/67)	79.2% (95/120)	82.9% (155/187)	0.108
Gestational week	36.1±2.6 (N=67)	35.3±3.0 (N=118)	35.6±2.9 (N=185)	0.060
Preterm (<37 week) %	52.2% (35/67)	60.2% (71/118)	57.3% (106/185)	0.372
Early preterm (<34 week) %	13.4% (9/67)	27.1% (32/118)	22.2% (41/185)	0.049
Weight at birth (g)	2458 ± 547 (N=63)	2400 ± 686 (N=118)	2420 ± 640 (N=181)	0.530
SGA <10% (Parazzini) %	27.6% (16/58)	21.2% (24/113)	23.4% (40/171)	0.461
SGA <5% (Parazzini) %	22.4% (13/58)	9.7% (11/113)	14.0% (24/171)	0.043
Eg < 37 o sga < 10 parazzini	67.2% (45/67)	67.8% (80/118)	67.6% (125/185)	1.00
Eg < 34 o sga < 5 parazzini	32.8% (22/67)	34.7% (41/118)	34.1% (63/185)	0.919

Conclusions:

The age of kidney-transplant mothers significantly increased. While the incidence of intrauterine death was unchanged, the incidence of “early preterm” live-born babies almost doubled over time, while SGA decreased over time. The changes in therapy (tacrolimus vs CsA) and the increased age may partly account for this occurrence; obstetric changes are presumably more relevant. In spite of high prevalence of prematurity (about half of the babies in both periods), no neonatal death occurred since 2000, hence confirming a good prognosis for the live-born babies in these “at risk” pregnancies

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