

Frequency and outcomes of pregnancy on nocturnal home haemodialysis

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Introduction

Pregnancy in women of reproductive age on dialysis is rare, with poor outcome. Several studies published in the 1990s revealed pregnancy rates of 0.3 to 0.8 per 100 patient-years, but not all pregnancies resulted in live births^{1,2}.

More recent studies suggest that intensive haemodialysis increases fertility and successful pregnancies with live births^{3,4}.

Objective

To evaluate whether nocturnal home haemodialysis (NHHD) three times a week supports successful pregnancies and live births.-

Methods

We performed a descriptive cohort study analysing pregnancies and their outcomes in 55 women of reproductive age (mean age 33.7±7.5 years) who started NHHD between August 2010 and April 2014.

Results

During a mean follow-up of 20±13 months on NHHD, four pregnancies were identified (4.2 per 100 patient-years).

In these four patients, mean age was 37.8±5.3 years and mean NHHD time 28±19 months at the beginning of pregnancy. Duration of the weekly haemodialysis session was increased from 24 to > 35 hours; serum urea was maintained < 50 mg/dl, haemoglobin >10 g/dl with an increase of erythropoietin and iron doses. Blood pressure was within normal ranges, antihypertensive drugs were not required.

Three women underwent a caesarean section at 35, 38, 38 weeks delivering three healthy newborns without any maternal and foetal complications. Birth weights were 2550, 3100, and 2750 g.

The fourth patient (with a history of secondary amyloidosis and multiple spontaneous abortions) delivered at 25th week, resulting in neonatal death on the second day. The pregnancy of this patient had a high risk, with a rescue cerclage at week 21 and premature rupture of membranes. Moreover the child had an intrauterine growth restriction and neonatal intensive care monitoring.

Conclusion

We observed that women of reproductive age on NHHD showed high rates of conception and live birth. We recommend that intensive home haemodialysis should be considered as a viable and feasible option for dialysis patients of childbearing age who want to become pregnant or are pregnant.



NHHD patient after birth

PATIENT	Age	NHHD duration (mos)	Gestational age (wk)	Child birth weight (g)
1	40	48	35	2550
2	30	36	38	3100
3	40	17	38	2750
4	40	10	25	450

Overview of the main parameters of the pregnancies and neonates

References

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