The Successful Outcome of Pregnancy in a Woman with End-Stage Renal Failure Chronically Hemodialyzed without Change of Treatment Regimen

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Table 1. Selected parameters during pregnancy

Dear Sir,

Despite increasingly better methods of renal replacement therapy and excellent he-modialysis techniques, pregnancy in chronically hemodialyzed patients occurs rather seldom [1,2]. Many factors influence the fertility in dialyzed women, among others reduced libido and sexual function, anemia and endocrinal abnormalities [2-4]. Pregnancies in patients with end-stage renal failure present a great risk for the mother (volume overload, exacerbation of hypertension, eclampsia), and for the infant (respiratory distress syndrome, leukopenia, thrombocy-topenia, reduced birth weight, adrenocorti-cal insufficiency, infection), with the likelihood of a live birth being, at best, 28-50% [1,2,4,5].

Therefore, to minimize these risks, many authors recommended an intensification of the dialysis therapy (to maintain a chemistry that is nearly as normal as possible), the beginning of peritoneal dialysis, rigid control of blood pressure, avoidance of rapid fluctuations in intravascular volume (interdia-lytic weight gain has to be limited to about 1 kg), careful monitoring of the calcium level and minimization of anemia by erythropoie-tin [2, 3, 6, 7]. Nevertheless, experience with the management of pregnancies in hemodialyzed women is limited.

In our center we observed a successful pregnancy in a hemodialyzed woman without the necessity of changing the treatment regimen. The 22-year-old woman with end-stage renal failure due to chronic glomerulo-nephritis had been hemodialyzed at our center for 2 years. She had residual diuresis of about 100-200 ml/day. The dialysis protocols included 15 h of hemodialysis per week (dialyzers with cuprophane membrane, acetate dialysis fluid). The patient received ve-rapamil 120 mg per day (per os) and erythro-poietin 6,000 U per week (subcutaneously). She was in a very good clinical state of health, her menstrual cycle was regular and normal. In March 1994 she missed a period. A pregnancy was detected in the 14th week (confirmed by ultrasound scan). Because her general state of health, blood pressure and biochemical parameters were very good, the

regimen of treatment was not changed (the same dialysis protocol, the same doses of verapamil, erythropoietin and heparin: 3,000 U as initial dose, afterwards 1,000 U/h). Selected parameters are presented in table 1; biochemical parameters were not significantly different from those before pregnancy and did not essentially change during the pregnancy. The pregnancy processed successfully to a spontaneous vaginal delivery in the 38th week of gestation. The birth weight of the healthy girl was normal (2,950 g, Apgar score

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10). Twelve hours later a typical 5-hour he-modialysis was carried out without complications. The patient is still hemodialyzed at our center; the state of health of the mother and daughter is good.

In conclusion, higher quality of life of the hemodialyzed population may lead to an increase in the frequency of pregnancies in hemodialyzed women [2, 4]. Therefore, it seems important to prepare a strategy to deal with pregnancies in these patients, but our observation suggests that an intensification of the dialysis treatment or an increase of the erythropoietin dose is not always necessary.

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