Preeclampsia, Diabetic Nephropathy Rates Linked

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Among women with type 1 diabetes whose pregnancies were managed at one clinic in Finland, those who had a history of preeclampsia went on to have a higher rate of diabetic nephropathy in the following years than did those with normotensive pregnancies.

In the report, researcher Daniel Gordin and colleagues at Helsinki University Central Hospital reported findings for 203 women with type 1 diabetes who had been pregnant between 1988 and 1996 and who were followed an average of 11 years within the nationwide, multicenter Finnish Diabetic Nephropathy Study.

For purposes of the study, diabetic nephropathy was defined as microalbuminuria, macroalbuminuria, or end-stage renal disease.

Among the women with history of preeclampsia, the rate of diabetic nephropathy at follow-up was 42%, versus 9% for those without such history (Diabetologia 2007 [Epub ahead of print doi 10.1007/s00125-006-0544-5]).

Women with pregnancy-induced hypertension, however, were not at significantly increased risk of microvascular disease, compared with normotensive women (10.3% vs. 8.9%).

Diabetic nephropathy at follow-up was also predicted by poor glycemic control during pregnancy. Hemoglobin A_{1c} levels in each trimester significantly correlated with kidney disease.

These results warrant more intensive monitoring of women with type 1 diabetes and a history of preeclampsia, as well as special emphasis on early detection of microalbuminuria, the investigators concluded.

In addition, "an early start to renoprotective medication in type 1 diabetic women with prior preeclampsia could be beneficial," they suggested. ■

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48 with disease who did not take adalimumab, and 26 without disease.

Another 33 women who did not meet the study cohort criteria were also enrolled in the adalimumab pregnancy registry. These included five women treated for Crohn's disease, two treated for psoriasis or psoriatic arthritis, and two others treated for nonspecific autoimmune disorders.

Rates of spontaneous abortion among the pregnancies with known outcome were higher among all the groups with RA or other autoimmune disease: 2 (11.8%) of the 17 in the adalimumab study cohort, 5 (20.0%) of the 25 from the registry, and 3 (7.1%) of the 42 in the diseased comparison group, versus 0 of 15 pregnancies with known outcomes among healthy women who were not exposed to adalimumab. The only stillbirth occurred in the healthy nonexposed group.

As with etanercept, no increased risks for preterm delivery or malformations were seen with adalimumab exposure. There was one preterm delivery among the 15 live births in the study cohort (7%), compared with 4 of the 14 in the registry (29%), 7 of the 37 in the disease comparison group (19%), and 0 of the 14 in the nondisease comparison group.

Malformations occurred in none of the 17 total known outcomes in the study (0%), in 1 of 14 in the registry (7%), in 1 of 42 disease comparison patients (2%), and in 1 of 15 of the healthy controls (7%).

In both of these drug studies, all of the infants will be evaluated up to 1 year of age for major and minor anomalies by pediatric specialists, Dr. Chambers said.

Final results for preterm delivery, birth weight, and congenital malformations should be available in 1-2 years. In the meantime, even these small preliminary numbers are reassuring because they don't show any particular pattern.

"All the major teratogens are associated with very specific patterns of abnormal outcomes. When you don't see a pattern and you just see one of this and one of that, it makes you a little more confident that this is not an Accutane," Dr. Chambers said. ■

Physicians who prescribe etanercept and adalimumab to women of childbearing age are encouraged to enroll patients in OTIS. For more information, call 877-311-8972 or e-mail Dr. Chambers at chchambers@ucsd.edu.