Diabetic Nephropathy Requires a Delicate Balance

BY SARAH PRESSMAN LOVINGER
Contributing Writer

CHICAGO — Tight blood pressure control is crucial in caring for pregnant women with diabetic nephropathy, but medication management must factor in potential fetal risks, Dr. Phyllis August said at a meeting on clinical nephrology sponsored by the National Kidney Foundation.

In reviewing the management strategies for pregnant women with pre-existing diabetic nephropathy and lupus nephropathy, she noted that the most effective management begins even before conception. Yet even though preconception counseling can improve outcomes, physicians typically care for gravid women who already have significant disease.

"Overall, the outcome in pregnancy is related to the baseline blood pressure and level of renal function at the beginning of pregnancy," said Dr. August, professor of medicine at the Weil Medical College of Cornell University, New York.

ACE inhibitors and angiotensin-receptor blockers (ARBs) are vital in the treatment of diabetic nephropathy in women who are trying to conceive, but these agents are potentially quite harmful to the developing fetus, she noted.

To derive the maximal benefit from these medications, Dr. August suggested switching to a safer agent (such as methyldopa or labetalol) as soon as a patient misses her menstrual period. "The overwhelming evidence for the adverse effects of ACE inhibitors and ARBs relates to second and third trimester exposure," she said.

Dr. August also recommended performing a cardiac evaluation before conception in women with long-standing type 1 diabetes.

"Significant renal disease is associated with preeclampsia and renal complications," she noted. Chronic kidney disease also increases the risk of intrauterine growth retardation and pre-term birth.

In the past, women with diabetic nephropathy tended to have a high rate of maternal complications, including overt nephropathy, hypertension, and death due to unrecognized coronary artery disease.

As many as 50%-80% of patients with lupus nephropathy will experience a disease flare during pregnancy if they have active disease at conception.

However, the outcomes for pregnant women with diabetic nephropathy have improved. A recent study detected no difference in the rate of decline in renal function between a group of women with diabetic nephropathy who became pregnant and another group that did not.

Lupus nephropathy can be quite challenging for both patients and physicians, Dr. August noted. "There is a poor outcome when the disease is active at conception," she said. A high percentage of patients—as many as 50%-80%—will experience a disease flare during pregnancy if they have active disease at conception. On the other hand, only 10%-40% of women who are in remission at conception will have a flare.

Physicians may safely use azathioprine to treat pregnant women with lupus nephritis. Dr. August also advocated delivery during the third trimester in gravid women whose lupus nephritis is deteriorating quickly. The mother's condition often improves quickly after delivery.

Women with lupus and antiphospholipid antibody syndrome are also at higher risk of fetal loss, arterial and venous thrombosis, renal vasculitis, and preeclampsia. Women with this syndrome may benefit from taking low-molecular-weight heparin, with or without aspirin.

Although the outlook has improved for women with certain types of chronic kidney disease who wish to bear children, the chance of a good pregnancy outcome in women with end-stage renal disease on dialysis remains poor.

Women on dialysis who do get pregnant have a high incidence of adverse outcomes such as second trimester pregnancy loss, prematurity, and congenital abnormalities. For these women, attempting pregnancy "should never be encouraged," Dr. August said. ■