Identify, Prepare Diabetic Women for Pregnancy

BY SHERRY BOSCHERT
San Francisco Bureau

SAN FRANCISCO — The first step in preparing a diabetic woman for pregnancy is recognizing that she has diabetes before she conceives.

Women with type 2 diabetes often don't get diagnosed until pregnancy, when it's too late to reduce the risk of congenital anomalies through better glycemic control, Dr. Ingrid Block said at a meeting on diabetes and endocrinology sponsored by the University of California, San Francisco.

Congenital anomalies in infants of diabetic mothers occur as early as 5 weeks after the mother's last menstrual period (for caudal regression) and as late as 8 weeks after the last period (for cardiac anomalies).

"If you don't sit down with that patient and ensure that she plans her pregnancy and that she has good glycemic control before conception, you run the risk that she'll find out she's 8 weeks pregnant and she has missed the opportunity" to avoid these congenital anomalies, said Dr. Block, of the university.

With any new female patients, pay attention to their obstetric histories, she urged. If a nondiabetic woman has delivered a large baby or had gestational diabetes, she's at increased risk for developing type 2 diabetes and should be screened for it periodically.

Congenital anomalies occur in 6%-10% of pregnancies among diabetic women with uncontrolled hyperglycemia, compared with an incidence of 2% in nondiabetic women. Emphasize effective contraception until diabetes patients achieve stable glycemia, Dr. Block said.

Preconception counseling and care should help women optimize glycemic control before pregnancy, which significantly reduces the risks of anomalies and fetal death, studies have shown. Women with type 2 diabetes should transition before conception from managing their diabetes using diet alone or oral therapies to using insulin, she added. Identification and treatment of long-term complications of diabetes—such as retinopathy, nephropathy, neuropathy, hypertension, and coronary artery disease—will give physicians an opportunity to warn some patients about difficult or nonviable pregnancies.

Diabetic women with early renal failure are unlikely to have viable pregnancies, for example, but renal transplant has allowed some of these women to have successful pregnancies and deliveries. A diabetic woman with preconception hypertension and proteinuria over 500 mg in 24 hours should be informed of her significant risk for preeclampsia and preterm delivery, which could mean weeks in the neonatal intensive care unit.

Women with diabetes who want to become pregnant should get tests for hemoglobin HbA_{1c} and TSH levels, 24-hour urine protein, and serum creatinine.

"That is a very stressful experience for the baby and the parents," Dr. Block said.

At her institution, women with type 1 or type 2 diabetes who want to become pregnant get tests for hemoglobin HbA_{1c} and TSH levels, 24-hour urine protein, and serum creatinine. They also get an ECG, and patients at high risk for coronary artery disease undergo noninvasive stress tests. Referrals for ophthalmologic evaluation, nutrition therapy, and a review of diabetes self-care skills are routine. Every patient gets a glucagon emergency kit if she doesn't already have one, and starts prenatal vitamins.

Any women with type 1 diabetes who are on regular insulin are switched to aspart or lispro forms of insulin. Women with type 2 diabetes stop oral hypoglycemics and start insulin. If they are on ACE inhibitor therapy, type 2 diabetes patients stop the drug and switch to labetalol or methyldopa.

It's important to know how much support the woman has at home, and how involved the father is in the pregnancy.

Start these patients on frequent glucose monitoring before meals and 60-90 minutes after eating, with a blood glucose check at 2 a.m., she said. Before pregnancy, aim for a fasting blood glucose less than 105 mg/dL, a 1-hour postprandial level below 155 mg/dL, and a 2 a.m. level below 120 mg/dL. During pregnancy, aim for a fasting blood glucose below 95 mg/dL, a 1-hour postprandial level less than 140 mg/dL, and a 2 a.m. level below 120 mg/dL. ■