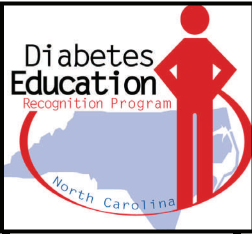

Sweet Nothings

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Gestational Diabetes Program at Cabarrus Health Alliance

Submitted by Cindy Walker, RD, MPH - Cabarrus Health Alliance

Cabarrus Health Alliance, the public health provider in Cabarrus County, is very excited to be one of the counties accepted in the Cohort II of the N.C. Diabetes Education Recognition Program. Although we do not presently have a program for either type 1 or type 2 diabetes, we have partnered with several other community agencies to develop a gestational diabetes program. This program is helping to ensure that women diagnosed with gestational diabetes in Cabarrus County have access to education and treatment options, increasing the potential for healthy birth outcomes.

The Cabarrus Health Alliance has seen a marked increase in the number of low-income women who are diagnosed with gestational diabetes, particularly in the Hispanic population. To control diabetes during pregnancy and prevent poor birth outcomes, a gestational diabetic program has been developed and implemented. This program is administered through the Cabarrus Health Alliance High-Risk Maternity Clinic, and supports the early identification and management of gestational diabetics in Cabarrus County. Women seen in the Maternal Health Clinic are screened for gestational diabetes through an extensive health history and a 1-hour glucose screen. Women with elevated screening tests are referred to the local hospital, Carolinas Medical Center-North East (CMC-NE), for a diagnostic 3-hour glucose tolerance test, which is done free of charge for those under and uninsured. Those women given a diagnosis of gestational diabetes are enrolled in the program and followed closely by the High-Risk Maternity Team.

The gestational diabetic program is multi-faceted, utilizing several community partners. Extensive education in nutrition and physical activity is provided to the client, both in a group setting and one-on-one, in English and/or Spanish. This is provided at the Health Alliance by a registered dietitian and an interpreter when needed. Since daily monitoring of blood sugar is crucial to the control of gestational diabetes, blood sugar testing equipment and supplies (i.e., glucometer, test strips and lancets) for home monitoring are provided free of charge. Further laboratory tests not done on-site at the Health Alliance, as well as level II ultrasounds, are performed in collaboration with CMC-NE. Since no two clients are alike, and neither are their needs, the High-Risk Team is able to look at each individual case and develop a care plan for each client. This care plan may, at times, change weekly.

The Cabarrus Health Alliance has a full-time, board-certified OB/GYN who leads the High-Risk Maternity Team of a certified nurse midwife, a women's health nurse practitioner, a registered dietitian (RD), a licensed clinical social worker (LCSW) and nurses. Overall in calendar year (CY) 2004, 539 babies were delivered through Cabarrus Health Alliance Maternal Health Clinic. Fifty percent of these babies were born to non-English speaking women, and 91 percent of the families met federal poverty guidelines. In CY 2000, 11 women from the clinic were diagnosed with gestational diabetes. In 2004, the number of diagnosed had increased four-fold to 45 women, the majority of whom were uninsured Latino women. In 2005, approximately 55 women were diagnosed, with 90% percent having no insurance or payor source. The need to provide these women with the education and equipment necessary to control their diabetes is essential. Funding from the March of Dimes was received in 2006 to provide money for salaries and educational materials. Without a program to enable access to education regarding disease process and control, as well as the provision of testing equipment, compliance with treatment regimens would be extremely low, resulting in poor birth outcomes.

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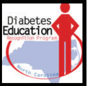
Remember

Data reports are due the 5th of each month

National Diabetes Fact Sheet, 2007

www.cdc.gov/diabetes/pubs/pdf/ndfs_2007.pdf

Data collection for Cohort II begins September 2, 2008



Gestational Diabetes Program at Cabarrus Health Alliance

(continued from page 1)

Grant dollars have been stretched to provide for 37-40 women with gestational diabetes in 2006 and each following year since then. Since the Cabarrus Health Alliance has provided this program, there have been no client hospitalizations related to gestational diabetes, nor any untoward birth outcomes.

The progress of the gestational diabetes program, as well as the well-being of the clients enrolled, is monitored in several ways. The High-Risk Maternity Team meets weekly after the high-risk clinic. Each diabetic client who was seen that day is reviewed by members of the team and information is shared regarding new treatment plans, psycho-social issues that may be going on with the client, needs that were not met or are ongoing, equipment or supplies that were provided to the client, or any other pertinent information. At this weekly conference, each team member assumes responsibility for some aspect of the patients' treatment. For example, the RD may have determined through nutrition assessment that a client is not eating the proper foods on a diabetic diet because she does not have the resources to purchase food other than what is already in her home. The LCSW may then assume responsibility for contacting the client and assisting her in accessing food resources, such as through the food pantry or church group. Monitoring also takes on a client-specific level through information in a data base. This data includes: blood test results; specific counseling information regarding condition; documentation of formal education including instruction on finger-sticks and blood sugar monitoring; follow up tests; and information regarding dispensing of supplies or change in regimen and starting of medications. The final monitoring of the impact of the program takes place on an ongoing basis. Since the objective of the program is to provide care and support to underserved women with gestational diabetes, thereby reducing the likelihood of complications to the mother or baby, each pregnancy outcome is evaluated in the client's postpartum period, and her program data is closed once her diagnosis is resolved.

Through early diagnosis and the provision of comprehensive medical care, this project is improving the health of pregnant women with diabetes, as well as ensuring healthier birth outcomes.

Did You Know?

Compiled by Laura Edwards, RN

Did you know: People with diabetes are almost twice as likely to have hearing impairments as those without diabetes? You should be aware that this is another complication of diabetes, and consider performing or referring your patients for a hearing test.

Did you know: According to the American Diabetes Association, every 21 seconds, someone is diagnosed with diabetes.

Did you know: Diabetes increases the risk of gum disease and infection, especially if blood sugar is too high. Diabetes and high blood sugar also raise the risk of oral fungal infections, such as thrush. Gum disease has also been linked to heart disease. It is important for people with diabetes to see their dentist every 3-6 months.

Did you know: Smoking increases plaque buildup in the mouth, causes inflammation in the gums, promotes periodontal disease, and raises the risk of oral cancer.

Did you know: The average person walks more than 100,000 miles in a lifetime. Diabetic nephropathy can reduce feeling in the feet, making injuries more likely. Poor circulation slows healing and promotes infection. People with diabetes need to take special care to check their feet every day.

Did you know: People with type 2 diabetes are more likely to develop kidney stones.

Did you know: Research shows that for every hour of regular exercise, you can increase your life expectancy by two hours.

Did you know: Women with diabetes are 1.5 times more likely than others to develop colon cancer.

Cantaloupe Salsa

What is in season in August? Cantaloupe, also known as muskmelon. Even though cantaloupe is very sweet, it is surprisingly low in calories. In a serving of about 1 cup of diced cantaloupe, there are only 50 calories, 12g of carbs and 2g of fiber. Try this great recipe along with grilled chicken or salmon.

Makes 4 servings

Each serving equals 1/2 cup of fruit/veggie and ½ serving of carbohydrate.

Ingredients

½ cantaloupe (large, ripe)
¾ cup red bell pepper, finely diced
¼ cup cilantro, finely chopped
3 Tbsp scallions, finely chopped
Juice of 1 lime
Pinch of salt and hot pepper flakes

Remove seeds and rind from cantaloupe. (You should have approximately ½ pound cantaloupe flesh.) Dice cantaloupe. Put in bowl. Add diced red pepper, chopped cilantro, scallions and lime juice. Stir. Add pinch of salt and pepper flakes. Chill. Serve with grilled chicken, fish or steaks.

Nutritional Analysis: Calories 75, Fat 1g, Calories from Fat 8%, Carbs 7g, Fiber 2g, Sodium 23mg.

Carbohydrates and Combination Foods

When we plan our meals, they are not always as straightforward as a meat, a fruit, a vegetable and a starch. Sometimes it is a combination of all of these in one plate...maybe a casserole, a one-pot meal, or a food that requires a combination of all different types of food. Here is a list of some common combo foods that are 15 grams (or 1 serving) of carbs. You can fit all foods into your meal plan as long as you count them properly.

- 1/2 cup of any casserole, like tuna or chicken noodle, macaroni and cheese, chili with meat, or spaghetti and meat sauce.
- 1 cup cream, bean, tomato, or vegetable soup
- 1/8 of a 10-inch pizza
- 1/3 of a store-bought pot pie, like chicken, turkey, or beef
- One 3-ounce taco

Guidelines for Gestational Diabetes

Summary by Joanne Rinker MS, RD, CDE, LDN, of Diabetes Care, May 2008; 31:1060-1079.

The purpose of these guidelines is to help educators have a grasp of information that covers the gestational as well as post-partum periods and the potential complications from gestational diabetes years after the baby is born. These guidelines are used to improve outcomes for patients as a result of having gestational diabetes. Guidelines cover both pregnant women who had diabetes before they got pregnant and those who did not have diabetes prior to pregnancy. Complications of diabetes are also covered in these guidelines.

Highlights of some of the specific clinical recommendations include the following:

- Before pregnancy, women with diabetes and childbearing potential should be educated about the need for good glycemic control and should participate in effective family planning.
- Multidisciplinary, patient-centered team care, with regular followup visits, is helpful whenever feasible: before, during, and after pregnancy.
- Women with preexisting diabetes who are contemplating pregnancy should be evaluated and treated for diabetic nephropathy, neuropathy, retinopathy, CVD, hypertension, dyslipidemia, depression, and thyroid disease.
- Before conception, medication use should be evaluated because drugs often used to treat diabetes and its complications may be contraindicated or problematic in pregnancy. These include statins, angiotensin-converting enzyme (ACE) inhibitors, angiotensin II receptor blockers (ARBs), and most noninsulin therapies.
- As soon as possible before conception, or early in pregnancy, complete medical evaluation should detect diabetic, CV, thyroid, or obstetric complications; review history of eating patterns, physical activity or exercise, and psychosocial problems; counsel the patient on prognosis and set goals for patient participation; formulate a management plan with team care members; and plan for continuing care and laboratory testing.
- Effective contraception is recommended until stable, acceptable glycemia is achieved.
- To prevent excess spontaneous abortions and major congenital malformations, target hemoglobin A1c before pregnancy should be as close to normoglycemia as possible without significant hypoglycemia. The same goal is recommended throughout pregnancy to minimize maternal, fetal and neonatal complications.
- Optimal glycemic goals throughout pregnancy are premeal, bedtime and overnight blood glucose 60 to 99 mg/dL, peak postprandial blood glucose of 100 to 129 mg/dL, mean daily blood glucose level of less than 110 mg/dL, and hemoglobin A1clevels of less than 6.0%.
- Provision of basal and prandial insulin needs with intensified insulin regimens (multiple dose regimens of subcutaneous long-acting and short-acting insulins or continuous subcutaneous insulin infusion [CSII]) usually achieves the best results.
- Women taking the insulins detemir or glargine should be transitioned to NPH insulin 2 or 3 times daily, preferably before pregnancy.
- Because of the heightened risks for ketosis in pregnancy, patients using CSII should be well trained in detecting and treating unexplained hyperglycemia from insulin underdelivery resulting from pump or infusion site problems.
- Before conception, oral hypoglycemic agents should be stopped and insulin started and titrated to achieve acceptable glycemic control.
- Metformin, thiazolidinediones, meglitinide inhibitors, and incretin should be used during pregnancy only in the setting of approved clinical trials.
- Pregnant women with preexisting diabetes should be screened for depression, anxiety or stress, and disordered eating, and the team management plan should be adjusted as indicated.
- Protocols to manage DKA during pregnancy include correcting volume depletion, insulin infusion, monitoring and correcting electrolyte imbalances, detecting and treating precipitating factors, and continuous fetal monitoring. Initial DKA care should be provided in intensive or special care units with experience in high-risk pregnancy monitoring.

Pregnancy has a great effect on the management of blood sugars. Women of childbearing potential need to consider these guidelines and review this information with their health care provider before becoming pregnant to prevent or reduce the risks of complications.

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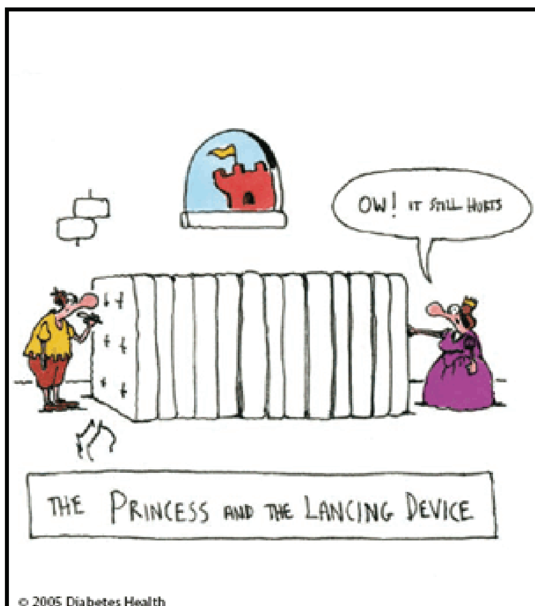

www.diabeteshealth.com

RESOURCES

Continuing ed opportunities at Medscape:
www.medscape.com/nurses/ce?src=nursecenl

Here is a link for a free 1.25 credit hours from the CDC and NDEP. They have new topics every few months. This one is available to all disciplines:
www.cdc.gov/diabetes/NDEP/CE_depression.htm

This one is available to pharmacists:
www.cdc.gov/diabetes/NDEP/CE_WorkingTogether.htm

Here is one more titled Type 2 Diabetes and Cardiovascular Risk: Integrating Physician and Educator Perspectives

This is also free and available through Medscape until November 30th, 2008 for nurses and pharmacists only (sorry, RDs).

www.medscape.com/viewprogram/8091

The Diabetes Education Fellowship at East Carolina University, Brody School of Medicine

The Diabetes Education Fellowship Program provides an opportunity for health care professionals to learn about diabetes in a multi-disciplinary diabetes education program. The week-long curriculum encompasses type 1 and type 2 diabetes, highlighting the self-care education of children and adults.

This is a multidisciplinary program. Professionals who may find the program of interest include nurses, dietitians, pharmacists, physician assistants, nurse practitioners, exercise physiologists, health educators, psychologists, and physicians.

The program topics include all aspects of diabetes education and management. The course is offered three times a year, in February, May and September. The 2008-2009 dates are Sept 22-26, 2008; February 23-27, 2009; and May 18-22, 2009.

Overall objectives include:

1. Describe the diagnosis and pathophysiology manifestations of diabetes
2. Identify the role of nutrition and oral health in treatment of diabetes
3. Explain blood glucose monitoring and medication administration
4. Discuss strategies and attitudes for living with diabetes
5. Review educational needs of diabetic patients
6. Discuss a variety of topics useful to professionals working with diabetic patients

Please visit www.ncdiabetes.org/_pdf/Registration.pdf to download the application. Staff in local health departments that are participating in Cohort I or Cohort II of the N.C. Diabetes Education Recognition Program may be granted preference for scholarships, as available. Please write "ADA Program" on the top of the registration form. Registration forms for the September 2008 Fellowship are due by August 15, 2008.