

Gestational Diabetes Subgroup

- Judi Nightingale, DrPH, RN
- Misa Perron-Burdick, MD
- Bervic Johns, MD, MBA

Gestational Diabetes

- Affects 2-10% pregnancies in the US
- Affects 135,000 women each year
- Incidence is increasing, along with that of Type 2 Diabetes Mellitus

Risk Factors for GDM

- Family History - first degree relative
- Ethnicity
 - African American
 - American Indian
 - Pacific Islander
 - Asian American
 - Hispanic / Latino

Risk Factors

- Age 25 or older
- Overweight
- Medical History
 - Hypertension
 - PCOS
 - Delivery of at least one baby weighing over 9 pounds

Risk Factors

- Medical History
 - Gestational Diabetes
 - Pre-diabetes
 - Impaired glucose tolerance
 - Impaired fasting glucose
- Labs
 - Glucose in the urine

Glucose Testing

- During pregnancy
 - High Risk patient - test at the first prenatal visit
 - If normal, repeat testing between 24-28 weeks gestation
 - Average and Low Risk patient - test between 24-28 weeks

Treatment During Pregnancy

- Meal Plan
- Physical Activity
- Insulin (if indicated)
- Monitor blood sugar
 - Treating to postprandial targets are associated with superior pregnancy outcomes vs pre-prandial targets

Long Term Follow Up

- The majority of women with GDM failed to return for postpartum glucose testing.
 - (Hurt et al, Am J Ob Gynecol, 2008)
- Providers initiated the postpartum testing only 60% of the time in one study.
 - (Kim et al, Am J Jpub Health, 2008)
- Up to one third of GDM women will have DM or impaired glucose metabolism at postpartum screening.

Why is Follow-up So Poor?

- Fragmented medical care
- Obstetricians may refer to endocrinologist for care, patient may see a primary care MD for post partum visit

American Diabetes Association

- Recommends repeat testing at least every 3 years for women with GDM and normal results of Post Partum Testing

Long Term Outlook

- Most, but not all, women with GDM do progress to diabetes after pregnancy.
- 10% have diabetes soon after delivery.
- Five year cumulative incidence of type 2 DM is over 50% for women with GDM.
- Ten year follow up reveals a risk of about 70%

Impaired Glucose Tolerance

- Identified by Postpartum Glucose value 140-199 after a 75g 2-hour glucose tolerance test.

Impaired Glucose Tolerance

- These patients may have a 58% reduction in the risk of Type 2 DM if they have:
 - Intense lifestyle modification to promote weight loss and increase physical activity.

Goal

- Postpartum testing of all patients with GDM
- Appropriate interpretation of results
- Proper referrals
- Long term follow up based upon history

Algorithm

- ACOG Committee Opinion #435, 2009
- Yearly screening for diabetes
- Emphasis on nutritionist referrals, breastfeeding, weight management
- Everyday Checklist for Healthy Women