Gestational Diabetes: A New Approach to Care

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Discuss Current Screening for Gestational Diabetes (GDM)
Discuss the Maternal, Fetal, Newborn Risk Factors
GDM Group Care Model

Objectives
Pre-gestational diabetes: Type 1, Type 2
Gestational Diabetes: “carbohydrate intolerance that begins or is first recognized during pregnancy”
Increased risk of developing Type 2 DM later in life
Increased risk for Cesarean delivery
Increased risk for GDM in subsequent pregnancy
Increased risk for developing HTN, pre-eclampsia, and chronic HTN

GDM: Maternal Effects
Increased risk of IUFD
Increased risk of macrosomia
Increased risk of neonatal complications: hypoglycemia and hyperbilirubinemia
Increased risk of childhood and adult obesity
Increased risk of developing diabetes
Screening for GDM

- United States Preventive Services Task Force (USPSTF)
- American College of Obstetricians and Gynecologists (ACOG)
- International Association of Diabetes in Pregnancy Study Group (IADPSG)
- American Diabetes Association (ADA)
“All pregnant women should be screened for GDM, whether by patient history, clinical risk factors, or a 50 gram, 1 hour loading test to determine blood glucose levels.”
Age <25 years of age
- Not a member of an ethnic group at risk for GDM
- BMI <25
- No history of abnormal glucose tolerance
- No history of adverse obstetric events associated with GDM
- No known diabetes in 1st degree relative

ACOG’s “Low-Risk Factors”
1-hour, 50 gram glucola at 24-28 weeks, fasting state not required

If result is >130, 135, or 140, a 3 hour, 100 gram GTT is required

GTT requires the patient to be fasting
Carpenter criteria is most widely used
If 2 of 4 results are abnormal, GDM is diagnosed
Threshold Values
- FBS: 95
- 1-hr: 180
- 2-hr: 155
- 3-hr: 140

3-hour, 100 gram GTT Results
Screen for undiagnosed Type 2 DM at first prenatal visit in those with risk factors

Administer 2-hour, 75 gram GTT at 24-28 weeks

American Diabetes Association
NATIONAL INSTITUTES OF HEALTH

October 2012 Consensus Conference: Diagnosing Gestational Diabetes Mellitus

Prediction: 2 hour, 75 gram GTT will be endorsed and established as the standard of care

Final Decision on GDM Screening
25,505 patients, 15 centers, 9 countries
2-hour, 75 gram GTT at 24-32 weeks
Looked at primary and secondary outcomes

Hyperglycemia and Adverse Pregnancy Outcomes (HAPO) Study
Primary Outcomes
- birth weight
- Cord blood levels of C – peptide levels

Secondary Outcomes
- Preterm delivery
- Shoulder dystocia/birth injury
- NICU admission
- Hyperbilirubinemia
- pre-eclampsia
 Threshold Values for 2-hour, 75-gram GTT

- FBS: greater or equal to 92
- 1-hour: greater or equal to 180
- 2-hour: greater or equal to 153
“Satisfaction with care, generally considered to be a measure of a patient’s perception of the care experience, is regarded as both an outcome of care as well as a measure of its quality”

Why Group Care

Development of a patient satisfaction survey specific to current prenatal care for GDM patients

Concepts: Access, Continuity, Communication, Resources
Based on the CenteringPregnancy® model for Group Prenatal Care

Curriculum developed for 6 session, one of which is the postpartum visit

Benchmarks: satisfaction of care, maternal & neonatal outcomes

Pilot Study
Assessment
Education
Support
Facilitative Leadership Style

GDM Group Prenatal Care
Change Dietary Habits
Increase Exercise
Decrease Stress

Lifestyle Modification
Patient Centered Care
Blood glucose Monitoring
Physical activity
Healthy Eating
Medication taking
Problem solving
Risk reduction
Coping

Self Management of Care

Peyrot et al Development and validation of the self-management profile for type 2 DM; 2012, 10:125
GDM is considered to be a pre-diabetes state

Empower women to Lifestyle Modification for themselves and their families for a lifetime

Follow up of 6 week PP testing

Encourage Health Promotion & Prevention

Primary Care follow up

Opportunities
Together We Can Make a Difference in Diabetes Care!