Gestational Glucose Intolerance in Pregnancy Guidelines

- pregestational diabetes
- abnormal glucose testing prior to 20 weeks EGA
- gestational diabetes requiring medication

## Counseling

### Preconception
- Recommend MFM consult prior to discontinuing contraception
- Glucose control goal: HgbA1c ≤ 6.5 (< 6 if no hypoglycemia)\(^5,6\)
- Recommended medications: Insulin (preferred), metformin, glyburide\(^3,6\) (if HgbA1c at goal)
- Baseline evaluation: UP/C (24 hour urine total protein if > 0.14), serum creatinine, CBC, AST/ALT; ophthalmology exam; echo/EKG if cardiovascular risk factors
- Stop ACE/ARB prior to conception; control of BP with beta-blocker, calcium channel blocker
- Folic acid 1-4 mg po daily + multivitamin starting 3 months prior to conception\(^6,17\)
- Contraception plan

## Management

### Initial prenatal visit

**First trimester**
- Recommend MFM consult; consider transfer of care
- Review self blood glucose monitoring (am fasting glucose and 1 hour post prandial)
- See Diabetes: Medication Management algorithm
- Reinforce medical nutrition therapy: % of calories: carbohydrate (33–40%); protein (20%); fat (40%); Nutrition consultation
- Exercise (at least 30 minutes/day physical activity)
- Baseline lab evaluation UP/C (24 hour urine total protein if > 0.14), serum creatinine, CBC, AST/ALT, Hgb A1c, TSH, free T4
- Ophthalmology exam, echo/EKG if cardiovascular risk factors
- Hypoglycemia education and Rx for glucagon
- Review SBGM at least q 2 weeks

### Second trimester
- Targeted anatomy fetal US at 18-20 weeks ; Fetal echo at 18-22 weeks
- Review SBGM at least q 2 weeks
- Review IOM BMI specific weight gain goals at each visit; F/U with nutrition consult as needed.

### Third trimester
- **Fetal growth assessment:** US q 4-6 weeks from 28 weeks; if suspected LGA – see Macrosomia Management algorithm
- **Fetal testing** may individualize method and frequency – consider earlier EGA start in presence of co-morbidities such as maternal renal disease (creatinine > 1.0, baseline proteinuria > 300 mg total protein in 24 hours), poor control of cHTN, or poor glycemic control defined as > 70% of SBGM values above goals
  - Fetal movement counts after 28 weeks
    - 32 0/7 – 35 6/7 weeks: weekly NST/AFI
    - 36 0/7 – delivery: twice weekly NST, weekly AFI
- Review BMI specific weight gain goals at each visit, F/U nutrition consult as needed.

### Delivery timing\(^1,3,15\)
- **Good control** (<30% of self testing values above goal): delivery at 39 0/7 – 39 6/7 wks EGA, or expectant management
- **Suboptimal control or significant comorbidities:** deliver at 37 0/7 – 39 6/7 wks EGA
  - > 30% of self testing values abnormal
  - Co-morbidities such as cHTN on multiple medications and suboptimal control, collagen vascular disorder, maternal BMI > 40; severe polyhydramnios.

If EGA is adequately determined, amniocentesis not indicated for delivery as above
These algorithms are designed to assist the primary care provider in the clinical management of a variety of problems that occur during pregnancy. They should not be interpreted as a standard of care, but instead represent guidelines for management. Variation in practices should take into account such factors as characteristics of the individual patient, health resources, and regional experience with diagnostic and therapeutic modalities.

The algorithms remain the intellectual property of the University of North Carolina at Chapel Hill School of Medicine. They cannot be reproduced in whole or in part without the expressed written permission of the school.

www.mombaby.org