Postpartum A2 Gestational Diabetes

Postpartum Ward

Check fasting (plasma, not fingerstick) glucose morning after delivery off IV fluids\(^1,2\)

Encourage breast feeding at least 3 months\(^3,4,5\)

> 200

< 200

Initiate Metformin 500 QHS (unless contraindicated\(^*\))

Continue to check fingerstick glucose fasting per 1 hr post prandial 3 times per week

Refer to primary care within 1 month for glycemic evaluation

< 100 (normal)

100-125

Diagnose with "prediabetes" or impaired fasting glucose\(^6,7\)

Counsel on risk factor reduction, diet and exercise to achieve ideal weight

Repeat diabetes screen either Q 2 year fasting plasma glucose or Q 3 year GTT\(^1,2\)

≥126

If non fasting and >200

Repeat fasting within 1 week

≥126

Refer to Primary care and initiate Metformin 500 QHS (unless contraindicated\(^*\))\(^6\)

Safe in Breastfeeding\(^5\)

Counsel on risk factor reduction, diet and exercise to achieve ideal weight

Repeat diabetes screen in 1 year

Diagnose with Diabetes

*Contraindications to Metformin usage

- liver or kidney disease
- prior adverse reaction to Metformin
- prior episode lactic acidosis

Approved
Copyright June 2008
UNC School of Medicine
Postpartum \text{A} \text{2} Gestational Diabetes References:

1. Kim C, Herman WH, Vijan S. Efficacy and cost of postpartum screening strategies for diabetes among women with histories of gestational diabetes mellitus. \textit{Diabetes Care 2007; 30:1102}. In a cost analysis, screening women with a history of GDM with an oral glucose tolerance test every three years resulted in the lowest cost per case of diabetes diagnosed. Q2 year fasting plasma glucose or Q3 year oral glucose tolerance testing result in equivalent cost per person screened and equivalent duration of undiagnosed diabetes.

2. Metzger BE, Coustan DR. Summary and recommendations of the Fourth International Workshop-Conference on Gestational Diabetes Mellitus: the organizing committee. \textit{Diabetes Care 1998; 21 (Suppl. 2) 161-167}. Women with gestational diabetes should undergo glucose tolerance testing at least 6 weeks post partum and should be reassessed at a minimum of Q3 year intervals.

3. Gunderson EP. Breastfeeding after gestational diabetes pregnancy: subsequent obesity and type 2 diabetes in women and their offspring. \textit{Diabetes Care 2007; 30 (Suppl. 2) S161 – S168}. Breastfeeding has beneficial effects for mom (decreased glucose intolerance and increased weight loss) and may decrease offspring risk for obesity in childhood and adolescence.

4. Schaefer-Graf UM, Hartmann R, Pauliczak J, Passow D, Abou-Dakn M. Association of breast-feeding and early childhood overweight in children from mothers with GDM. \textit{Diabetes Care 2006; 29:5}. Study of 324 offspring of mothers with GDM had childhood overweight prevalence of 37.3% if not breastfed, 32.5% if breastfed for up to 3 mos., and 22% if breastfed for over 3 mos. \((P=0.008)\)

5. Hale TW, Kristensen JH, Hackett LP, Kohan R, Ilett KF. Transfer of metformin into human milk. \textit{Diabetologia 2002; 45: 1509-1514}. Seven women with healthy infants taking a median dose of 1500mg Metformin were studied with low concentrations of Metformin seen in breast milk. Mean infant exposure was only 0.28% of the weight normalized maternal dose, and absolute infant dose average of 0.04mg/kg/day.

6. American Diabetes Association. Diagnosis and Classification of Diabetes Mellitus. \textit{Diabetes Care 2004; 27: (Suppl. 1)}. A fasting plasma glucose >126 or a casual plasma glucose >200 meets the threshold for diagnosis of diabetes if confirmed on subsequent day. Confirmation precludes the need for glucose challenge. Fasting plasma glucose 100 – 125 (impaired fasting glucose or “prediabetes”) indicates significant high risk for developing diabetes as well as other cardiovascular risk. Intervention can prevent or delay development of diabetes. \textbf{Either} glucose tolerance testing (2hr) or fasting glucose testing can be performed.

7. Nathan DM, Davidson MB, DeFronzo RA. Impaired fasting glucose and impaired glucose tolerance: implications for care. \textit{Diabetes Care 2007; 30:753}. Fasting plasma glucose 100 –125 (impaired fasting glucose or “prediabetes”) indicates significant high risk for developing diabetes as well as other cardiovascular risk. Intervention can prevent or delay development of diabetes.

\textbf{NOTIFICATION TO USERS}

These algorithms are designed to assist the primary care provider in the clinical management of a variety of problems that occur in pregnancy. They should not be interpreted as standard of care but instead represent guidelines for the management of these patients. Variation in practice should be taken 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 School of Medicine at Chapel Hill. They cannot be reproduced in whole or part without the expressed permission of the school.