A NICE guideline is born!

Debbie Hicks

Diabetes during pregnancy is associated with risks to the prospective mother and to the developing foetus. Complications such as miscarriage, pre-eclampsia and pre-term labour are more common in women with diabetes than those without the condition. Also, complications such as stillbirth, congenital malformations, macrosomia, birth injury, perinatal mortality and postnatal adaptation problems (such as hypoglycaemia) are more common in babies born to women with pre-existing diabetes.

Approximately 650 000 women in England and Wales give birth each year, with 2–5% of pregnancies involving women with diabetes (King, 1998; Confidential Enquiry into Maternal and Child Health [CEMACH], 2003). Some 87.5% of pregnancies complicated by diabetes are estimated to be due to gestational diabetes, 7.5% are attributed to type 1 diabetes and the remainder due to type 2 diabetes (CEMACH, 2003).

The recently published NICE guideline on diabetes in pregnancy (2008) outlines recommendations for the management of diabetes and its complications in those women with diabetes who are pregnant or wish to conceive. The guideline focuses on areas where additional or different care should be offered to women with diabetes and their babies and builds on existing clinical guidance for routine care during the antenatal, intrapartum and post-natal periods.

Where made possible by supporting evidence, the guideline makes separate recommendations for women with pre-existing diabetes and women with gestational diabetes. Everyone of child-bearing age, including young women who have not yet transferred from paediatric to adult services are referred to as 'women'. A summary of the main points from the guidance can be found in *Box 1*.

It is imperative that high-quality preconception, antenatal and post-natal care is available to all women of child-bearing age with diabetes, or those in whom diabetes occurs at any point during the pregnancy, throughout the UK, to avoid repeating the poor outcomes as documented in the CEMACH report in February 2007. ■

Box 1. The main points of the NICE guidelines on diabetes in pregnancy. (NICE, 2008).

Preconception care

- Women with diabetes who are planning to become pregnant should be informed that establishing good glycaemic control before conception and continuing this throughout pregnancy will reduce the risk of miscarriage, congenital malformation, stillbirth and neonatal death. It is important to explain that risks can be reduced but not eliminated.
- The importance of avoiding unplanned pregnancies should be an essential component of diabetes education from adolescence for women with diabetes.
- Women with diabetes who are planning to become pregnant should be offered preconception care and advice before stopping contraception.

Antenatal care

- If it is safely achievable, women with diabetes should aim to keep fasting blood glucose levels between 3.5–5.9mmol/l and 1-hour postprandial levels <7.8mmol/l during pregnancy.
- Women with diabetes treated by insulin should be advised of the risks of hypoglycaemia and hypoglycaemia unawareness in pregnancy, particularly in the first trimester.
- During pregnancy, women who are suspected of having diabetic ketoacidosis should be admitted immediately for level 2 critical care (this is for those who require detailed observation or intervention, including support for a single failing organ system or post-operative care and those 'stepping down' from higher levels of care) where they can receive both medical and obstetric care.
- Women with diabetes should be offered antenatal examination of the four-chamber view of the foetal heart and outflow tracts at 18–20 weeks.

Neonatal care

- Babies of women with diabetes should be kept with their mothers unless there is a clinical complication or abnormal clinical signs that warrant admission for intensive or special care.

Post-natal care

- Women diagnosed with gestational diabetes should be offered lifestyle advice and a fasting plasma glucose measurement (but not an OGTT) at the 6-week post-natal check and annually thereafter.

Confidential Enquiry into Maternal and Child Health (CEMACH; 2003) *Pregnancy in Women with Type 1 and Type 2 Diabetes in 2002–03, England, Wales and Northern Ireland.* CEMACH, London

CEMACH (2007) *Diabetes in pregnancy: are we providing the best care? Findings of a national enquiry: England, Wales and Northern Ireland.* CEMACH, London

King H (1998) Epidemiology of glucose intolerance and gestational diabetes in women of childbearing age. *Diabetes Care* **21**(Suppl 2): B9–13

NICE (2008) *Diabetes in pregnancy: Management of diabetes and its complications from preconception to the postnatal period.* NICE, London. Available at: http://www.nice.org.uk/nicemedia/pdf/CG063FullGuidance.pdf

Debbie Hicks is a Nurse Consultant – Diabetes at Enfield PCT.