

Pregnancy: An important aspect of primary diabetes care



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Diabetes is one of the most common pre-existing medical disorders complicating pregnancy (Bell et al, 2008). Having either type 1 or type 2 diabetes increases the likelihood of poor pregnancy outcomes, and diabetes in the mother can impact significantly on the health of the neonate in the perinatal period and beyond (National Collaborating Centre for Women's and Children's Health [NCCWCH], 2008). In recognising these risks, primary care teams should be making a much more significant contribution to preparing women with diabetes for pregnancy, supporting them through it and ensuring active follow-up during the postnatal period.

Fertility and pre-pregnancy counselling

Both type 1 and type 2 diabetes can impair fertility (Livshits and Seidman, 2009). Polycystic ovary syndrome is associated with type 2 diabetes and infertility due to anovulation (Boomsma et al, 2006). The reproductive period of a woman with diabetes may be reduced due to delayed menarche and premature menopause. Better glycaemic control, and prevention of diabetes complications, improves menstrual irregularities and increases fertility rates close to those that are seen in the general population.

Primary care should be an important source of counselling about the risks of pregnancy for women with diabetes but, unfortunately, many become pregnant inadequately prepared (Mortagy et al, 2010). 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 (Confidential Enquiry into Maternal and Child Health, 2007). Valerie Holmes (page 332) discusses the development of a DVD in Northern Ireland that may help primary care teams ensure that women with diabetes are well informed.

Pregnancy in women with type 2 diabetes

Type 2 diabetes is now the most common form of diabetes in women of reproductive age in developed

countries (Dunstan et al, 2002). Pregnancy outcomes for women with type 2 diabetes are also significantly worse compared with the general population and are at least as poor as for women with type 1 diabetes (Hod and Simeoni, 2009). Many women with type 2 diabetes receive routine diabetes care in the community and, unlike women with type 1 diabetes, may not be aware of the importance of optimal glycaemic control at the time of conception and the critical 6–7 weeks thereafter (McDowell et al, 2009).

Glycaemic control

Where possible, pregnancies in women with diabetes should be actively managed in joint clinics staffed by diabetes specialists and obstetricians. Individualised targets for blood glucose levels and self-monitoring should be agreed, taking into account the risk of hypoglycaemia (NCCWCH, 2008). If it is safely achievable, pregnant women with diabetes should aim to keep fasting blood glucose levels between 3.5 and 5.9 mmol/L and 1-hour postprandial blood glucose levels below 7.8 mmol/L. Often, insulin therapy is required to achieve this (Diabetes UK, 2008).

In the immediate postnatal period, both the mother and the neonate need careful monitoring.

Gestational diabetes

Gestational diabetes (GD) is defined as glucose intolerance with onset during pregnancy. Its prevalence in the general population is 9% but it occurs with greater prevalence in obese women (6–12%) when compared with their lean counterparts (2–4%) (Solomon et al, 1997). In the article by Michael Kennedy et al (page 337), the increasing hazard from GD is outlined as well as a call to actively screen, and reduce, associated complications.

Conclusion

The burgeoning numbers of young women with type 2 diabetes means that primary care health professionals have an important and evolving role in ensuring excellent pregnancy outcomes, by giving robust pre-pregnancy counselling, supporting the pregnant woman with diabetes and ensuring active follow-up in the postnatal period. ■